The 25th Annual RESER Conference

"Innovative services in the 21st century"

Conference Abstracts
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A: Development and innovation in public and private manual services
A1: Public, private and social innovation in manual services

Chair: Britta Hermelin
Innovation in public service systems

Lars Fuglsang, Jon Sundbo

OBJECTIVES:

This paper deals with service innovation in the public sector. We will outline the characteristics of service innovation and what makes the conditions different in the public sector compared to market-based service sectors. These discussions will be carried out by looking at innovation capabilities as the core concept.

METHODOLOGY:

Theoretical paper

EXPECTED RESULTS:

The public sector is a service sector and contains service systems – besides other tasks and characteristics. Service innovation within public service systems requires some of the same innovation capabilities as in market-based service sectors, but due to the particular situation of public service systems as integrated in political systems, other, partly overlapping, innovation capabilities are required in public service systems. These particular capabilities are related to “customers” also having different roles as citizens and the employees perhaps being more idealistic in some situations. Involvement of employees and their bricolage is an important capability which we find in both private and public services, as is innovation co-production with citizens. The political system’s lead, or authorization, of service innovation processes is a particularity as is the issue of out- and insourcing of services in the public sector and networks with private actors. The capability of externalization is important for innovation in public services, and it involves such elements as being able to specify services, coordinate preferences, create trust among public and private partners, and justify collaboration.
Social Innovations – the Role of the Local Community

Brita Hermelin, Grete Rusten

OBJECTIVES:

One major societal challenge of countries in Europe nowadays and elsewhere is poor integration of young people on the labour market and high youth unemployment rates (Grimm et al 2013, p. 437). It is for Europe found that unemployment is particularly high among early school leavers. This paper concerns the core for one of EU 2020 targets about strengthening the competitiveness and employment rates, and decreasing shares of early school leavers in Europe. Education is in this respect is seen as a critical resource linked to social capital. A fundamental component in these political goals is ensuring social sustainability by decreasing the level of early school leavers and unemployment among the young.

Supply of education opportunities is in many countries including Sweden and Norway a responsibility of the government and the public sector is a major supplier of such services\(^1\). Schools are facing challenges when public sector organisations in many countries are experiencing financial cuts as well as high demand to be updated and deliver education at a high level as well as meeting the needs of delivering relevant competence from the business community and other workplaces. It also concerns how one can find ways to reduce the number of school leavers. This study is part of an ongoing project titled; Small municipalities and large companies - the roles of local governments for regional economic resilience (Vetenskapsrådet, Sweden 2013-2016) which is managed by Linköping University (Hermelin), and also includes researchers from Stockholm University and University of Bergen. Our first paper in this concerned the cross-sector partnership between industries and secondary schools linked to combined theoretical and vocational training programs.

This paper does in particular explore the transformation of secondary education through cross-sector partnerships between regional public authorities and institutions and the business community focusing on some other projects with different organizational formats.

Some research on social innovation has had specific attention on the role of the
public sector (for a review see Rana et al 2014). A second group of literature considers social enterprises as commercial actors, whereas a third category concerns enterprises that part of their corporate citizenship addresses social issues (Shaw and Bruin, 2013). A fourth category of studies see these social innovation projects as activities belonging to social networks. Combinations of several of these perspectives are represented in the empirical evidence in our paper.

Our focus has specially concerned the socioeconomic network linked to helping the younger to get a qualified education and a job in the local community. There are two important factors driving these initiatives, namely community entrepreneurship which explains the social dynamics of these arrangements include factors like socializing motives, trust, self-realization, reciprocity, norms, social control and self-realization. According to Johannisson (1989 and 1990) explains how the need to mobilize resources to develop new workplaces in a situation where the community is experiences job losses. These forms of community entrepreneurship is driven by individuals that mobilizes forces (community, firms NGS, public institutions and politicians) in a joint project for the community. The other concept represents the qualitative resource base and willingness to do something for the community, what is often labeled social capital. This social capital is according to Putman (1995) may already be there, but needs to be activated and confirmed from time to time to be The way we experience this through the cases described in this paper, as well as previous research is that the driving forces represents a combination of individuals feelings for the community, public and commercial interests. Partly this form of social capital is formed by what the Norwegians calls dugnad- a collective voluntary work where neighbors etc. helped each other. We know this quite well for examples from Sports events and the organizing of festivals (Rusten et al, 2014). Some of the voluntary represents a cultural preference and response to the absence of costly commercial alternatives. It may not only be culture events, but do also concern the way for individuals representing industries, NGO, public organizations and academic joint forces take part in for example hearings, meetings and practical work related to a particular task, this is a norm that seems especially well developed and kept intact outside the larger cities where most everyone at least the locals either socialize, know or know of each other. The empirical evidence presented later in this paper will discuss some examples where these components play a major role.

METHODOLOGY:
The case studies are projects located in manufacturing based towns in Mjölby in Sweden and Nordhordland in Norway. The size and composition of the two regions are somewhat similar, according to their size measured by number of inhabitants, industrial composition and the representation of large global engineering companies. Major partners of these cross-sector partnerships are the local authorities, local public sector, and management of small and large companies. A literature search across relevant disciplines marks the start of the project. The theoretical approach combines theories from institutional and service research, social innovation, public-private partnerships and collective entrepreneurship, management studies, training (e.g. CSR and regional development studies. The empirical evidence combines use of open source and grey literature document, some secondary data, as well as interviews with key informants. The empirical evidence include two cases, respectively a Mentor/placement project for high-school dropouts in Nordhordland Norway, and case 2 a social enterprise within gardening and janitor services from Mjölby Sweden. The case in Norway concerns a mentor arrangement initiated by ten senior citizens with backgrounds from management and leading positions in different businesses, the local chamber of commerce and public sector institutions. They are long term members of extensive business networks developed from established professional and social ties in the community; many have known each other for a long time. These mentors have through their social positions, knowledge and influence been able to motivate workplaces and businesses to take a social responsibility and find placements to help these youths. The voluntary resource team of mentors meet on a regularly basis discuss how they in the best way can help and follow up teenagers invited to the project.

This social company in the Swedish case study aims to offer job opportunities to young persons and in that way leverage their capacity to gain regular employment at the regular labour market. Continuous collaborations with local employers and businesses make major resource for this endeavor. Work at this social company involves to delivery of manual services to clients, and in this way achieve competences required for gainful employment. The board and CEO of the company represent major public and private employers and rich social capital and local relations with many stakeholders. This company is innovative through new service offers and through new organizational forms.

EXPECTED RESULTS:

On the basis of this paper, lessons can be drawn regarding experiences for how
joint project effort between local social capital, public or private institutions and companies can support social innovations and in this way help young persons to get access to the labour market. This would support regional social and economic sustainable development. The research design in two different countries will further allow a comparative analysis. The case study will also deepen the conceptual understanding of the service economy, social innovations through cross-sector partnership with respectively a network based project and a corporate business model case.
Innovation network development in conflict-dominated tourist destinations: An impossible mission?

Flemming Sørensen, Nanna Balsby

OBJECTIVES:

Innovation and development often rely on networks in which actors, their knowledge and other resources come together and jointly sustain innovation processes (G. Ahuja, 2000; Boschma & Frenken, 2010; Håkansson & Ford, 2002; Lee, Park, Yoon, & Park, 2010). In tourist destinations tourism businesses and other businesses, organisations, the local population and local authorities rely on a set of shared destination resources (Briassoulis, 2002; Healy, 1994). There are, consequently, benefits of local destination networks, for example in terms of coordination, knowledge distribution and innovation (Sørensen & Fuglsang, 2014). However, such destinations are often characterised by conflict rather than cooperation because of competition among tourism companies and because shared resources are competed for by actors with different interests, goals and strategies (Bærenholdt, Haldrup, Larsen, & Urry, 2004; Haugland, Ness, Grønseth, & Aarstad, 2011; Hjalager, 2000; Sørensen, 2007; Sundbo, Orfila-Sintes, & Sørensen, 2007).

This paper reports a case study of a destination network that took shape in spite of fierce conflict - even hate - between actors in a small destination. The paper discusses how different roles played by different actors made network development possible in this network-hostile environment. Thus, the paper focuses on two related network issues: Network dynamics and the role of different actors in such dynamics. On the one hand, network dynamics has been a neglected theme in much innovation network research (Gautam Ahuja, Soda, & Zaheer, 2012) and in spite of the dynamic nature of tourism this neglect is also evident in tourism research (However see Gibson, Lynch, & Morrison, 2007; Pavlovich, 2003; Zehrer & Raich, 2010). On the other hand, different roles of specific actors in networks and for the development of networks have been investigated to some degree. Burt (1993, 1997, 2005), for example, has introduced the terms Network Entrepreneur, Network Broker and Tertius Gaudens. These are individuals who connect different otherwise unconnected networks, mainly for their own benefits. However, less is known about how
different actors performing different network roles and their interactions influence network development in network hostile areas.

METHODOLOGY:

Empirically the paper is based on a longitudinal case study of a small Danish seaside tourist destination. Data collection consisted mainly of qualitative interviews, passive observation as well as active participation in the destination network building process. The case can be considered an extreme case (Flyvbjerg, 2006) because the destination was characterised by fierce conflicts, even hate, between a number of private actors (including businesses, local organisations and the local population).

EXPECTED RESULTS:

The case illustrates how different actors playing different network building roles managed to build an inclusive development network in the destination. However the paper also illustrates the delicate balance between network development and network disruption and how this balance is determined by how different actors play their roles and affect each other.

The contribution of the paper concerns its suggestions of how various actor roles can play together in network building processes in tourist destinations characterized by conflict, but also how such different roles can lead to network disruption. The findings have implications for business management as well as for public and private destination development strategies. Furthermore, the findings have relevance not only for actors operating within the tourism business but can be illustrative also for other sectors or places where network building phase difficulties.
A2: Manual service systematization and service values

Chair: Flemming Sørensen
Service culture and value experiences of everyday service: North-South divide

Anu Helkkula, Tiziana Russo Spena, Cristina Mele, Carol Kelleher, Valeria Improta

OBJECTIVES:

The cultural dimension of service experiences, which frames individual sensemaking of value, has been neglected in service research. But as cultural studies are context sensitive, they may respond to the call for greater contextual sensitivity in co-creation research in service (Chandler and Vargo 2011; Akaka et al. 2015).

Basically, in organizational studies, culture is defined as “a set of values, beliefs, and norms that direct the thinking and decision making of a group” (Leininger and McFarland 2006). On the management side, this simplistic approach to culture in service experiences has been questioned due to increasing emphasis on the service economy (Pine and Gilmore 1998).

In practice theory, Reckwitz (2002, pp. 243-63) states that “Cultural theories, including practice theory, are founded upon a different form of explaining and understanding action, namely by having recourse to symbolic structures of meaning.” This set of studies has generated one of the most useful concepts with which to understand practice as collective knowledgeable doing situated in the historical, socio-material and cultural context (Gherardi, 2008).

In this study, we draw on Consumer Culture Theory (CCT) and understand individuals making sense of their service experiences, meaning of resources and resulting value experiences within a cultural frame that affects their social actions (McCracken 1986).

Our context for studying culture in service experiences is mundane everyday services, specifically public transportation.

METHODOLOGY:
As part of our empirical study of public transportation service users, we conducted forty-three narrative interviews with Event-Based Narrative Interview Technique (EBNIT) (Helkkula and Pihlström 2010) in Naples and in Helsinki, Southern and Northern Europe. The interviews explore the challenges people have in their everyday lives and their innovative ideas how these challenges could be solved.

EXPECTED RESULTS:

Our findings firstly show that existing service culture strongly affects how people make sense of their service experiences using that service. Secondly, existing service culture affects expected service experiences. For example, in relation to public transportation, the expected service experience in Naples was very different from the expected experience in Helsinki. Thirdly, the service innovations that passengers suggested were strongly linked to the existing service culture.

This is one of the first studies to focus on the cultural dimension of service experiences and its implication to value and expected service innovations. We contribute to service research, and especially to service-dominant logic, by drawing on Consumer Culture Theory and conclude that culture in service experiences, value research and service innovation is a central concept that has received little attention in current research.
Functional versus Experiential Service Encounters: Impact on tourist satisfaction and recommendation intention.

Kristian J. Sund, Flemming Sørensen, Jens Friis Jensen

OBJECTIVES:

Service encounters have been investigated in relation to their role in customer satisfaction (Bitner et al. 1990). They have been characterised as the 'moments of truth' (Carlson 1989) because of their central role in determining customers' evaluation of services. In the case of tourism service-encounters, these are considered crucial to customer satisfaction (Baum 2005), and the 'tourism experience' is typically constructed through a number of such service-encounters at a tourist destination (Weiermair 2000).

Recent theory has argued that unique, personal, meaningful and co-created experiences, rather than physical products and functional service deliveries, are today key to value creation in modern economies (e.g. Boswijk et al 2007, 2012, Grönroos & Voima 2011, & Sørensen 2013). Nevertheless, in destination based tourism companies, such as hotels or transportation companies, tourism service encounters continue to be largely guided by a traditional service paradigm and mainly function as facilitators of standardised and rigid one way service deliveries (Sørensen & Jensen 2013, 2015; Binkhorst & Den Dekker, 2009). This is a paradox, considering that tourism is a sector in which customers seek and pay for unique experiences above anything else.

A recent qualitative experiment in a hotel (Sørensen & Jensen 2015) indicated that changing employee-tourist encounters from traditional service encounters to 'experience encounters' that support experience creation, will raise the value of the encounters for tourists. This implies a change from employee-tourist encounters that are rigid, standardized, deliver one way functionality, are efficient and quick, (hyper) professional and detached from the tourist experience, to encounters that are characterized by dynamism, personality, flexibility, co-creation, experiential intelligence and integrated in the tourist experience (Sørensen & Jensen 2015).

Based on a user survey this paper will build on, complement, and advance the
above-mentioned findings. It will attempt to illustrate to which degree different attributes of employee-tourist encounters (such as those mentioned above) influence whether users perceive that encounters result in satisfactory services or in memorable experiences. Further, it will be explored how this affects tourists’ overall satisfaction and recommendation intentions. Finally, it will be investigated to what extent age, travel motive, and a range of other variables influence the model.

METHODOLOGY:

This study is based on a series of surveys conducted during the Winter and Spring of 2015, across the horizontal destination value chain in Copenhagen. Data was collected from customers of several transportation companies, the airport, a hotel and an attraction. We so far have a sample of over 600 respondents, but data collection is continuing and we expect to exceed this number substantially. We will discuss how and to which degree delivering services or experiences is important in different tourism companies and we indicate the relevance for tourist satisfaction of the different encounter attributes in such different companies. A range of statistical tests will be used to verify hypotheses.

EXPECTED RESULTS:

We expect to be able to demonstrate how service encounters can be differentiated according to whether they are purely functional, or experiential, and what attributes lead to different types of experiences. We will furthermore demonstrate how tourist motive influences the perception of the encounter and ultimately customer satisfaction.
Service Dominant Logic – how to systematize service business

Seppo Kuula, Erkka Niemi, Harri Jouni Olavi Haapasalo

OBJECTIVES:

Digitalization is changing the world quickly, industrial boundaries are vanishing and competition is truly global. Digital transformation is disruptive, based on new unseen services, which again is amplifying demand for service-oriented business- and marketing logic. There is a lot of theoretical elaboration regarding the value creation in service economy and Service-Dominant (S-D) logic. However, there is very limited amount of literature regarding practical implications how this logic can be used in service creation between customer and vendor and is, therefore, waiting for feasibility testing.

The most significant difference between the product- and service business logics is in value creation. Co-creation of value is the most important foundation point in the service economy, where value-in-use is defined as the baseline for an exchange, and value creation becomes an ongoing process. Holbrook (1996) addressed the topic, and Vargo and Luch introduced (2004) and revised (2008) the idea of value co-creation together with the foundational premises of S-D logic.

The main objective of this paper is to describe cornerstones for systemization of service business. Moreover, we aim at conducting a feasibility study of S-D logic and illustrate a practical application of the co-creation framework.

METHODOLOGY:

We selected an interpretive case study approach in this conceptual study in order to deeply understand and systematize co-creation of value in service business.

First, we review literature to find out what are the approaches behind service dominant logic. Payne et al (2008) explored the nature of value co-creation in the context of S-D logic and developed a conceptual framework. They confirmed the need for a practical process-based value co-creation framework consisting of
three main components; Customer value-creating process, Supplier value-creating process, and Encounter process.

Second, we study how to systematically utilize the S-D logic in practice in business-to-business environment using the Payne et al framework as a foundation. We are reflecting a case where a service provider is co-creating value in the professional service business environment using a systematic approach together with its customer.

EXPECTED RESULTS:

Value co-creation requires a change in the dominant logic for marketing from ‘making, selling and servicing’ to ‘listening, customizing and co-creating’. It is also cross-functional: it assumes and requires alignment between those organizational functions which make the customer promise and those which deliver the customer promise. In practice the required approach is relative to 1) so called “Lean Startup” – model (Ries 2011), which in brief is a process answering the question: “How can we learn more quickly what works, and discard what does not”, and 2) “Sense-and-respond” strategy (Haeckel 1992).

Main principles in Lean thinking are: focus on your customer, vision his need, describe the iterative approach how to get there, remove inefficiencies and waste, seek continuous improvement, empower the people operating in process and do all this in systematic way. Moreover, main principles in Sense-and-respond centered view are: cultivate relationships that involve the customers in developing customized, competitively compelling value propositions to meet specific needs. Encountering process is built on complete transparency.

This study and encountering process is covering a specific business environment and is waiting for a feasibility study in the other service providing environments. A service-centered approach to social and economic exchange broadens the process of value creation beyond a firm’s operation activities to include the active participation of customers and other stakeholders, through co-creation. Service is the dominant vehicle of exchange, and all economies are service economies.
A3: Bricolage and user-based innovation in manual services

Chair: Mervi Hasu
How users are involved in business-to-business service innovation processes

Giulia Nardelli, Ada Scupola

OBJECTIVES:

By adopting a proactive approach and involving users actively, service firms can facilitate learning and reduce the risk of being imitated and surpassed by competitors (Alam & Perry, 2002; Alam, 2002; Matthing, Sandén, & Edvardsson, 2004). Yet, user involvement in service innovation carries along problems and uncertainties, which make it crucial to identify user groups and their differences to successfully enrich innovation activities (Ahmad, Kyratsis, & Holmes, 2012; Carbonell, Rodriguez-Escudero, & Pujari, 2012; Hennala, Parjanen, & Uotila, 2011; Magnusson, 2009).

This paper aims at enriching the existing understanding of user involvement in service innovation by investigating whether and how business-to-business service organisations identify user groups and make use of their differences to enrich their service innovation processes. To achieve such purpose, this study investigates the case of outsourced facilities management (FM) service providing in Denmark through in-depth interviews at different organisations within this field.

METHODOLOGY:

This work adopted a case study strategy (Yin, 2009), which investigates a variety of innovation processes in FM service-providing organizations in Denmark. Data for the study were gathered from archival sources, interviews with companies (22 in total) as well as attendance in practitioner conferences and workshops on the topic of innovation in FM services. The collected data were analysed by using a theoretical framework developed on the basis of existing user involvement competence research, with support of the qualitative data analysis software Atlas.ti.

EXPECTED RESULTS:
The main outcome of this study is a competence matrix, which depicts how FM service organisations differentiate between user groups and make use of the differences in their attitudes, needs and expectations in involving them in their innovation processes.

Our study highlights that business-to-business FM service providers rarely follow a structured process when involving users in service innovation processes. This underlines the emergent nature of service innovation in business-to-business services such as FM services, rather than a stage-gate inspired model, as suggested for financial and knowledge intensive services (e.g., Alam & Perry, 2002; Alam, 2002), whose innovation process resembles in many ways that of tangible goods.

The contribution of this paper lies in the identification of the fact that business-to-business service organisations appear to have a user involvement competence not based on a systematic phase-by-phase approach (Lettl, 2007), but rather based on the outcomes that they would like to obtain from the involvement itself. Each combination of competences about characteristics of user groups and interaction pattern appears to have, in the eyes of outsourced FM service innovators, a different impact on the innovation process, which is why they tend to select specific combinations in similar cases. For example, involving the client organisation as co-creator appears to work best for strategic decision making, while involving end users as co-creators might be useful for idea generation.

These results both confirm and add further insights to existing research (Alam & Perry, 2002; e.g., Alam, 2002; Lettl, 2007), and might offer a concrete set of practical recommendations on how to involve users throughout the service innovation process, based on what outcome is sought.
Connecting policy and practice: How everyday creativity and bricolage-work can evolve around shared fields of meaning

Lars Fuglsang

OBJECTIVES:

The purpose of the study is to understand how employees can develop unique services based on incremental, bricolage-like activities. We already now from research that bricolage, i.e. solving problems based on available resources, can be a path to innovation. Particularly in public services, where new public management (NPM) has led to more internal management and control, bricolage is an important alternative way of co-creating services with clients in a more open and improvisational way. Yet, we now little about how such activities can be organized, and how bricolage can be framed as innovation in a more organizational way. By using the concept of bandwagon and labelling, the paper argues that management can help to link policy and practice, thereby creating unique and reproducible services out of bricolage in a more organized way. Based in a case-study, the paper explores how such solidary processes of innovation may be organized.

METHODOLOGY:

The study is based on interviews with employees and managers in 5 public nursing homes in Copenhagen. They participate in a project entitled “liveliness at nursing homes”, where the purpose is to increase the experience of homeliness for the residents. Further observations have been made of a learning workshop that gather employees and managers from all 5 institutions and is facilitated by public managers in the municipal administration. Its purpose is to exchange knowledge, mutually inspire each other, qualify and conceptualize the local projects.

EXPECTED RESULTS:
The paper contributes new elements to a theory of service innovation. Research has shown that day-to-day bricolage activities can be a path to user-based and user-friendly innovation, but we know less about how such activities that lead to unique reproducible services can be organized. Using the concepts of labelling the paper concludes that management, employees and clients can develop service labels in order to frame bricolage as innovations.
Employee critique as an impulse for bricolage in elderly care services

Sari Käpykangas, Mervi Hasu

OBJECTIVES:
This paper analyzes critique expressed by front-line care workers on their work conditions as a potential impulse for change and innovation-oriented agency. By analyzing interview accounts and interactions of elderly care employees in municipal nursing homes it is possible to achieve new understanding of how employee critique can advance employee-driven innovation. In the paper we analyze connections between employee critique and daily routines of employees in the context of elderly care services. We see employee critique as a neglected topic of research as well as opportunity to develop elderly care services and care work.

Background: The Nordic countries are very ‘aged’ societies, and they are set to witness further population ageing, with respective economic challenges, in the future. For instance in Finland, it is estimated that the number of employees in the elder care sector will need to increase by 30 000 by 2030, leading to additional expenditure amounting to 1.2 billion euro (Kiander 2009). Care work is one of the most demanding fields in the labour market, both physically and mentally (e.g. Trydegård, 2012). Alarming research results are being reported concerning care workers’ working conditions, plans to leave care occupations, management support, and professional development. Interestingly enough, little attention is paid on ‘manual’ care work, care workers and work communities from the point of view of innovations, especially bottom-up innovation (e.g. incremental innovation, bricolage). The dynamics of transformative, employee-initiated critique or resistive actions are not systematically addressed in public administration and service research. There is a need for studies which could inform critically reflexive, practice-based and employee-driven interventions in elderly care.

METHODOLOGY:
The empirical case study describes developments in elderly care work in a
In our in-depth case study, we aim to illustrate employee-based bricolage related to employee critique on their working conditions. The analysis is based on two data sources: (1) participant observation in care workers meetings, and (2) interviews among individual care workers. The analysis focuses on two nurses whose discourse shifted from ‘critical and (only) negative’ to ‘critical and innovative’. During the observation that took place in two meetings, care workers used a special intervention tool (a booklet associated with bottom-up, employee-driven innovation) introduced by the researchers. Data also contains videotaped episodes of interaction in the meetings.

EXPECTED RESULTS:

This paper highlights positive connection between employee critique and innovation-related agency and its potential for changing work routines and practices in the nursing home. We find out that coworkers strengthened and enhanced the innovation-related agency of the nurses when the personnel group dealt with their work problems in the meetings using the intervention tool as a resource.
B: Servitization
B1: Servitization

Chair: Thomas Meiren
Development of Smart Services in Manufacturing Companies

Thomas Meiren, Nicola Saccani, Andrea Alghisi

OBJECTIVES:

Information and communication technology has become an integral part of manufacturing industries. In particular, the increasing digitisation of products and processes is triggering new business models and the associated organisational systems, networks and consumption patterns. This paves the way for a new type of highly IT-based services, the so-called “Smart Services” like advanced status and diagnostics applications, new control and automation solutions as well as profiling and behaviour tracking. They are making use of the growing volume of data that is being captured every day and are combined in innovative ways in order to create on-demand, personalized solutions for customers. Moreover, product performance and customer behaviours will get visible as they have never been before. Due to the high complexity of Smart Services, systematic approaches for their development are required, and first promising research can be found in the area of Service Engineering and Service Design.

METHODOLOGY:

Based on two empirical studies – one within the European Project T-REX and another within a joint initiative of European service researchers – the current business models and service offerings of manufacturing companies have been analysed. It has become obvious that their service business has undergone extensive structural changes within the last decade and, also today, they are still facing many challenges, in particular, when it comes to the use of information and communication technologies. Many manufacturing companies are, however, hindered by the fact that their present corporate structures and processes are not designed to enable complex IT-based services to be efficiently developed and launched on the market. Difficulties are frequently encountered because appropriate business models are missing, requirements of customers are not clear, new services are not accurately defined and tested, IT integration is challenging, and the service staff is not sufficiently trained. Taking into
account existing knowledge in the area of Service Engineering and Service Design, a reference framework for the development of Smart Services has been elaborated. It consists of a process-activity model, methods and tools as well as organisational arrangements. In particular, it explains the creation of a new service from its first idea at the beginning to the market launch at the end by reflecting an external perspective (e.g. customers, competitors), an internal perspective (e.g. management, service staff), and an economic perspective. The reference framework is currently applied and validated by several European companies.

EXPECTED RESULTS:

Smart services offer manufacturing companies a promising possibility to expand their service business. The proposed reference framework provides them a clear structure and proven instruments in order to develop their new services systematically. Organisational recommendations will help them to plan and to staff their service development projects.

The conference paper will present an overview of Smart Services including empirical findings among European companies, the reference framework for the development of Smart Services, a case study from manufacturing industry, and a roadmap for further activities.
Servitization and Productization: two faces of the same coin?

Luna Leoni

OBJECTIVES:

The companies of our time compete in what can be defined as "Customer Economy", where it no longer makes sense to distinguish between tangible and intangible goods. Satisfying the customer is the mission and purpose of every business.

In order to survive in this new scenario, companies - both product- and service-centered - have to reinvent themselves by offering an integrated solution to the customer in order to fully satisfy his needs (i.e., a Product-Service System) through the adoption of new strategies, namely: product servitization and service productization.

Despite servitization having already been discussed in-depth by scholars, little has been said on productization. Thus, due to the ongoing convergence and integration between sectors, an integrative view of these topics seems to be necessary.

Through a thematic analysis of the relevant literature (identified by a Systematic Literature Review), the purpose of this paper is to identify potential common themes between servitization and productization in order to verify if the two topics could be considered - or not - as "two faces of the same coin".

METHODOLOGY:

This study aims to systematize and analyze current literature on servitization and productization, through the application of a Systematic Literature Review.

The literature review process will follow the steps suggested by Tranfield et al. (2003); thus, a three-stage procedure will be applied (i.e., planning, conducting and reporting).
In particular, the reporting section will be divided in two sub-stages: 1) a descriptive analysis to provide, through the use of graphics, simple summaries of the relevant literature (Sandelowski, 2000), such as time-line, geographical and journal distribution of the papers in the dataset; and 2) a thematic analysis to identify key themes between papers, in order to provide the major findings of the Systematic Literature Review.

EXPECTED RESULTS:

The Systematic Literature Review and the Thematic Analysis will provide an integrative framework based on the relevant articles on servitization and productization that will be retrieved.

In particular, the review will offer the possibility to understand the state-of-the-art related to the topics; while the thematic analysis will help to understand if they should be considered as "two faces of the same coin".

The study results could be important both for scholars and practitioners. The former should see the possibility to develop a new theoretical framework, based on a holistic view of the presented topics. The latter should recognize new opportunities in order to better satisfy customers' needs.
Standardizing the service delivery system for repetitive industrial services

Elina Poikonen, Miia Martinsuo, Sanna Nenonem

Industrial firms add services to their offering, to increase their revenues and achieve a closer relationship with their customers. The manufacturers need to develop efficient service deliveries that can be used for multiple customers. The service delivery system, however, should take into account that each customer may have different equipment and technologies, each with their unique service requirements. Even if services as such may have unique features, it is possible that the service delivery system can support service repetitiveness through standardization.

Service process designs, service modularization, and e-service systems have been studied both in industrial and knowledge-intensive service contexts already. Yet, the standardization of service delivery systems in industrial companies has not been researched broadly, and it is the focus of this study. In particular, there is a research gap concerning the service production to end users in service triads. More knowledge is needed on how industrial companies can promote industrial services towards customers in a triadic setting with third parties such as equipment dealers and logistics providers.

The purpose of this study is to examine the standardization of service delivery systems when producing industrial services to customers with a versatile installed base of equipment. The research analyses the need of standardization caused by multiple customers, multiple pieces of equipment and multiple technologies embedded in the equipment. The objective is to identify critical dimensions of standardization in service delivery systems and means for efficient service delivery in triadic settings. The study focuses on two research questions: 1) What are the critical features requiring standardization in manufacturing firms’ service delivery systems? 2) How can manufacturing firms promote the customers’ service use in service triads?

The study is focused on manufacturing firms and their service delivery systems towards industrial customers. The settings are characterized with complexity: each piece of equipment is unique, the customers are multi-equipment and multi-service users, and various third parties may be involved, including dealers, external service providers, and software firms.
The research was conducted as a qualitative multiple-case study. We sought for manufacturing companies that have an active strategy towards industrial services and that are developing their delivery systems. Two companies were selected, both representing manufacturing of complex systems and solutions for industrial clients.

Interviews were carried out with key persons involved in service delivery at the companies. The interviews included questions about the companies’ service offerings, the current state of their service delivery systems and their level of standardization, and technological systems needed in service deliveries. The questions were mostly open ended, revealing the interviewees’ unique experiences in their own service delivery contexts.
C: Innovative services, sustainability and value-creation
C1: Innovative services and innovation determinants

Chair: Jon Sundbo
Determination of Innovation Capability of Organizations: Qualitative Meta Synthesis and Delphi Method

Mostafa Momeni; PhD Candidate of ATU; Guest Researcher of DTU
Susanne Balslev Nielsen; Associate Professor of Denmark Technical University, Management Engineering, Copenhagen, Denmark, Mahdi Haghighi Kafash; Associate Professor of Allameh Tabatabaie University, Management Faculty, Tehran, Iran

OBJECTIVES:

The survival of organizations in today’s competitive world necessitates a competitive advantage. Management theorists have declared two main approaches for obtaining competitive advantage, one dealing with environmental opportunities (Porter, 1980-2001), and the other with organization’s internal resources, capabilities and competencies (Barney, 1986-1999).

Now, researches have relied on the concept of Dynamic Capabilities in Resource Based View to preserve sustainable competitive advantage (Teece et al., 1997-2007). Dynamic capabilities are defined as the firm’s ability to integrate, build and reconfigure internal and external competences to address rapidly changing environments Bryson et al., 2007). Moreover, the innovation capability is one of most important dynamic capabilities that orientates the organization to strongest competitive advantage (Borjesson & Elmquist, 2011). The innovation capability is affiliated to other organization capabilities such as technological, oprational, stractural, etc. capabilities.

On the other hands, characteristics of firms are defined by rapid change, globalization, hyper innovative competition, etc. (Farazmand, 2009), so many organizations have focused on the need to identify innovation capabilities and resources or strengths in relation to external opportunities and threats according to inside-out view (Bryson et al., 2007), beacuse innovation capability has been defined consistently as the adoption of an idea or behavior that is new to the organization. The innovation capability can be either a new product, a new service, a new technology, or a new administrative practice (Hage, 1999).
This research will propose a conceptual model which focused on the development of innovation capability in the organizations.

METHODOLOGY:

This research is descriptive and non-experimental and employed a mixed (qualitative and quantitative) research method. Data collection obtained through the following two ways:

- A) Qualitative Meta synthesis of literature. The researchers reviewed most of valuable and scientific papers and articles in Innovation Capability field with critical consideration. At last, the conceptual model proposed for the development of innovation capability in the organizations, and thus

- B) Delphi method, for the theoretical confirmation of the conceptual model of innovation capability, an expert panel formed in three rounds (first round deep interview, 2 rounds questionnaires). The panel was include 20 Experts (Academic Scholars and Practitioners).

At the end, the qualitative collected data (from both A and B) was coded and classified. Then the questionnaire data analyzed by statistical analysis with Arithmetic Mean (Average in Statistics).

EXPECTED RESULTS:

This research believes that developing the innovation capability as an important aspect of dynamic capabilities of the firm is an important research project and it can help to achieve competitive advantage in this rapidly change world, so it attempts to describe and explore effective elements of innovation capability framework in organization level.

At the end this research will propose dimentions and components which have a direct relationship with innovation capability. Also, it will propose most important indexes (empirical measurements) which directly influenced and related to innovation capability.
Service concepts from future - weak signals from different branches

Vitalija Petrulaitienė, Eelis Rytkönen, Suvi Nenonen, Tuuli Jylhä

OBJECTIVES:

Facilities management (FM) aims to support the core business of an organization in a rapidly changing operating environment. FM should be perceived as a set of strategic proactive actions that support the future of the organization instead of a set of reactive technical and operational services. Deep understanding of the changes in the core businesses of clients in the future is essential in order to understand the future service requirements.

This paper introduces five branch-specific scenarios in order to predict future challenges for facilities management. The branches in question are retail, senior housing, industry, wellness and well-being and knowledge work. The scenarios have been constructed based on research projects which investigated the futures of a variety of space segments that are relevant to the selected branches. Facilities under investigation are shopping centers, residential buildings, offices, wellness centers and industrial production facilities.

METHODOLOGY:

The empirical data is collected with the following future research methods: future wheel, PESTE-analysis, futures table, scenario building and future workshops. The data was collected in 2009-2013 in Finland. The diverse methods are utilized to investigate a sample consisting of users, core business representatives and professionals of facilities management in the branch in question. The produced scenarios from different branches are compared and analyzed from the perspective of weak signals for future orientated facilities management.

EXPECTED RESULTS:

The results suggest that there are five topics for proactive facilities management
to be taken into account. They are

1. Facilities management in virtual worlds 2. Responsibility and wellbeing factors as business drivers

3. Dissemination of activities and new ways of doing daily activities, which require new ways of supporting clients

4. Mixed and multi-use space segments


Even though the findings are limited to the Finnish business environment and context, the future scenarios of different branches and the future of facilities management may offer some insights to global level too. Furthermore, this paper introduces future research methods and how they can support the future orientation and proactive approach of facilities management.
Re-Approaching the Meaning « Innovative Service » on Generating New Service Process: MEIJI Milk Express study case (fresh milk home delivery service) - Provider and User perspectives as innovative/innovated service

Leisa Moreno Ryukoku, University Kyoto Japan

OBJECTIVES:

What is an “Innovative Service”? 

There is a question that (re)awakes all the basic concerns and basic questioning on research about services. A revision called up through what have been elements of solidification to define service as well as now in need “Innovative Service”. 

Tentative to define an “Innovative Service” can easily find comfort on the technological aspects composing it. The specificity about service nature (immateriality and interactivity) led studies concerning the diversity of the innovations or the multifaceted dimensions of performance in the service sector (e.g. Djellal & Gallouj 2010, 2012 and 2013). New evaluations by renewed “tools” can help identify where and how “Innovative Services” are generated; as well as how they are reproduced; as how they give contributions to the wellbeing. The objective is to contribute to the research about Innovation Processes in Services. 

The net-contribution of the paper is going to be embodied on the ad hoc use of Djellal and Gallouj (2010;2013) modified multi-criteria and system dynamic perspectives to the Meiji Milk Express Service case (fresh milk home delivery service). The methodology proposed, in a more direct description about the state of the analysis, aims to advance steps in the evaluation challenge in services as innovative or innovated. The new approach tries to clear perceptions of “Innovative Services”. In short the willing is to contribute at having clear perception when facing “Innovative Service” meanly regarding to its combined participatory element in economic and social mutation dimensions.

METHODOLOGY:

After re-analyzing the concept supported by “Innovative Service”, through
different perspective suggested by very well-known authors in previous published works, a focused in vision study case follows. This one takes reference to what could be questions nurturing a “multidimensional approach taking in account the dynamism as well as the aspects of quality, reputation, social innovation and social value” of an “Innovative Service” provided by a company and it's provided service users thanks to submitted questionnaires.

According to already done contacts with targeted organization only submitted questionnaire is possible as source of empirical data. As for equivalence the users perspective will also be supported by submitted questionnaires.

EXPECTED RESULTS:

As result, thru a renewed approach, the paper expects to suggest how to depict “Innovative Services”. The aim is to provide empowered perception of “Innovative Services” supported by “multidimensional approach”. Expected findings are for the paper and similar research an additional step on experimenting previously published “multidimensional approach” and own adaptability on supporting analyzes of innovation process in (for) diverse service as the respective knowledge advances.
Fruit wine festivals and producer visits as tourist attractions and marketing channels

Donna Sundbo, Jon Sundbo

OBJECTIVES:

Fruit wine is undergoing gastronomic renewal. New, scientific based cultivation and productions methods and use of local sorts of apples and cherries based in local “terroir” are bases for new types of fruit wine with high gastronomic value. Consumption of fruit wine is part of the experience economy as it is purely hedonic. For the entrepreneurs who produce the new type of fruit wine the marketing and storytelling about the wine is crucial to put fruit wine on the consumers’ agenda and establish a business. Wine tourism is one means to do this.

In a research project we investigate how four Danish fruit wine entrepreneurs use tourism to give the tourists an experience and at the same time promote the interest for this new type of fruit wine. This is primarily done by organizing an annual fruit wine festival, but also by attracting tourist to the producer’s place – for example as business tourism (firms organizing seminars in the wine growery). We also investigate how the visitors at the festivals and the growery experience these events and what fruit wine means to them.

By this research we get new knowledge about how entrepreneurial activities, distribution services and food and wine tourism play together and which impediments might occur in such interplay.

METHODOLOGY:

The method is inductive sociological-anthropological. 1) We are engaged in a long-term development project with four fruit wine producers and a group of biologist who help the producers to develop new fruit wines. We make participant observations and make interviews with the producers. This is basis for investigation of tourists visit to the groweries.

2) The festivals are investigated by interviewing the visitors using a structured
questionnaire with descriptive variables that we have predefined, supplemented with observation. We have investigated two festivals.

EXPECTED RESULTS:

One of the producers, who is an extrovert type, has developed quite comprehensive visitor activities. Several tourists visit his growery, but he has discovered that it is difficult to attract normal holiday tourists. The growery is placed in an agricultural area outside normal tourist areas and his wine are not yet as world-famed that many people will make a journey, or maybe not even a detour to visit him. He has been more successful in using business tourism by organizing seminars and events for firms and their employees and customers, who see the visit as an extraordinary experience. The other three producers do not attempt to attract visitors, either because of the technical production system makes it risky to have visitors or because they as persons not are extrovert.

The festivals took place at Lolland, an island with traditional tourist activities about 175 km from Copenhagen. The visitors to the festivals were mainly ordinary consumers. A little less than half of them came from the local area and a little less than half from Copenhagen. About 10% came from abroad. Most visitors were between 30 and 50 years old with 20 to 30 years old people as the next largest category. This demonstrates that the fruit wine producers have succeeded in getting younger peoples’ attention to the fruit wine. All occupations were represented, however, employees at managerial levels were over-represented. This demonstrates that the interest for fruit wine is quite socially widespread but with the supposed front runners or elite (younger high salaried employees and managers) as the most interested and possible opinion leaders.

A few professionals (wine merchants, chefs, food journalists) visited the festivals, which got much publicity in a couple of Danish food magazines. To most of the festival guests fruit wine still is a new, experimental experience. They have no traditions for, and most of them no clear idea of, how to use the fruit wine. They mostly see it as an exotic aperitif or gift object, not as a natural daily aperitif or drink to meals. They appreciated the festival and expressed that they learned much about fruit wines and how to use them. The festival may be assessed a success as a tourist activity. However, we also observed some misses and challenges in promoting fruit wine as a daily consumption phenomenon. There was very little food at the first festival thus the guests had difficulties in tasting the combination food and fruit wine. To many guests it was not clear
where they could buy the fruit wine when they came home thus this part of the marketing was not successful. Traditional factors as the weather influenced how many visitors came and their experience. A particular challenge for wine festivals in the countryside is that tasting includes consumption of alcohol, but people have to drive home.

CONCLUSION:

Festivals and opening for visitors can be means for entrepreneurs within food and wine industries to create awareness of a new product area and do marketing. However, these means also have some challenges: The entrepreneurs should have an extrovert personality to stand for open visiting. Festivals can attract tourists who could be market opinion leaders, but it is difficult to increase sales after the festival (for example because the food and wine product not leave the “exotic” first stage in the consumers mind, or the products can not be purchased in the visitors normal shops).

The paper contributes with new knowledge to entrepreneur theory, distribution services and an emerging particular food and wine tourism theory.
C2: Services and issues of sustainability

Chair: Faïz Gallouj
OBJECTIVES:

More than two decades of research, in economics and management science, have helped to make service innovation a relevant, legitimate and increasingly important issue in the field of innovation studies. Research efforts have naturally mostly focused on two, often related, issues, namely the nature of innovation in services and its production modes. Does innovation in services differ from innovation in goods? This is the main question that has long guided the emerging service innovation studies. In recent years, innovation studies have been strengthened, in different ways, by exploring new themes (e.g. KIBS in innovation, social innovation, public-private innovation networks, public policies for service innovation,...) and by carrying out empirical investigation in new sectors. They have also been reinforced by complementing qualitative works with quantitative surveys.

However, the maturity and legitimacy of service innovation studies also depend on their ability to fit into the great contemporary socio-economic issues. From this point of view, sustainability is undoubtedly a key issue. While contemporary economies are unquestionably service economies, and if they are or really aspire to be sustainable development economies, then the question of the relationship between services and sustainable development is essential. However, despite some obvious exceptions, such as the reporting of adverse effects of transport and tourism on the environment, little attention has been paid to this question so far. Sustainability is still seen as a predominantly industrial issue.

The purpose of this paper is to examine to what extent services and service innovation can contribute to sustainability in its environmental dimension that is to say, to the satisfaction of social needs with the smallest possible ecological footprint.

Some intrinsic characteristics of the services, especially their immateriality, seem to argue in favour of their natural sustainability. This is actually just a myth of which we propose to examine the foundations and to achieve the deconstruction. This questioning of the myth of naturally green services does
not mean that the greening of the economic activity cannot rely on services. Quite the contrary, greening also basically depends on innovation dynamics implemented in services or by services.

METHODOLOGY:
Mainly theoretical paper

EXPECTED RESULTS:
In this work, we first of all, refute the myth of the immateriality of services. If the result of the service is (or may seem) immaterial, we must not forget the many materiality sources that the service conceals: materiality of the service medium, of the production factors deployed, of the production/consumption spaces, materiality related to interactivity.

In addition, the materiality/immateriality of a service is not an objective technical characteristic. It depends, first of all, of the output convention adopted, that is to say, the scope agreed upon to define the service. Similarly, the materiality of the service is underestimated when it is limited to the direct materiality, excluding indirect materiality, which is "incorporated" in particular in buildings, furnishings, intermediate goods and technical systems, but also in the intermediary services mobilized during the service transaction. This materiality of the service also depends on the materialization/dematerialization strategies implemented by service organizations.

In their relationships to services, dematerialization strategies can take two forms, which cover different sustainable innovation trajectories. The first form involves a set of innovation strategies, which consist, for services, to dematerialize and to green themselves. The second form encompasses a set of innovation strategies, which consist in dematerializing/greening goods (and the whole economy) by services and service innovation. The concept of Product-Service System occupies an important place in these dematerialisation/greening strategies.
Sustainable Development an Opportunity for Innovation in the Management Model of Public Organisations

José Aureliano Martín Segura, José Luis Navarro Espigares, César Pérez López, Guillermo Maraver Tarifa

The literature recognises the great influence that environmental spending has in implementing LA21. But some authors raise doubt about the real commitment of local government after the signature of the Aalborg Charter or when they declare their adherence to Local Agenda 21.

This is the main objective of this paper, to verify the authenticity of political commitment towards meeting the objectives of sustainable development by means of the budgetary support to these policies or specific actions in favour of environment. We also verify the impact of the political character of the local governments on their behaviours in this respect.

To accomplish this verification, we apply the Difference in Differences technique for the period 2002-2012 in the Spanish municipalities. Results obtained confirmed the initial hypothesis and show how those local governments that adhered to LA21 have had a better evolution in their environmental expenses.

This article introduces a new perspective for the LA21 analysis, based on the study of local budgets as evidence of the actual commitment to the sustainable development strategy promoted by LA21.

OBJETIVOS:

El objetivo general es el de examinar los casos específicos de España y Noruega en relación con el desarrollo sostenible, y analizar y comparar los cambios estratégicos y estructurales en los municipios, ayuntamientos y organismos públicos como las respuestas y adaptaciones a las demandas de los diferentes ámbitos sociales.

Algunos de los objetivos específicos a alcanzar se especifican en las siguientes hipótesis: § H1 . Existen diferentes factores organizativos e institucionales que promueven la adopción y aplicación de prácticas sostenibles en las organizaciones públicas. § H2 . Los organismos públicos que tienen más éxito en la adopción y aplicación de prácticas sostenibles son los que muestran una mayor capacidad para innovar . § H3 . La implementación de nuevas prácticas sostenibles en las organizaciones públicas influye positivamente en su capacidad
Para el desarrollo de innovaciones. § H4. Las organizaciones públicas definidas como más sostenible están adoptando e implementando cambios más innovadores internos, así como la creación de servicios más innovadores para atender a las nuevas demandas para la sostenibilidad del sector público. § H5. Los diferentes países pueden enfrentar diferentes factores contextuales que bien podría promover u obstruir la adopción y aplicación de prácticas sostenibles de las organizaciones públicas.

Los principales conceptos son los siguientes:

- Rendición de Cuentas.
- Transparencia.
- Colaboración, Participación, Redes.
- Confianza
- Compromiso.
- Innovación, Creatividad.
- comparación bilateral.
- Migración Económica.

La originalidad de este proyecto de investigación radica en considerar el desarrollo sostenible como palanca de la innovación dentro de las organizaciones públicas, y en la ide

METODOLOGÍA:

Tendremos en cuenta los datos de 428 municipios en Noruega y 8239 municipios de España. Se seleccionará una muestra representativa de cada población objetivo.

La pregunta fundamental es si los cambios que se han producido en los municipios durante un período específico de tiempo consecuencia de la adopción de los principios de sostenibilidad contenidos en el Programa 21 (Carta de Aalborg), o si la adopción de estos criterios es la causa de los cambios. Para este propósito, un grupo control y un grupo de tratamiento fueron seleccionados de 2002, en la que se analizarán algunos indicadores. Estos indicadores se comparan con los mismos indicadores de 2012. Se está
realizando el análisis y evaluación de estas políticas públicas municipales de sostenibilidad mediante la técnica estadística de "diferencia en diferencias.'

RESULTADOS ESPERADOS:

Aunque España es uno de los países europeos con el mayor número de municipios que han adoptado la Carta de Aalborg, la implementación de la Agenda 21 es actualmente casi en un punto muerto. Sin embargo, ha habido experiencias interesantes que han logrado resultados importantes en algunos de los indicadores de sostenibilidad locales más representativos.

Con respecto a Noruega, el progreso en las prácticas sostenibles es mucho más intensa que en España.
Como resultado del análisis comparativo de la evaluación de estas políticas públicas en ambos países, se espera un equilibrio más favorable en los municipios noruegos, aunque algunos municipios españoles han alcanzado un nivel de desarrollo similar.
Market dynamism and social capital as determinants of innovation: A study of cultural tourism clusters

Dioni Elche, Ángela Martínez-Pérez, Pedro M. García-Villaverde, Ma José Ruiz-Ortega

OBJECTIVES:

The aim of this paper is to study the moderating effect of social capital on the relationship between market dynamism and radical innovation in a sample of firms located in cultural tourism clusters. To study social capital we use the three dimensions proposed by Nahapiet and Ghoshal (1998): structural, relational and cognitive.

The traditional literature on clusters focuses on agglomeration as unit of analysis, thus considering firms within cluster as homogeneous. However more recent studies find heterogeneity of behaviour among firms within an agglomeration (Paniccia, 1998). For what concerns innovation, autonomy in decision-making and unique endowment of capabilities implies that firms can take advantage of agglomeration in different ways (Boschma and Ter Wall, 2007).

Most of the existing literature calls attention to how social networks establish complex connections with cultural, economic and social character among firms that encourage innovations (Sainaghi and Baggio, 2014). We propose that cultural tourism clusters can be an appropriate context for fostering innovation based on the interaction of agents who share cooperation and competitive relations.

Following the main tenet of evolutionary economics, we highlight market dynamism as a critical antecedent of innovation. At the same time other internal factors such as social capital can influence such a relationship, so we include capital social as moderating factor. Beyond confirming the moderating effect of social capital between market dynamism and radical innovation, the main contribution of this paper is an analysis of the differential role of the three component dimensions of social capital.
METHODOLOGY:

We analyse the cultural tourism clusters through a sample of 215 tourism firms located in 13 UNESCO World Heritage cities in Spain. First, we identify empirically these cities as clusters, by carrying out both quantitative and qualitative methods. Data were collected through the questionnaire completed by the managers. We measure the variables market dynamism, innovation, and social capital with seven-point Likert scales. We also control for size, age, cluster of belonging, and branch activity in the tourism sector. We employ structural equation analysis using the technique Partial Least Squares (PLS) SmartPLS software with a view to assessing the mediating effect proposed by Baron and Kenny (1986).

EXPECTED RESULTS:

In this work we analyse the determinants of innovation in the cultural tourism clusters, which is a context that has received relatively less attention relative to industrial agglomeration.

We find that market dynamism has a direct and positive influence on radical innovation, which is the first condition for studying the moderating effect of social capital. Our findings reveal that social capital moderates the relationship between market dynamism and radical innovation.

Yet another important result is that the three dimensions of social capital exhibit divergent effects on the relationship between both variables. The structural capital has a negative moderating effect, whereas the relational and cognitive dimensions of social capital positively moderate the relationship between market dynamism and radical innovation.

In so doing this paper brings to the fore a hitherto neglected nuance of firms within the tourism industry, namely the role of radical innovation, as opposed to the established tradition which generally emphasises incremental innovation.
C3: Values of services and their measurement

Chair: Bent Petersen
Importance-Performance Analysis as a Tool in Evaluating Service Productivity in Hospitals

Mario A. Pfannstiel, Neu-Ulm University, Faculty of Health Management, Wileystr. 3, 89231 Neu-Ulm, Germany

N/A
Creating and capturing value for different types of services - A contingency approach

Bent Petersen, Peter Ørberg Jensen

OBJECTIVES:

To an increasing degree are services dominating developed economies (OECD, 2005) and successful strategies for service providers are therefore in still higher demand. However, services are manifold and require different strategies and there exists no one-size-fits-all strategy for service providers (Lovelock and Yip, 1996). Hence, a key contention in this paper is that services differ fundamentally across technologies and institutions in terms of how customer value is created and captured by the service provider. This assertion links up to a very general and contentious question in strategy research, namely: Is it possible for strategy scholars to provide managers – including those operating in the service sector – with practical prescriptions as to how their firms should create and capture value, and thereby achieve a sustainable competitive advantage (SCA)? Not surprisingly, the strategy literature gives contradicting answers to this question. One short and vigilant answer is no, which reflects the view that success formula are multifarious and based on highly idiosyncratic resources (Rumelt, 1984; Peteraf, 1993) and, to some extent, random, as they can be contingent on luck rather than managerial discretion (Ma, 2002; Svensson and Wood, 2005; Salganik, Dodds, and Watts, 2006). Therefore, proponents of this view suggest that instead of engaging in the futile task of attempting to uncover specific success recipes, strategy scholars should concentrate on developing general and generic schemes for achieving competitive advantage, such as the value-chain template (Porter, 1985), the VRIO framework (Barney, 1997), and the business model canvas checklist (Osterwalder and Pigneur, 2010). Those strategy scholars who have nevertheless ventured into a search for company-specific recipes of success through empirical observations of high-performing companies (e.g., Bullen and Rockart, 1981; Peters and Waterman, 1982; Porter, 1990; Kim and Mauborgne, 2005) have been vigorously criticized for their retrospective, uncontrolled, and unfalsifiable methodologies, as well as the lack of sustainable success or simple survival of the observed companies, which becomes evident with hindsight.

In an attempt to reconcile these two contradictory views, the strategy and
marketing versions of the contingency approach (Govindarajan, 1988; Katsikeas et al., 2006; Zeithaml et al., 1988) aim to prescribe optimal strategies given a certain set of difficult-to-control factors, known as “contingencies,” within or outside the firm. The contingency approach assumes that it is possible to provide managers with guidance as to the best strategic responses to observed contingencies. However, even though the contingency approach can prescribe an optimal course of managerial action with regard to SCA, the prescription may only apply for a few firms facing similar contingencies. In other words, such a management prescription may not be generalizable. In the extreme, the strategy prescription may only apply to a single firm, in which case the contingency approach takes on the characteristics of business consultancy. Furthermore, the extent to which the contingency approach can deliver generally applicable management prescriptions depends on the nature of the contingencies. If the contingencies are many and equivocal, such that every situation is unique, the scope for generalization is limited. Conversely, if the contingencies are few and distinctive, the space for generalization is larger. Therefore, if we can identify contingencies that are few, distinctive, and of relevance to the service providers that are the focal point of this paper, we can move one big step closer to our aim of defining value-creation and value-capture essentials for service providers.

The paper proceeds in the next section with a discussion of and a search for a set of contingencies that can serve as the right basis for value-creation and value-capture prescriptions. We argue that service archetypes based on value propositions are suitable for this purpose. In the third section, we derive and explain five service archetypes that are differentiated in terms of their value propositions. In the fourth and fifth sections, we outline the essential mechanisms for value creation and value capture, respectively, and we show how these mechanisms differ among the archetypes. We then suggest a diagnostic framework for the SCA prospects of service providers. In the final section, we offer a concluding discussion.

**METHODOLOGY:**

Conceptual paper using a contingency approach.

While the formulation of broad, universal categories of service offerings is appealing, we are also aware that such a categorization suffers from some ontological as well as methodological weaknesses:

In ontological terms, it is difficult, if not impossible, to establish that there are
only five archetypes of service offerings. The reader may question whether these categories fulfil the scientific typology ideals of exhaustiveness and mutually exclusivity. If this is not the case, the ability of the service categories to explain and predict corporate strategies is weakened.

The methodological weakness of our categorization has to do with the fact that service providers often make value propositions related to more than one basic service need. This complicates the use of industry statistics to make inferences between firms’ value propositions and their behavioral or structural patterns (e.g., international growth, governance structures), and suggests that the unit of analysis is not the individual firm but rather the firm’s current or potential value propositions.

EXPECTED RESULTS:

We highlight the essentials of value creation and value capture as important components in the formulation and development of business models. For the practice-oriented company manager, the understanding and development of a competitive business model is a sine qua non. The situation is different for the researcher, for whom business models are—and should be—unique for each company. If the business model is not unique, it is unlikely to be competitive. As such, it is difficult to generalize and theorize about (successful) business models, as they tend to be idiosyncratic and firm specific. Moreover, business models are difficult to grasp because they embrace all aspects of a firm’s business operations. From this perspective, some broad and universal categories of service offerings may constitute general starting points for understanding and developing business models. As such, they may appear to be useful strategic- analysis tools for researchers as well as practitioners. In addition, the business- model concept tends to be technology oriented with a special focus on digital- technology business opportunities. Much of this focus has historical origins, such as the dot.com wave. In this paper, we have tried to avoid this “technological myopia” by categorizing services on the basis of universal characteristics that apply across institutions and technologies.
Emotion measurement services for knowledge workers

Maiju Vuolle, Henna Salonius, Johanna Lintinen and Julia Mäkinen

OBJECTIVES:

Emotions are a central part in striving for holistic success in terms of business figures, customer experience as well as the well-being and productivity of the personnel. This is particularly true for knowledge intensive fields where emotions directly govern the majority of the result of the work, for example, through conscious and subconscious thinking, decision making, motivation, creativity or ability to co-operate. In order to understand how emotions affect employees and their work, organizations have to find proper ways to become aware of emotions. One way to increase awareness is to start measuring emotions in workplace. There are various approaches for measuring, but their applicability in real life context in everyday use needs more research.

The purpose of this paper is twofold. Firstly, the paper explores through literature review how emotions can be measured in the work context. Secondly, three emotion measurement services are tested in knowledge work context and their applicability is evaluated. The paper provides new insights and user experiences of emotion measurement services and their use in knowledge work. Managerial guidelines are drawn up for planning and executing emotion measurement services in an organization.

METHODOLOGY:

Three emotion measurement services were used by knowledge workers in real life work contexts. These services provided new ways to collect data of daily work. The usefulness of these services was tested through piloting services in small groups. The selected services approached emotion measurement with different methods; human intelligence service for reporting daily experiences at work, wearable technology ring for measuring electrodermal activity during workday and mobile self-tracking service for identifying discrete emotions and their intensity. These research periods acted as interventions for supporting well-being and performance at work.
EXPECTED RESULTS:

The paper identifies various methods for measuring emotions in knowledge work context. Measurement tools can be useful in order to better utilize and channel emotional energy into productive and creative behavior, but also remain useless if the purpose and outcome of measuring are obscure.

The value of the measuring is realized if and when the knowledge worker becomes more aware of their emotions and how discrete emotions influence his/her work performance individually. However, ethical concerns arise when it comes to collecting highly personal data, such as emotional data. Ethical concerns and data ownership are aspects that need to carefully be taken into account when designing emotion measurement services in an organization. The paper suggests that measuring emotions in work context should always be voluntary and some emotion measurement services could be offered to personnel as self-management tools. Managerial guidelines are drawn up for planning and executing emotion measurement in an organization for two purposes – supporting self-development and assessing company pulse.
D: Changing geographies of services: Internationalization, regional and local development
D1: Services and local, regional and national development

Chair: Laurențiu Tăchiciu
Tyranny of Distance or Market Potential? Empirical Analysis on Service Sector Growth in Hinterlands of China

Yi Liu, Jiechang Xia

OBJECTIVES:

Despite the pivotal role of the hinterlands in theories of the development of the urban hierarchy, there has been little literatures related to the effect of service agglomeration of metropolitan on service sector growth in the hinterlands, especially in developing countries. Furthermore, smooth and successive changes caused by market potential in New Economic Geography theory have ignored the discrete changes caused by the distribution of different hierarchy cities, which will lead to an incomplete measure of agglomeration spillovers on service sector growth of hinterlands. Also in the reality of China’s service sector development, many cities have taken advantage of their proximity to large cities, while others suffered spatial exploitation of central cities.

METHODOLOGY:

This paper focuses on the role of central cities on the uneven development of service sector in Chinese cities, including metros and non-metros. By reviewing the relevant studies in the New Economic Geography, this paper has created a theoretical framework to examine the effect of central cities on the development of service sector in hinterlands, and examined how proximity to different hierarchy cities affects the service sector and sub-sectors growth of hinterlands by using the spatial econometric model. In order to accurately measure incremental distance, this paper firstly divided all cities in China into four hierarchies with shift-share method. Then by using the panel data of cities at or above prefecture level of China in 2003-2012, this paper conducts an empirical analysis on the net agglomeration effects depend on various hierarchy metro cities. Industrial and regional heterogeneity has also been considered to see the different effects of geographic proximity.
EXPECTED RESULTS:

Results indicate that when taking the distribution of different hierarchy cities into account, service sector growth in hinterlands is more dependent on the geographic proximity to higher hierarchy cities than the market potential caused by the near metro cities. Improvement in transportation infrastructure and information technology did not eliminate the impact of geographical factor on service sector growth, and tyranny of distance does exist. The first-hierarchy cities have a centric drive effect on service sector growth of regional central cities and hinterland cities, while the nearest metro has a shadow effect of agglomeration on hinterlands.
The assessment of service innovation in relation to regional development. A comparative analysis between the Province of Limburg and the Region of Bucharest-Ilfov

Alina-Elena Iosif, Laurentiu Tăchiciu

OBJECTIVES:

Even though there are studies revealing that there is a strong connection between service innovation and regional competitiveness, the research topics related to the effects of promoting service innovation at the regional level are attractive for academics, policy makers and practitioners.

The topic of this research is connected to a previous research process that was coordinated by the European Service Innovation Centre (ESIC), as an initiative of the DG Enterprise and Industry of the European Commission, and reports on six model demonstrator regions are formulated. The main aim of the current paper is to reveal the relevancy, potential and policy mix of innovation at the regional level, by conducting a comparative analysis between two European regions. Selected from the six model demonstrator regions, the Province of Limburg (NL42) is going to be compared to the best performant region from Romania, namely the Bucharest-Ilfov (RO32).

The comparative analysis is following similar points of discussion as the ones included in the reports of the model demonstrator regions, starting from the challenge of each region; and referring to two main components: the Regional performance and potential, and the Regional policy and policy mix revealing the stakeholders' interest for service innovation.

METHODOLOGY:

Methodologically, a statistical analysis on the main indicators that show the influence of service innovation at the regional level will be conducted. Further on, the research includes a core qualitative study focused on comparing the regional policy mix for innovation of the two selected regions. Particularly, it contains an analytical overview on the regional policy mix for both regions and
the innovation policy measures at other policy levels, and ends with an assessment of the regional policy mix for innovation. In terms of methods, there will be a mix between statistics, content analysis of the current regional policy mix for innovation of both Limburg and Bucharest-Ilfov region, and semi-structured interviews among stakeholders.

The ideal situation would be a systemic approach in terms of policy mix that has the purpose to foster regional development by addressing societal challenges and spatial changes through service innovation, but the reality of the two comparing regions is currently looking differently.

EXPECTED RESULTS:

The expected results consists of a series of recommendations that are useful for the stakeholders involved in promoting service innovation for enhancing regional development. Moreover, based on the best practices of the two selected regions, policy recommendations for developing proper innovation policies within similar regions of the European Union will be formulated.
Host country impact of services FDI: the case of Visegrad countries

Zoltán Gál, Magdolna Sass

OBJECTIVES:

Services sectors have been important “hosts” to inward foreign direct investments (FDI) in former transition economies and among them the Visegrad countries (Czech Republic, Hungary, Poland and Slovakia), however, in the nineties their main aim was to supply the domestic market of the host country with various services, which were unavailable or less developed in the pre-transition era. Thus their main motivation was market-seeking. Starting from around the beginning of the years 2000, more and more FDI projects arrived to the Visegrad countries, the main aim of which was to build up export capacities in certain service sectors relying mainly on the abundantly available mid- to higher-skilled local labour with relatively low wages – thus the efficiency-seeking motive has become increasingly important for services foreign investors. While the host country impact of manufacturing FDI is analysed extensively in various areas, the number of studies dealing with services FDI is much less numerous, especially in fields such as exports or employment and/or differentiating between the host country impact of market-seeking and efficiency seeking investments.

The main aim of the research is to analyse the impact of FDI on growth, export and employment in selected service sectors of the Visegrad countries. Three service sectors: financial services, ICT-related services and business services were analysed. The three service sectors were selected, because i) they are important host sectors to FDI in the countries analysed; ii) they differ to a great extent in terms of their export-intensity (export/sales) ratios: business services being highly export-oriented, financial services sell their products mainly on the domestic market, while ICT-related services can be positioned in-between the other two sectors.

METHODOLOGY:

As for the methodology, we rely on the analysis of a panel dataset containing time series data for the period 1990/95-2013 on FDI inflows, FDI stock, FDI share in GFCF, sectoral FDI, export and import, employment and various composite indicators proxying the level of development of the analysed services sectors. Using SPSS, we examined how FDI in a given sector impacts upon employment, exports and the other variables.
EXPECTED RESULTS:

According to our preliminary results, in the case of employment, we could not find low p-values (thus the levels of significance were low), though in the case of financial services, the b-values were considerably higher than in the case of the other two service sectors. Thus interestingly enough, the employment effect of FDI is not significant in any of the analysed service sectors. In the case of exports, for ICT-related and business services, the impact of FDI was significantly positive, while in financial services there was no significant connection between the two variables. Further statistical analysis is being carried out for the impact of FDI on various other characteristics of the analysed three sectors in the four countries.
D2: Collaboration, networking and innovation

Chair: Lars Fuglsang
Networking and cooperation: Social innovations in the demographic change

Janina Evers, Jan Knipperts

OBJECTIVES:

Demographic change confronts social services with huge challenges. In many cases they are not able to offer a wide range of needed services by their own. Therefore, it is recommended to have close local partnerships with other social services and institutions and to provide complementary services together. This paper shows how such cooperation and networking projects could be established and managed in a sustainable way by presenting an empirical example of social services cooperation. It raises the key question how transitions to sustainable working services networks can be well managed within a context of bottom-up initiated networks by increasing pressure to act, whereby they are most likely not to be managed in a formal way. The thesis of the authors is that to develop such local projects and to raise them to a steady and higher level, social innovations are nessesary to lead local and regional service networks to a sustainable development by using forms of regional governance extended by transition management approaches.

The concept of Transition Management has been primarily applied within the context of sustainability of natural ressources and delivers the theoretical framework to analyse, structure, and coordinate running governance processes. This combination represents a social innovation as it makes possible the identification of actors and control capabilities in the area of social services, particularly in the context of demographic change, and the evaluation of the effectiveness of cooperations over a longer period.

METHODOLOGY:

Our paper shows from a conceptual perspective how cooperation and networking projects could be established and be managed as social innovations in a sustainable way. Social innovation means the enlargement of a local cooperation or network (micro level) up to a regional or even larger level (meso - and macro-level). Through this process, new arenas of interaction of different
actors will be achieved, which will contribute to an even stronger and sustainable Initiative on the local level.

We observe instances of cooperation by using the political science perspective and criteria of the Local-, and respectively, Regional Governance approach. This research perspective is extended by using the Transition Management approach. This concept and its application to cooperation of social services is additionally clarified by the presentation of an empirical study that shows how social service microenterprises implement a bottom-up networking process which leads to good cooperation among different actors at the informal level. While the networking in the given case study is mostly realized on the micro-level of a local project, the broad perspective of a sustainable cooperation on the meso- and macro-level is clearly given but for now still in the beginning stage like our chosen case study shows.

EXPECTED RESULTS:

Social service organizations are key actors for innovations because they have to deal with demographic change and to shape it. Networking will become more important for them to link their offers and services to provide complementary services in a specific region. The quality of communication and collaboration between the actors concerned is the key to success of such projects and is strongly needed to build trust between the key stakeholders of such cooperation. In the case given in our paper the partnership with the interregional organizations of social services provides a solid platform to bring this cooperation from a local to a regional level and makes the establishment of similar forms of cooperation in other regions conceivable. Furthermore interregional organizations are a good way to achieve successful management of these regional governance forms from a host level. The methodology suggested by the Transition Management Approach could provide the appropriate framework to deal with this task by using new governance methods without classical hierarchic governance.
Towards a multi-level framework of collaborative innovation in tourism

Olga Høegh-Guldberg, Lars Fuglsang

OBJECTIVES:

Tourism companies share resources and need to collaborate in order to develop and innovate. However, in the literature on innovation and collaboration, it is still unclear how innovation and collaboration are co-evolving. Therefore, the main objectives of the paper are:

- To discuss different perspectives on collaboration and their role for innovation in tourism: dyadic relations, innovative milieus, social network approach, destination, innovation system and institutional environment
- Elaborate on whether a systematizing criteria could be found in order to attribute each approach to a multi-level framework
- Inquire into the matter of innovation capacity at different levels of collaboration
- Elaborate on tourism application of approach(es) to collaborative innovation which received insufficient attention in the research literature on collaboration and innovation in the industry

METHODOLOGY:

Six approaches to collaborative innovation are described by the main characteristics inherent to each of them. When possible, the study goes back to the foundational works describing the approaches. In case when there is no clearly identified respective foundational paper for an approach, a review of wider spectrum of articles is done in order to identify the main intrinsic characteristics. The criteria for the choice of articles is explicit orientation on a particular type of collaboration as a precondition of innovation. Descriptions of different levels of collaborative innovation also account for tourism context when applicable.

The main characteristics are then systematized in a table concluding on ontological dimension, type of study conducted, methodology, main findings as
well as relation to innovation.

EXPECTED RESULTS:

A framework systematizing six different approach to collaborative innovation is offered. However, research on the broadest form of collaboration and the last level of the framework, i.e. institutional environment, particularly its relevance for analyzing collaboration and innovation in tourism, has been modest. It might be explained by the fact that tourism firms are limited in the resource base for their activities as most of them are small and medium enterprises. Therefore, the paper contributes by elaborating on whether and how collaborative innovation in tourism is possible in institutional environment. Namely, tourism companies are institutionally embedded within the area they operate in, which, therefore, influences their innovativeness and innovative outcomes. Besides, collaborative innovation within institutional environment differs in terms of capacity to innovate.
Evaluation of design thinking for the creation of service innovations in developing countries

Silvia Gliem, Christiane Hipp, Astrid Böger, Harald Gögl

OBJECTIVES:

The services sector in newly industrialized countries and developing countries is constantly growing. In these countries service innovation has the potential to sustainably contribute to well-being and foster the development of emerging markets. This especially applies to educational services, health services, and other social services. However, demand and supply of these services often do not fit due to non-existing or traditional, product based marketing instruments in use. This situation is particularly severe in newly industrialized countries and developing countries.

To create service innovations in such environments, we propose to employ the design thinking methodology. Hence, we outline the theoretical approach of design thinking, its features, and its fitting accuracy. We evaluate the idea of creating service innovation on the basis of the design thinking methodology by several case studies that are settled in the health sector. Our evaluation of design thinking based on a multiple case study analysis provides researchers and practitioners alike with an impression of the power of design thinking and implications for its application in dynamic environments.

METHODOLOGY:

First, the design thinking methodology is presented from a pure theoretical perspective. Subsequently, we will shed light on the peculiarities of design thinking on the basis of a detailed case study carried out in Kenia dealing with maternal care services. This analysis is complemented by multiple other case studies showing how design thinking leads to the creation of service innovation. In order to prove our proposition that design thinking is a promising method for the creation of service innovations, we use a qualitative approach. Using the data of the before mentioned case studies, we conduct a multiple case study analysis. Thereby, we elaborate on the strengths and weaknesses of design thinking and investigate the service innovations created by it. Conclusions in relation to the
applicability of design thinking and critical success factors are derived from our analysis.

EXPECTED RESULTS:

Our multiple case study analysis will provide insight whether design thinking is a promising method for the creation of service innovation. Furthermore, our analysis will reveal the characteristics of design thinking methodology and possible clues for its successful application. Implications for researchers and practitioners will be presented and are intended to foster the use of design thinking as a method for the creation of service innovations.
D3: Services, regional and local development

Chair: William Beyers
L’éventail des services délocalisables, facteur d’attractivité des pays hôtes : Une approche par les coûts et les risques

Arbia Chatmi, Karim Elasri

OBJECTIVES:

Notre analyse porte sur la décision de délocaliser en relevant les caractéristiques du pays hôte qui y concurrent. Les hypothèses ainsi formulées serviront à établir un modèle qui distingue les services délocalisables selon le pays d’origine et le pays d’accueil. Concernant les propositions faites, elles seront vérifiées par la suite et montreront que l’attractivité du pays en matière d’accueil de services délocalisés tient non seulement de l’étendue des services délocalisables mais aussi du faible risque pays.

METHODOLOGY:

D’une part, la modélisation mathématique est appelée à répondre à la question du choix du lieu de localisation, entre produire localement (dans le pays d’origine) ou délocaliser la production (dans un pays hôte) en fonction des caractéristiques des pays et des spécificités des services. En multipliant les simulations avec de nombreux pays hôtes, le modèle permet d’établir le lieu le plus approprié pour bénéficier le plus de la délocalisation.

D’autre part, l’étude économétrique s’intéresse aux atouts que le pays hôte doit développer pour attirer un maximum de délocalisation. Aussi, l’étude économétrique ne se préoccupe pas tant du niveau de gain que de l’éventail de services pour lesquels il y a un gain potentiels. Un indicateur est construit suite au modèle mathématique pour calculer l’étendue des services délocalisables pour lesquelles il y a un gain à la délocalisation en tenant compte des caractéristiques du pays hôte et des spécificités des services.

EXPECTED RESULTS:

L’objectif est de montrer une relation positive entre les services délocalisés dans
le pays hôte et l’étendue des services délocalisables. Un indicateur de risque pays est aussi introduit pour montrer qu’il influence la quantité de services délocalisés dans le pays hôte.

Il s’avère que l’éventail des services délocalisables, c’est-à-dire les services pour lesquelles la délocalisation serait profitable, constitue un facteur important d’attraction probablement parce qu’il montre que le pays d’accueil offre aux entreprises une visibilité internationale, une capacité à se diversifier et un accès facilité aux infrastructures. En outre, l’aspect risque pays n’est pas à négliger puisqu’il peut conduire l’entreprise à devoir supporter des coûts imprévus.

William Bjorn Beyers

OBJECTIVES:

This paper documents changes in export shares (to the rest of the U.S. and on foreign trade account), import shares (from the rest of the U.S. and on foreign trade account), and regional (WA state) production shares over the 1963-2007 time period for WA sectors. The paper utilizes the unique history of WA state i/o models (eight survey-based models spanning the 1963 – 2007 time periods) along with data from the benchmark U.S. i/o models to develop the metrics described above. The author has already undertaken this decomposition for producer services, which has provided fascinating insights into the roles of trade as well as local production. This paper would extend these accounts to as many other services as can be examined with the underlying data. While there is a significant literature on export trade in services, including producer services, this literature has tended to be cross-sectional rather than longitudinal, and it has not focused on local and external sales relationships simultaneously. There has been much less focus given to the flip-side of exports: imports. The data base to be utilized in this paper allows a simultaneous focus on purchases (local plus imports) and sales (local plus exports).

METHODOLOGY:

The paper will utilize benchmark U.S. input-output data for the years 1963, 1967, 1972, 1982, 1987, 1997, 2002, and 2007. These are the same years for which the State of Washington has estimated input- output models. The national model documents the use of commodities by industries each year; this can be interpreted as domestic absorption of services. Similarly, the WA models document the local purchases of services. Across the economy, differences between local and total demands can be interpreted as imports (the author has already undertaken these computations for producer services with robust results). Similar analyses with sales data are also possible; the WA I/O models allow estimation of regional sales and sales on export account. The WA I/O
distinguish between domestic exports and foreign exports, while the U.S. input-output model provides estimates of total domestic consumption.

The paper will develop measures just described for the 1963-2007 time period for as many service sectors as can be isolated in the underlying i/o data sets. These likely include: wholesale trade, retail trade, transportation services, producer services, health services, and consumer services.

Initial analyses undertaken by the author on this topic were measured against all private industries, and did not broach the issue of how changes industry mix have been related to observed overall change. The paper will attempt to unravel this issue.

EXPECTED RESULTS:

This paper is exploring a topic that has eluded service industry scholars, due to a lack of data. The unique Washington State input-output model history gives us a rare opportunity to focus on these changes in demand for and sales of services in an advanced economy—the United States.

The analysis already conducted for producer services is an example of the type of results to be expected. This analysis documents estimated WA regional requirements for producer services, documenting a strong rise in local supply, as well as demand for these services on import account.

The analysis just described yields exports from other regions in the U.S. to WA producer service businesses. The WA accounts also provide estimates of exports from WA to clients located elsewhere in the U.S. The author believes that this is the first attempt to provide a longitudinal portrait of these interregional sales and purchases relationships across a wide array of service industries. We have many case studies of traded producer services, including the author’s own pioneering work (Beyers & Alvine 1985). But we do not have efforts of the type described for this proposed paper to document these trade patterns on a more comprehensive basis.

Implications of these U.S. data for European nations and regions will be discussed.
Between the center and the margins: Services location, economic (re)structuring and quality of life in metropolitan periurban areas

Pedro Costa, Teresa Costa Pinto, Ma Fátima Ferreiro, Fátima Bernardo, Conceição Colaço, Sebastião Santos, Ricardo Lopes, Rosa Coelho

OBJECTIVES:

The aim of this paper is to discuss the specificities of the role of services in the economic structuring and in the social liveliness and attractiveness of periurban areas, drawing on an empirical work developed at Lisbon Metropolitan Area.

Periurban areas present specific characteristics in terms of the competitive factors they develop to attract economic activities, users and residents, which make them special in terms of contemporary metropolitan contexts. Specific types of economic activities and specific branches within economic value chains (from logistics to agriculture, from proximity services to KIBS, from clean energy supply to specialized exported oriented businesses, from specific touristic branches to environmental protection services) find their place in these areas, and services have a fundamental role on it. At the same time, the social restructuring of these areas, marked by increased territorial and social mobility(ies), and permanent identity challenging processes, is intimately marked by these service activities, that, on one hand, condition the attractiveness of residents and users, but on the other hand, are the result of these new social composition and the fruit of the re-composition of the needs of that population.

The role of services in these “in-between” territories and the way they are important in the spatial economic structuring of these areas and in the quality of life and well-being these areas provide are clearly under-studied, and this paper's objective is to problematize that issue, drawing on the result of an empirical work developed in 5 different parishes of Lisbon Metropolitan area, which represent 5 categories of periurban spaces previously identified.

METHODOLOGY:
The paper is developed under the broader scope of a funded research project on the challenges that periurban areas of Lisbon Metropolitan Area will face to meet sustainability. In the scope of this project, in the first phase of the project has been identified a typology of peri-urban spaces in the Lisbon Metropolitan area, starting from a thorough diagnosis, at different levels (Mobility; Identities and Experiences; Natural Elements; Territorial Functions and Topology; Occupation; Economic Activities), which made it possible to map from a cluster analysis, a set of different types of parishes in AML, among which we have defined 5 types of peri-urban territories.

In a second phase, and from a more detailed analysis based on quantitative and qualitative methodologies (including, but not limited to, interviews, the application of a survey and a discussion of visual material recollection on the territories concerned), we proceeded to an in-depth study of 5 parishes who assumed as representative of each of these clusters (Nossa Sra. da Anunciada; Sarilhos Grandes; Poceirão; Vialonga and Agualva), considering the challenges to the sustainability of these territories within the timeframe given by the project, based on a characterization of the current situation and a discussion with local stakeholders on scenarios for its future development.

This analysis was based on an in-depth evaluation carried out the 5 distinct levels, which constitute what we’ve called “the pentagon of sustainability”: the "physical" system; the "ecological" system; the "social" system; the "economic" system; and the "institutional" system.

In this paper, we focus specifically on part of the results obtained on this part of the project, namely, in 2 of those analytical dimensions: the "economic" and the "social". It is made a discussion, based on the information collected via interviews, survey and visual recollection, crossing the 3 methodological sources, in order to establish a profile of peri-urban services, and to inquire the way they condition and (re)produce the economic (re)structuring patterns and identity(ies) and quality of life in metropolitan peri-urban areas.

EXPECTED RESULTS:

Paper will provide, after an introductory section, an analysis of the types of services found in each of the parishes, confronting the different categories of peri-urban areas represented. Drawing on the empirical results achieved with the interviews, the survey, and the visual recollection, two main sections are
provided, summing up the results: one centered on the role of these services in the (re)economic structuring of metropolitan area; the other one focusing on the re-composition of lifestyles and identities. The results of both analysis are then integrated, on a final section, providing a tentative typology which is suggested as framework for analyzing the role of services on periurban metropolitan spaces, and some policy implications, in terms of territorial planning policies, are underlined.
D4: Knowledge intensive services: geographic characteristics and development

Chair Patrick Ström
International Financial Centre Development in Central and Eastern Europe – Role of Financial & Business Services Offshoring in IFC Formation

Zoltán Gál

OBJECTIVES:

The paper examines the financial centre development in Central and Eastern Europe and a detailed analysis devoted to the international financial centre (IFC) function of Budapest, together with Warsaw and Prague as reference cities during transition, assessing of the preconditions for the creation of a regional or third tiers centre. The study argues that the development of the financial services in CEE is characterized by external dependency, which appears in the form of hierarchical command and control functions over Central and Eastern European financial subsidiaries within the West European IFC network. The paper identifies the stages of IFC formation within the CEE and investigates the role of offshoring activities in the IFC formation process and the factors what make major cities an increasingly attractive option for financial companies to relocate their BPO activities. The presentation reveals the geographical implications and the role of offshoring activities in the metropolitan transformation. The paper assesses the highly uneven impacts of the global crisis upon Central and Eastern European financial centres and confirms that their trajectories also became more differentiated as a result of the crisis.

METHODOLOGY:

The paper quantitatively compares the factors of IFC functions of Budapest Warsaw and Prague. Both qualitative and quantitative data have been collected. Primary data for this paper is collected from national statistical offices, central banks, and private financial firms’ report (Raiffeisen CEE Banking Reports) and also from the sites of international financial organizations (Bank of International Settlements, World Federation of Exchanges). Concerning offshoring section Foreign Direct Investment (FDI) and trade statistics support the assumption that an expanding export in other business and financial services has been associated with relocation of services centres, back offices created by FDI into the six NMS. The service export data adopted from the Balance of Payments
statistics gives a good approximation to identify those sections of service trade, which are considered to be offshorable. We also use reports issued by consultancy firms. With regards to the development of the financial centre functions of Budapest expert interviews were conducted with the stakeholders of the Hungarian banking sector and policy makers in the mid-2000s. The paper summarises the additional location factors selecting Central and Eastern European locations.

EXPECTED RESULTS:

According to our preliminary results, we argue that the development of the financial services sector in CEE is characterized by external dependency, which appears in the form of hierarchical command and control functions over Central and Eastern European financial subsidiaries within the West European IFC network. It argues that despite there is a little market evidence showing signs of a regional- centre focus during the transition there are some signs of IFC formation. The study concludes that the rise and fall of Budapest as a prominent regional financial centre can be explained not only by the macro and micro conditions of local economy but by the actions and the success of other financial centres, especially if considering the current development of Warsaw as an emerging financial hub.

The presentation reveals the geographical implications and the role of offshoring activities in the metropolitan transformation and their growing significance in local and regional development. Empirical findings suggest that offshoring services have a significant impact on their metropolitan locations, however with certain constraints due to its more pronounced Global Network embeddedness and it has a rather limited impact on host locations. We found that SSC/BPO locations therefore can not contribute to IFC formation.
Regional reconfiguration of the multinational companies in the knowledge economy

Ola Bergström, Patrik Ström, Department of Business Administration, University of Gothenburg, Sweden

OBJECTIVES:

EU member states compete among each other and with the rest of the world for foreign direct investments. Reconfiguration of MNCs’ activities is therefore important for the development of a European policy framework creating an attractive environment for these FDI. Employment in foreign controlled enterprises in European Member States is affected by the way MNCs allocate restructuring, which can be affected by national governments only to a limited extent. From this perspective it is clear that the way restructuring is managed in MNCs has important implications for European policy making. MNC restructuring is driven by concerns for employment protection; MNC strategic developments, the availability of specific restructuring measures, the development in the local market, and the nature of competition in the specific industry. In the knowledge driven economy, dominated by advanced manufacturing and various forms of services that combined creates value at specific locations, reconfiguration of MNC activities is also vital for future competitiveness. Competition for talent in relation to the development of products and services help to transform the economic geography of the EU Single Internal Market. Firms are expanding and changing their industrial footprint in order to best sustain and develop their competitive advantage. This combines industrial policy with the development of public policy towards facilitating this industrial reconfiguration in a positive way for regions and municipalities. The objectives of the paper are based on this discussion; 1) to study the reasons for MNC spatial reconfiguration, and impact of MNC spatial reconfiguration for industrial policy and employment regimes, and 2) establish a conceptual contribution to the understanding of the connection between advanced manufacturing and business services that help to drive this reconfiguration.

METHODOLOGY:
This paper compares the legal and policy frameworks related to restructuring in eleven Member States and gathered data on changes in foreign controlled employment between 2008 and 2013 across Europe. We believe the scheme will prove helpful in analysing the allocation of MNC restructuring in other countries. The eleven Member States covered provide examples of the variation and combination of regulatory regimes relevant for MNC restructuring and also illustrate the divergent and complex contexts that MNC restructuring may take. The comparative aspect of this study is an important contribution in relation to previous studies that analyse the characteristics and outcomes of restructuring in MNCs in a single national context. From a national context, restructuring in MNCs is most often seen as a threat to jobs in the national labour market. However, from a European perspective, MNC restructuring can be seen as an outcome of the creation of a European single market and an emerging European division of labour. The paper also aims to include case study based data from both advanced manufacturing firms and business service firms in order to catch the underlying rational behind spatial reconfigurations of activities, not only within Europe, but also on the global market.

EXPECTED RESULTS:

The absence of effective measures for national governments to control MNC restructuring give rise to dynamics and conflicts that are complicated and complex for many reasons. First, attempts to exercise control primarily through statutory labour market regulation tend to create greater incentives for MNCs to divest their operations in that particular member state and thus expand operations in other Member States where regulative frameworks are less restrictive. Second, when governments deregulate legal frameworks as a way to be more attractive for foreign investors, there is a risk of creating a race to the bottom, where employment standards, wages and working conditions are reduced in general. Third, Member States may also apply reactive policies to prevent MNCs to withdraw their operations. There are several factors influencing the way MNCs allocate restructuring activities, which are not easily controlled by government authorities. In particular, from a European perspective, it is difficult to implement the same control measures or regulative frameworks in all Member states, taking into account the diversity of MNCs, their different strategies, types of industries and governance structures. Presumably, Member States need to balance the thin line between regulatory measures and industry policies to build sustainable economic development for the entire Single Internal Market.
Outward FDI in financial services: the case of Hungary

Magdolna Sass

OBJECTIVES:

Hungary was among the frontrunners in OFDI among the New Member States of the European Union, starting to invest abroad considerable amounts from the mid-nineties. Hungarian OFDI is concentrated in a few sectors, partly in connection with the largest transactions connected to a few companies. Among these, financial services have been among the leading sectors, representing almost one fourth of the total stock of OFDI at the end of 2008, which declined to 7 % by 2013. This share as well as changes in it could be attributed to the activities of a few banks: mainly to OTP Bank, and to a lesser extent MKB Bank in monetary activities and OTP Garancia, an insurance company. The paper examines in detail the foreign investment activities of the leading investors and changes in it during the crisis.

METHODOLOGY:

The methodology applied is detailed case studies of the main investor banks, based on semi-structured interviews with leading managers as well as other information collected from specialised newspapers and journals and the bank balance sheets. On the basis of these, Hungarian OFDI in financial services is analysed, regarding the main ownership advantages of investors, their motivations to invest, the entry mode chosen, the geographic locations of the investments, the strategy settings of the companies and the home country impact of outward FDI. Given the deep changes during the crisis years, the aforementioned areas are looked at in the pre- and post-crisis period as well.

EXPECTED RESULTS:

As far as the expected results are concerned, after briefly introducing the leading players, we distinguish indirect and virtual indirect investors: while OTP Bank is foreign majority owned, the strategy of the bank is determined by its controlling owner(s), which are the members of the Hungarian management due to the dispersed ownership structure (no foreign investor has more than 10 %). On the
other hand, MKB Bank was a 100% foreign-owned bank with a German owner in the pre-crisis period, the important role of the Hungarian management is also shown when determining the foreign investment strategies of the Hungarian subsidiary. Thus, while the two cases would be clearcut cases of indirect investments, their closer analysis reveals important “deviations” from the textbook case.

In terms of the ownership advantages (OA) of the banks, we show the direct (MKB) and the indirect (OTP) connection between inward and outward FDI in terms of enabling the banks to develop their own OAs with i)experience in privatisation and restructuring of formerly state-owned banks; ii)with learning how to operate successfully in a developing market economy environment with numerous competitors. We show that their motivation to invest is mainly market-seeking with strategic asset seeking in the case of OTP. In terms of entry modes, we make a connection between the choice of entry mode (acquisition in certain cases related to privatisation) and the OAs of the banks. In location choice, we show the importance of psychic distance in a wide sense (including a slightly belated progress compared to the home country towards the establishment of a market economy). We show the impact on the home economy in terms of i) benefitting from synergies, ii) medium to small employment creation in the parent bank and iii) profit repatriation helping the parent banks especially during the crisis. The direct impact of the crisis is shown for the performance of the banks and their internationalisation strategies and its indirect impact on changes in the ownership structure of MKB impacting upon its strategy.
E: Development, innovation and societal impact of knowledge
E1: Innovation and new business models in KIBS

Chair: Christina Castro Lucas
Teaching Strategy of an Innovative Service: a Case Study in the Context of Cybernetic Simulated Scenarios

Franco, Víthor Rosa; Castro-Lucas, Cristina; Guimarães, João Gustavo Alcantara.

OBJECTIVES:

Electronic systems have been widely popularized since the beginning of the XXI century. These systems have been used to many ends, such as the share of information, economical trades, organizational management, and others. Also, many of these systems have been connected to public networks, a type of network wherein anyone can access and can access networks or the Internet through it. This expresses a vulnerability that the electronic systems can be exposed to. Cybernetic security involves the techniques that have been developed to defend those systems. It is an innovative service, given the recency of the need of it and the fast and constant development of cracker programs that cybernetic security fights against. However, the teaching of cybernetic security is not widespread, taking into account the widespread necessity of using it. Therefore, the aim of this case study is to evaluate a teaching strategy of cybernetic security using simulated scenarios.

METHODOLOGY:

The teaching strategy was ministered as a discipline in a major federal institution and was called “the Cybernetic Challenge”. Five groups participated of the discipline, each one with at least three members and with five members maximum. They were all students of computer science, computer engineering, network engineering or software engineering. Each group was oriented by a professor of their teaching institute. The Challenge consisted in the accomplishment of 15 tasks of intrusion scenarios created by an instructor and performed in the Cyber-Range-In-A-Box (CRIAB). CRIAB is a simulator of computational networks, focused on the probe of vulnerabilities. The groups received general instructions about the tasks. They received access to each new task as soon as they gain access to the network assets in the previous simulated environment. Each group had five accesses of four hours to the CRIAB environment. The performance of each group was measured by their total points.
acquired in each task, which was calculated taking into account the correct accomplishment of the task and the time of each group to perform the intrusion, totaling a maximum of 160 points. To characterize the teaching strategy as a challenge, was given as a prize to the group that has achieved the highest number of tasks a visit to one of the technological research centers of Boeing.

EXPECTED RESULTS:

None of the groups completed all the tasks in the maximum set time. However, the best placed team had a difference of 30 points against the second place. It was found that the winning group was the most balanced between the skills of each of its members and the one who took the best take advantage of them. The group ranked last also contained highly skilled students that, individually, could easily solve many of the tasks’ problems. However, they did not know how to best leverage the skills of each one. In general, it was observed that all groups were better prepared to operate in electronic systems in need of security. We conclude that the Challenge is effective as a teaching strategy. It is proposed that new studies seek to quantify and test measurement estimators which may serve to better evaluate the teaching strategy quality. It is expected therefore that the study, as a pioneer in the area in Brazil, may raise new research that is multi-method and multi-theoretical oriented, aiming to strengthen the cyber security education and the proper practice in this area.
From value propositions to business models: the case of diabetes self-care

Eija-Liisa Heikka, Saila Saraniemi, Pauliina Ulkuniemi

OBJECTIVES:

In health services, self-care in treatment and following the course of diseases has an increasingly important role in controlling diseases. Self-care is particularly important in treatment of diabetes. Daily activities that diabetics need to do include, for instance, measuring blood sugar levels before and after every meal and calculating the amount of insulin for every meal. Exercising is also an important part of treatment of diabetes. Nowadays, diabetics receive some help to nutrition, but still not enough help related to physical activity. Fears concerning health, such as fear of losing eyesight or a limb, are present every day in diabetic’s life. Therefore, there is huge demand for self-care solutions for diabetics. Hence, the objective of this study is to identify possible business models based on value propositions emerging from diabetes self-care context.

METHODOLOGY:

This study utilized qualitative research methods to carry out the objective of this study. Qualitative methods enable gaining the most complete picture from the research phenomenon of this study. This study includes several different companies, which enables exploring and comparing multiple perspectives related to the research phenomenon of this study. The main research data of this study consists of qualitative interviews. In addition to the semi-structured interviews, also MyData clinics are used as primary data in this study. The interview data has been supplemented with secondary data such as meetings and workshops. The interviews have been analysed by theme-based categorizing to address the objective of this study.

EXPECTED RESULTS:

The findings of this study reveal several business models based on the value propositions related to the diabetes self-care case. According to the analysis of
the interview data of this study, customers prefer value propositions that promise easy use of equipment and services, and possibility to have a balanced and full life. Possible business models that emerged from the value propositions include several service models based on self-care. One possible business model concerned an application using MyData to provide treatment instructions and recommendations for diabetics related to e.g. nutrition and physical activity. Another possible business model could build also around digital service and related applications to facilitate peer support, which was seen very important to share information on self-care, and to deal with changing situation and emotional stress. There was also demand for personal training services specialized in providing guidance to diabetics. However, also challenges related to utilizing personal data in developing business models emerged clearly from our data. These challenges relate to customers’ reluctance to reveal personal data and to their concerns over how their personal data is used and shared. This study provides theoretical implications by offering insights to possible business models based on value propositions emerging from diabetes self-care context. This study also carries several practical implications. The service providers may benefit from gaining practical insights on possible business models targeted to diabetics.
Innovation in Knowledge Intensive Business Services in Palestine: A conceptual framework

Rabeh Morrar, May Abdelhadi

OBJECTIVES:

The Palestinian economy is considered as a service economy. The service sector recently is the main contributor to the GDP and employment. Knowledge intensive business services (KIBS) represent an important and promising category within the service sector in Palestine. This is related to the fact that knowledge is becoming the strategic resource of production, and perform well in complex economic and political environment and could coexist with the many constraints imposed by Israeli occupation to the Palestinian territories. Thus, innovation in KIBS could create a value added to the overall service sector, and significantly enhance the economic growth in Palestine. But, the innovation in the KIBS sector in Palestine is not formalized or conceptualized well; it is not a regular and persistent process. Therefore, it is important to develop a framework for innovation in KIBS, which will define the innovation patterns and the main elements that could improve the innovation performance in KIBS sector through more structured interventions. This framework will provide a better structure for the innovation in KIBS and could contribute to facilitating the analysis and researches in this sector. In other words, the main objective of this research is to develop an innovation framework in the Palestinian KIBS sector, considering the main variables and factors that control the innovation worldwide and mainly in Palestine through analyzing the enabling environment and the restrictions for service sector and the intensives for integrating innovation within their institutions. The framework will be developed to better reflect the innovation within the KIBS and how would it be more effective and can create greater impact on their business, economic and social development,

METHODOLOGY:

The methodology will be analyzing different components affecting the innovation integration within the KIBS, including the classification of KIBS in Palestine, the innovation capabilities within the KIBS, innovation climates and enabling environment, management practices, innovation patterns in KIBS,
innovation obstacles and challenges, and finally the impact of innovation on the performance of KIBS firms. For this purpose, a questionnaire will be distributed to a representative sample that targets the different KIBS types and other stakeholders to reveal the innovation practices, different affecting factors, and their relationship with the overall performance of KIBS sector. Also, a semi-structured interviews with key institutions and other stakeholders (private, public, etc) to define the main elements of the innovation framework which will support the questionnaire development and design.

To estimate the relationship between innovation and the performance of KIBS firms, an econometric model will be applied using primary data collected from a sample of 300 KIBS in Palestine. This will enable us to obtain a quantitative measure for economic impact of innovation in KIBS.

EXPECTED RESULTS:

Three main outputs will be obtained from this study: 1. Identification of the critical factors and challenges that is affecting the effective integration of Innovation within the Palestinian KIBS. 2. Developing a conceptual framework that will structure the existing model of innovation within the KIBS. 3. To provide an oversight of the level of innovation within the Palestinian KIBS firms and its impact on their economic performance.
Sustainable business model innovations in service: A study of Norwegian knowledge-intensive service companies

Erlend Aas Gulbrandsen, Research Scholar, Lillehammer University College  
Sveinung Jørgensen, Associate Professor, Lillehammer University College  
Lars Jacob Tynes Pedersen, Associate Professor, NHH Norwegian School of Economics

OBJECTIVES:

The aim of this study is to investigate the characteristics of business model innovations for sustainability in the service industry. Sustainability is considered one of the main drivers of innovation in the contemporary economy (Nidumolu et al., 2009). Increasingly, business organizations are recognizing the potential for innovating business models in ways that integrate sustainability concerns (Wells, 2013; Boons & Lüdeke-Freund, 2013). On the one hand, this involves designing value propositions that enable consumers to lead more sustainable lifestyles (B2C) or enable other companies to reduce their ecological footprint (B2B). On the other hand, it involves delivering these value propositions in ways that are more sustainable (Jørgensen & Pedersen, 2015; Porter & Kramer, 2011). Research is increasingly demonstrating that such business model innovations may promote financial performance (Eccles et al., 2014; Kiron et al., 2012, Khan et al., 2015).

Sustainability initiatives appear to be particularly prevalent in goods-producing industries, wherein opportunities for greening the value chain are easily identifiable. However, knowledge is scarce about similar practices among service providers (Gulbrandsen et al., 2015, Bocken et al., 2014; Kiron et al., 2012). Such knowledge is highly desirable, since service companies constitute the majority of the economy both in the number of companies and as fraction of GDP; the world average value added of the service sector as a fraction of a nation’s GDP were 58.1 percent in 2013 (World Bank, 2015).

METHODOLOGY:
We conduct a survey of Norwegian knowledge-intensive service companies (N=103). Thereby, we provide insight into their stated motives for investing in sustainability, the problems they are aiming to solve, the concrete measures they implement, their perception of the success of those measures, as well as their intentions for further investments in sustainability.

EXPECTED RESULTS:

Our results shed light on how the concrete characteristics of service companies’ business model innovations are related to the degree to which they claim to gain financial benefit from their work with sustainability. Our results suggest that the companies that claim to gain financial benefit from their work with sustainability are more likely to (1) anchor their sustainability measures in organizational support systems, (2) make substantial changes to services and processes, and/or to their relational work with stakeholders, (3) use resources right, rather than use more resources, and (4) have a coherent system of sustainability work, from strategy to control and reporting. Finally, our results suggest that service companies are increasing their investments in sustainability, which implies that current competitive advantages may become tomorrow’s hygiene factors.

Our study contributes to the understanding of current business model innovations aimed at promoting sustainability, as well as how this varies with relevant characteristics of companies. This knowledge can contribute to management of sustainability challenges in service firms, and to identify avenues for alignment between social, environmental and financial goals therein.
E2: Innovation and development in healthcare

Chair: Doris Schartinger
Social innovation in Austrian health care: a conceptual approach

Doris Schartinger

OBJECTIVES:

Social innovation (SI) relates to new responses to pressing social demands by means which affect the process of social interactions. SI aims at improving well being in covering various areas which range from new models in service provision to web-based social networks, from empowering to sharing, and the development of global fair-trade chains (BEPA, 2010).

This paper has a special focus on social innovation in healthcare. It is a conceptual paper which is aimed at preparing the ground for empirical field work. It is part of a research project (Social Innovation: Driving Force of Social Change (SI-DRIVE)) that wants to enhance the theory on SI in developing a typology of social innovations and their relationships to transformative societal change and policy making.

The goal of this paper is therefore to provide conceptual guidance for a general scan of social innovations in Austrian healthcare, so that the screening, identification and assembling of social innovations in Austrian healthcare is as systematic as possible. The guiding question of this paper is: Are there patterns observable where social innovations in Austrian healthcare (most likely) occur?

METHODOLOGY:

In order to answer the above question I will follow a threefold approach, based on existing studies and analyses of Austrian healthcare:

1. The view on health markets

2. The view on health system(s)

3. The view on health problems

I start out with results from an Austrian health satellite analysis which defines markets in healthcare (Czypionka, Schnabl, Sigl, Zucker, & Warmuth, 2014). This
provides us with an overview of products and services in healthcare and hence enables us to ask ourselves if there are markets that are particularly likely to be complemented by social innovations.

This will be followed by the results of an Austrian Health System Review (Hofmarcher & Quentin, 2013) which thoroughly analyses health care in Austria on the system level and identifies strengths and weaknesses in provision and integration of supply and services. It is a working hypothesis that especially weaknesses on the system level initiate social innovation projects.

A third approach provides a view on health problems in Austria: The prevalence of certain disorders may be the basis for social innovation projects, or the low spread of others. This will be based on WHO data and WHO country comparisons.

EXPECTED RESULTS:

This conceptual and explorative approach shall support the screening and identification of social innovation projects which are not officially coined as such. While “social innovation” as a term is not used in official Austrian health policy, a multiplicity of aspirations to improve the coordination and governance of the public healthcare system are taking place that would conceptually qualify as social innovations. The wording used includes terms like “reforms”, “initiatives”, “improvement” etc. Instead, the term social innovation in Austria is mainly institutionalised through a private foundation. This private foundation explicitly uses the term social innovation, whereas official policy also engages in social innovation, but does not use the term. The methodology proposed in this paper shall provide guidance to comprehensively screen and identify social innovation projects in Austrian healthcare, labelled as social innovations or not, and shall furthermore help developing a typology of social innovations.
Non-Invasive Prenatal Test: An “invasive” innovation in prenatal testing

Henni Tenhunen, An Chen

OBJECTIVES:

Prenatal testing for chromosome abnormalities has become a routine aspect in maternal and fetus care. Genomic technologies facilitate innovative services to provide safer and easier screening, testing and diagnosing with higher precision. Non-Invasive Prenatal Testing (NIPT) based on next-generation sequencing of cell-free DNA in maternal plasma is a relatively new offering in the landscape. NIPT overcomes significant risks of iatrogenic miscarriage carried by the invasive procedures.

However, despite this advantage, NIPT still has not been considered as the replacement of the conventional testing methods, which detect a wider range of genetic disorders with more affirmative diagnostic results. NIPT is currently provided as an option with non-absolute advantages in the prenatal screening and testing paradigm. Furthermore, the application of NIPT is not isolated from controversies.

The purpose of this study is to investigate the disruptive elements of NIPT from both the providers’ and consumers’ perspective in prenatal testing services. Our research develops new insights into the application of NIPT with a more phenomenological view and also enriches the research of service innovation with the focus on the implementation of innovation in knowledge intensive services.

METHODOLOGY:

Hospital District of Helsinki and Uusimaa (Finland) started to provide NIPT alternative in January of 2015. Several private clinics in Finland also offer NIPT. We explore interruptions caused by NIPT in prenatal testing services by studying actors’ experiences. Exploratory research is conducted for a problem that has not been clearly defined and it can be used to gain familiarity with a phenomenon in order to formulate a more precise hypothesis.
Phenomenological interviews are conducted to obtain first-person descriptions of service events. We interview practitioners involved in the provision of NIPT services (e.g. midwives, technicians, specialists, and geneticists), as well as consumers who had experience with NIPT and other prenatal testing services (e.g. expectant mothers and families). We encourage the practitioners to compare their daily work before and after the NIPT and inquire them about the disruptive potential of the services based on this genomic innovation. Thematic analysis is employed to separately analyze practitioners’ interviews and consumers’ interviews. The interruptions caused by NIPT in prenatal testing service are thematically organized and presented.

EXPECTED RESULTS:

The use of NIPT creates certain challenges for both the consumers and the service providers. Regarding consumers, active choices and freedom is not necessarily increased, because in the district of Helsinki and Uusimaa, NIPT is provided after the early screening as an optional further test to women in high risk who have likely suffered from anxieties and worries. In this condition the consumers may have difficulties to rationally process the prenatal testing information and make choices. Being better informed might make the patients worse off, if they feel that more alternatives add pressure. Thus the choice dilemma emerges.

Concerning healthcare service producers, business model innovation is essential. Genomic innovations such as the NIPT make health service production highly individualized, liking to craft production, and hence, the dilemma of mass customization arises. This necessitates the development of business models and management practices due to the changes in value chains and service networks. To solve these two dilemmas caused by NIPT, we argue that genetic counselling is essential and should be tightly integrated to the patient-provider relationship and to the supported peer to peer networks as a way to organize service production and delivery.
The impact of service robotics on service work within a healthcare service system

Michaela Friedrich (née Klemisch), Andrea Rößner, Anne-Sophie Tombeil

OBJECTIVES:

Demographic change nowadays has more and more influences on the health care sector. Less nursing staff face more and more patients and elderly people. Those changes on work processes can be observed in the area of prevention but also in the field of medical and elderly care. Technical support in the sense of IT is considered as helpful to support documentation. Nevertheless, support is still required concerning physical interaction in nursing and elderly care. The proposed solution in the paper at hand describes the potentials of service robotics for complex service systems in healthcare, also describing the mutual influences between the possible applications of service robotics and the changes in service work. Currently, service robotics are mainly used in the field of logistics or manufacturing, but they also offer great potential in the administrative and physically demanding work processes in health care systems.

The solution presented here will respond to one major challenge in healthcare: the use of service robotics in the form of a mobile care assistant will show the effects of technology use on service work, affecting different groups of persons like caregivers or patients/nursing home residents.

The paper at hand raises the following questions:

- How does the service system change through the development and use of service robotics?
- How does service robotics influence the interaction in the field of medical and elderly care?
- In which parts of the processes in medical and elderly care are potentials for improvements through service robotics?
- Where and how can the productivity and also the quality be raised?
- Which mutual correlations can be observed between the technological development and configuration of the (modular) service robotics, the service work and the design of the overall service system?
METHODOLOGY:

- Visits and survey on-site in health care facilities (hospital and retirement home) in order to identify: o how the service system works
  o which healthcare-specific aspects (service work, technology acceptance, etc.) show requirements for service robotic design
  o which are the relevant processes that are suitable for deeper analyses and can be re-designed through the use of service robotics
- Process analysis for one specific part of the health care process in both areas, medical and elderly care: for the analysis, a standardized, but specifically adapted, surveying method is used, which categorizes service activities into heteronomous, autonomous and interactive elements. The information base for this method relies on established survey methods like observations, workshops and interviews.
- The observations and surveys are conducted before and after the test phase of the service robots in the different health care facilities in order to depict the changes in the service system concerning quality and productivity.

EXPECTED RESULTS:

The results that are pictured in this paper rely on a work-in-progress state of a joint research project that represents urgent challenges and possible measures for the German healthcare sector. Within in this paper, the presented results cover:

- the selection of an adequate element of a service process in the complex system of the health care work in the field of medical and elderly care - which has the potentials for improvement on service work by the use of service robotics - via systematically developed, qualitative selection criteria
- the analysis of an isolated, specific service process including an in-depth analysis of the process using a before-after comparison related to the introduction of service robotics
- an illustration of the correlations and the impacts of the varied process step(s) for related upstream- and downstream processes
- suggestions for improving the design of service work (processes) within
the service system through robotics.
Identifying critical interdependencies and coordination needs in value-driven e-health services

Kaisa Seppänen, Henri Karppinen

OBJECTIVES:

New technological solutions change and replace existing value creation logics. Ostrom et al. (2015) state that successful integration of the roles of customers, employees and technology in value creation has been rated as one of the most important topics in the service research field. In this study we are challenging the prevailing assumption about value co-creation in where one actor sets a value proposition and other actor either accepts it or not. This study focuses on one of the underlying themes identified by Ostrom et al. 2015: Actor interdependency and coordination in value co-creation.

Personalized health care or e-patient care is a field where need to motivate and coordinate patient or customer to provide personal health information and activities play a significant role in the value creation process. Because of interdependencies created by technology, information and activities, new types of coordination mechanisms are required for actors of the value co-creation.

Our main objective is to provide new insights and propose new approaches for capturing actor interdependencies and related coordination mechanisms in service systems which are introducing more personalized and customer centric health care solutions. This objective is accomplished by focusing on three different value creation settings:

i) actor's data and information are valuable as is (value is captured by having access to data/information) ii) actor's data and information can be used in value creation process by other actor(s) iii) valuable data and information can be created through activities or value propositions (independent or co-creative)

METHODOLOGY:

Value creation settings have been analysed in four different service contexts. Research process including all major phases from research planning to data collection, validation and result analysis were done by using case study.
methodology. In all case-environments, data were collected through individual and group interviews (including working seminars). All data were either audio recorded or documented by the participants themselves. Data collection were accomplished by at least two different researchers. Collected data and data needs were compared with data provided by fifteen most popular health applications in European market.

Case contexts consisted of 1) Welfare centre which represents ongoing, an easy access service type which is planned by the service provider to be more customer centric than the traditional health centre. 2) New treatment centre which represents the service directed to the specific customer group (e.g. intravenous medication), 3) Settled, but renewing treatment centre which represents the service directed to the specific customer group (e.g. intravenous medication 4) Digital health care services which represent the new and fast developing service offering type and process in the all case environments.

EXPECTED RESULTS:

Research data analysis from the cases and applications result in observations about the value, both for the customer and service provider, which are formed by processing information about customers everyday life and the use of service. Value analysis revealed unexpected interdependencies and actor related requirements that are mainly passed in the current literature. Results highlight actor interdependencies in situations where actor (1) sets a value proposition as a personal data and information offering and the actor (2) sets a value proposition based on delivered data and information.

Based on our study and results, a conceptual framework for identifying, analysing and integrating information-driven value propositions and value expectations is introduced. As practical implications we set guidelines not only for service providers but also for customers. The identified further research needs follow general guidelines set by Ostrom et al. (2015) and Chandler & Lusch (2014) but at more detailed level.
E3: KIBS and learning in clusters and networks

Chair: Morten Boesen
Learning in value networks as a challenge for digitalized service innovations

Eveliina Tuulikki Saari, Mervi Hasu

OBJECTIVES:
The digital era revolutionizes traditional hierarchical and sector-specific service provision: roles of professionals and employees, organizations and managerial practices are changed. There is a critical lack of research attention on management of digital disruptions in political, organizational, and professional levels. The development of new institutional forms in the digital era needs new methods, models and arenas for learning and collaborative experimentation in and between value networks.

The aim of the paper is to outline an intervention method for enhancing inter-organizational learning. The paper explores how organizational learning theories have been present in discussion on co-creation of value networks and ecosystem management so far. Then, it elaborates and makes the learning process explicit with practice-based learning theories and theory of expansive learning.

Potential risks as impediments and motivational factors as opportunities for learning are identified and weighed up based on previous literature. Ways of tackling the risks and preparing the arena ready for practical co-creative encounters and learning between value creators are discussed.

METHODOLOGY:
Value networks of service providers will co-create innovative experiments in 2016, within three domains; digitalized learning at primary schools, digitalized support services for specialized health care and service integration in primary care for the citizens. We outline the learning intervention in the value networks as a method based on expansive learning and practice-based learning theories.

The phases are:

1) Visionary workshop for all the value networks facilitates learning from
citizen’s mundane practices and co-creation of an ambitious vision for the value network.

2) Learning across value networks stimulates mental models with service-integration innovation models from pioneer countries and from other value networks.

3) Defining the innovative experiment by the value network actors implementing the shared vision.

4) Conducting innovative experiments in each value network.

5) Developmental evaluation and scale up workshop for all the value networks to reflect on what has been generated.

EXPECTED RESULTS:

As service-dominant logic becomes the prevailing way of organizing offerings, customers are considered as active co-creators of value adapting the service to their individual needs. Service suppliers’ motivation is to understand and improve customers’ mundane practices in order to build value for the customer. (Payne, Storbacka & Flow 2008.) Focus in customers’ mundane life and how to provide customers support to enable mutual learning processes is the first concrete challenge for the intervention.

In the digitalized world, integration and knowledge sharing between service providers may be accelerated. Liquefying information resources enables novel integration of service offerings and changes the dynamics between organizations. However, supplier organization needs a new kind of strategy, including arguments with whom to network with. Lack of trust in sharing critical information between partners may take place as a fundamental impediment to collaboration. (Lusch, Vargo & Tanniru 2010.) How to create trust and openness in a value network is the second concrete challenge for the learning intervention.

Inter-organizational collaboration occurs when the problems to be solved are so complex and multifaceted that pre-existing power relations are not able to solve them. Ecosystem management literature points out that a transcendent vision and a unifying purpose among stakeholders is needed for generative learning (Manring 2007). Previous power-relations may be re-formed by constructing a new sustained culture of decision making through consensus. The third concrete
challenge for the intervention is to persuade and stimulate potential actors to co-create an ambitious shared vision and enable employees and managers adopt new roles and power in order to experiment it.
KIBS and the Dynamics of Industrial Clusters: a Complex Adaptive Systems Approach

Benoît Desmarchelier, Xi’An Jiaotong-Liverpool University, China. Faridah Djellal, Faïz Gallouj; University Lille, France

OBJECTIVES:

This paper aims at intertwining – in a theoretical and operational way – three strands of literature: (i) innovation through knowledge intensive business services (KIBS thereafter), (ii) industrial clusters’ dynamics, and (iii) complex adaptive systems. KIBS are services which are processing, generating, and diffusing knowledge within the economy. They are largely regarded as important (co-)producers of innovations (Miles et al., 1995; Den Hertog, 2000; 2002; Gallouj, 2002), as well as a promising engine for economic growth (Desmarchelier et al., 2013a) and a key component of regional and national innovation systems (Muller and Zenker, 2001) and of technological and sectoral systems of innovation alike. Typical KIBS are training services, R&D, and technical and non-technical consultancy.

KIBS’ central role within successful industrial clusters has been steadily emphasized since the birth of the cluster concept. Indeed, in Porter’s words, for example, “clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (e.g. universities, standard agencies, trade associations) in a particular field that compete but also cooperate” (Porter, 2000 p.15). In this definition, KIBS mainly enter into the “associated institutions” category, as this includes “universities, think-tanks, vocational training providers” (p.17).

An important and highly debated question in economic geography is how to explain these clusters’ dynamics, i.e. their emergence and evolution through time (Frenken et al., 2015; Boschma and Fornhal, 2011). Two main theories are generally explored, without being confronted: the cluster life cycle theory (Menzel and Fornahl, 2010; Shin and Hassink, 2011; Audretsch and Feldman, 1996a; 1996b) - which mainly adopts an aggregate point of view - and the network-based approach (Saxenian, 1994). Surprisingly, these two theories pay little attention to KIBS as a potential driver of clusters’ dynamics.

We will show in this paper that properly taking KIBS into account requires
considering an alternative and integrative approach that conciliates these two theories. In particular, we argue that complex adaptive systems (CAS) (Martin and Sunley, 2011; Holland, 2012) constitute a promising basis for such a synthesis. A CAS “consists of a multitude of interacting components called agents [...]. The agents are diverse rather than standardized, and both their behavior and their structure change as they interact” (Holland, 2012 p. 57). In order to address clusters’ dynamics, we emphasize the three following main features of CAS: (i) A CAS emerges within (technological or market) niches; (ii) it is strongly oriented towards innovation and (iii) it is quick to adapt to changes affecting its environment thanks to its agents’ anticipations and innovations (Holland, 2012).

METHODOLOGY:

We operationalize the CAS approach by studying an existing industrial cluster - Skywin (aeronautics in Wallonia region, Belgium) - within this framework. For this purpose, we use an exhaustive list of the innovation projects undertaken within this cluster between 2006 and 2014 and we build temporal innovation networks linking the agents of the cluster.

EXPECTED RESULTS:

It appears that Skywin’s innovation networks exhibit a small-world effect. This implies that any agent who takes part into an innovation project of this cluster can easily benefit from knowledge and information generated within another ongoing project. We argue that this effect is an interesting proxy of a cluster’s attractiveness and an appropriate aggregate variable for studying clusters’ dynamics as it shows cluster’s potential for further growth. We also demonstrate that KIBS are the main responsible for the emergence of this small-world effect in Skywin’s innovation networks.
Ties with KIBS and SMEs’ Service Innovation Performance: The Moderating Role of Absorptive Capacity

Lin Wang, Yan Tao

OBJECTIVES:

The literature on innovation in services have revealed that KIBS firms, referred as service intermediaries or the third party (Howells, 2006), can produce and provide firms with knowledge in areas such as legal accounting and finance, market research, law and technical services. More important, because KIBS firms act as external knowledge sources as well as bridges for innovation (Muller & Zenker, 2001; Czarnitzke & Spielkamp, 2000), they are not only a source for the acquisition of external knowledge but they can help organizations to overcome the localization of learning. Recently, the contribution of KIBS firms to innovation in manufacturing firms has been highlighted from the perspective of external innovation search. Service intermediaries firms are argued to sit at the intersection of many firms, organizations, and industries, which would enable the manufacturing firms’ access to specialized network abundant with innovation resources (Zhang & Li, 2010). Considering KIBS firms are potentially available to all firms by offering knowledge and know-how inputs, it is not surprising that extant literature has emphasized the importance of external linkages with KIBS firms for innovation search.

Despite the potential important role of KIBS in service innovation of product-manufacturing firms, theoretical or empirical work in this area is very limited. To advance the literature, we examine how and under what conditions product-manufacturing firms’ ties with KIBS are related to their service innovation. Our premise is that because KIBS not only provide diverse knowledge elements with a low degree of localization (Wagner et al., 2013), but also maintain an extensive network of external knowledge source such as clients, suppliers, competitors, universities, research institutes and etc (Miles et al., 1995). This means that product-manufacturing firms’ ties with KIBS enable their external learning and contributing the service innovation with the potential of searching and obtaining distant knowledge.

Furthermore, since firms’ ability to assimilate and utilize of knowledge and
know-how from the outside is a necessary condition to capture knowledge and benefit from it (Zahra & George, 2002), ties with KIBS firms does not equally benefit all firms in the development of effective service innovation. In recent decades, the role of the absorptive capacity (ACAP) has been emphasized in the process of knowledge management and innovation (Dyer & Singh, 1998). As defined by (Cohen & Levinthal, 1989), ACAP is an ability to recognize the value of new information, assimilate it, and apply it to commercial ends. ACAP, thus, is a dynamic capability which allows firms to explore and exploit knowledge resources outside their organizational boundaries (Zahra & George, 2002). We expect that ACAP plays a central role in converting close relationship with KIBS firms into improved service innovation performance. Based upon this argument, we will examine the moderating roles of ACAP, which are still scarce in extant studies.

METHODOLOGY:

We will test these relationships with a sample of SEMs in South-east part of China.

H1: Ties with P-KIBS positively impact the service innovation of SMEs.

H2: Ties with T-KIBS positively impact the service innovation of SMEs.

H3: Absorptive capacity moderate the relationship between ties with KIBS and SMEs’ service innovation
EXPECTED RESULTS:

In this study, we examine the relationships between SMEs’ ties with KIBS (i.e., T-KIBS and P-KIBS) and their service innovation. We propose that SME’s ties with KIBS enable the firms’ service innovation by promoting the external innovation searching and acquiring for technology-based knowledge and market-based knowledge. Moreover, we argue that the positive relationships between SMEs’ ties with KIBS and their service innovation will become stronger when the SMEs’ absorptive ability is more higher. Based on a sample of SMEs in North-east of China, our results support these arguments.
Serving mobile workers at university campuses – access to success

Eelis Rytkönen, Vitalija Petrulaitiene, Suvi Nenonen, Tuuli Jylhä

OBJECTIVES:

Knowledge workers learn, work and spend their leisure time in a variety of manners in multiple locations during different times of the day. Due to technological advancements, the decision power of when, how, with whom and where to work from increasingly shift from organizations to individuals. This shift is enabled by services that provide access to pools of virtual information and underutilized physical resources.

In the network of increasingly complex service offerings, providing access to underutilized resources is one of the key strategies applied by relatively new service providers (Eckhardt and Bardhi 2015) such as Airbnb, Uber and Liquidspace. At the same time, university campuses are challenged by virtual universities (Carr 2012), they are struggling monetarily (Van Damme 2012, OECD 2012, Maassen and Stensaker 2015, Kamarazaly et al. 2013) and have low utilization rates of physical premises globally (Den Heijer 2011, Den Heijer and Zovlas 2014, Harrison and Les Hutton 2014, Hietanen 2014, Neary et al 2010, University Herald 2013).

Therefore, this paper aims to identify services that utilize access to underutilized resources as a key strategy to support mobile workers of university communities and beyond.

METHODOLOGY:

It does so by first pinpointing the research gap through a literature overview of two streams - university campuses and services for mobile working - in spatial transformation. Second, it analyses business models of services, which, through providing access, are designed to support mobile knowledge workers. The primary data is collected on the basis of the business model canvas (Osterwalder et al. 2010) from the internet sites of the services. The data is thereafter analysed cross cases in order to find the similarities and differences based on
which the services are clustered further.

EXPECTED RESULTS:

As a result, a set of service clusters is drawn. The identified clusters help both academics and practitioners to understand the services on offer and their potential implications for the university campuses in transition. Potential future research includes ie. exploring the user groups of these services.
E4: KIBS and internationalization and outsourcing

Chair: Grete Rusten
Building documentation for building operation – A study based on the theory of planned behavior

Jana Koers, Vanessa Platner, Torben Bernhold, David Serbin, Christian Junker

OBJECTIVES:

A building is the final outcome of complex planning and communication processes. Information and data are generated and processed during the construction phases which finally describe and display the building (genetic building code). A comprehensive knowledge of this information flow and data is a substantial starting point for an effective and efficient building operation. That means that the planning and construction players should document the results of their work continuously. But in practice this documentation is mainly incomplete and not up-to-date which often leads to misunderstandings. Moreover, the documentation causes high additional expenses which are not recompensed. That leads to building data which prevent efficient and effective building operation. The theory of planned behavior could explain this suboptimal situation which leads to the necessity of investigation into the present status quo of documentation first of all. Based on this our research also illuminates the reasons for insufficient building documentation.

METHODOLOGY:

A first extensive study shows the documentation motivation of the main planning players (project development, architecture, building industry, consulting etc.). The survey is carried out via an online survey in Germany. To get deeper insights, problem-centered interviews with experts of every profession are conducted additionally.

EXPECTED RESULTS:

The paper gives an overview of the documentation status quo and the motivation of planning participants to document their results with regard to building operation. The study shows which factors and conditions (e.g. ICT-
support, extra reward etc.) could influence the motivation and behavior of the participants.
Internationalization Services and KIS (Knowledge Intensive Services): Applicability of Traditional Models

Clara Belén, Martos Martínez

OBJECTIVES:

The literature on the internationalization of the business of services has been applied to the goods traditionally, since they have been more capable to make the international transactions. This is due to the fact that the services have had a few characteristics very different from those of the goods that have prevented them in some cases, to adopt certain forms of internationalization. Nevertheless, in the last decades some changes have taken place in the nature of the services, such as the appearance of the new technologies of the information and of the new contractual formulae of entry to other countries, etc., that have allowed the appearance of specialized services and his expansion in the exterior. In this context, the aim of the work is to analyze in what measure they adapt well some Traditional Theories on the internationalization of the services and, which would be the changes that should appear to justify the wide growth of the operations in the exterior of the tertiary sector and, specially, of the Knowledge Intensive Services.

METHODOLOGY:

For the analysis of the above mentioned work we base on the theoretical methodology, from the literature review of empirical investigations of cases of internationalization of business of services and KIS.

EXPECTED RESULTS:

With the investigation we expect to obtain the following results. Firstly, to know that the theories that traditionally have been applied to the manufactures are in the habit of adapting well to the services, providing that his distinctive characteristics and classification. Secondly, to compare from the theoretical vision that the group of theory that better they adapt, generally, to the KIS they are the Theories of Internationalization from the Perspective of the Resources
and, in concrete, the Theory of Accelerated Internationalization: Born Globals Firms. Thirdly, to select the factors, for that, in spite of new variables having modified and introduced to the above mentioned traditional theories in order to adapt better to the changes on the international market, they are not applicable, generally, to the Knowledge Intensive Services.
Current state and perspectives of 3PL outsourcing by SMEs

Laurentiu Tachiciu, Vasile Dinu

OBJECTIVES:

Outsourcing knowledge intensive services is a solution for SMEs to reduce the competitiveness gap in relation with larger companies. However, the number of SMEs who resort to outsourcing of knowledge intensive services is still limited.

In the present paper we are focusing on third-party logistics services, as logistics activities tend to hold a growing share in the total costs of businesses, which also means they can contribute significantly to narrowing the performance gap.

The study is carried on enterprises active on the Romanian market and aims at:

- Analyzing the current state of the 3PL services market in Romania;
- Exploring SMEs understanding of logistic challenges and the determinants of their choices between integration and outsourcing of logistic processes;
- Investigating the 3PL service providers readiness to work with SME clients;
- Assessing the effectiveness of outsourcing 3PL services by SMEs;
- Identifying barriers which slow market expansion of 3PL services outsourcing by the SME sector;
- Estimating the perspectives for 3PL outsourcing by SMEs.

METHODOLOGY:

We first make a review of the relevant literature and data sources. Scholars have investigated SME logistic practices, small business outsourcing capabilities and the relationship between outsourcing intensity and performance of SMEs, models of SME integration of advanced supply chain management techniques. Another set of researches focus on third-party logistics value added. Data sources are scarce. The national statistics do not allow a clear delineation of 3PL service activities. Therefore we rely on data collected by the Romanian Association of Logistics firms and on the information provided by the World
Bank’s Logistic Performance Index. This last rank Romania on the 40th place out of 166 countries in 2014, which indicate that there are important reserves to improve the efficiency of logistics activities and their contribution to the competitiveness of the Romanian economy.

The main part of our study consists in a two-fold exploratory survey: a questionnaire addressed to SMEs and a questionnaire addressed to 3PL service providers. The questionnaires have been designed in accordance with the objectives of the study stated above, and have been distributed to 1000 SMEs from different sectors of activity and 30 logistic firms known as providers of 3PL services. Among SMEs, we discriminate by size category, sector, age of the company, perceived importance of logistic activities, presence and share of foreign trade. Among logistic service providers we discriminate between domestic companies and subsidiaries of foreign firms, share of outsourcing contracts and share of 3PL activities. In order to avoid misinterpretation, the objectives of the study are addressed mostly indirectly, with very few questions pointing specifically to outsourcing arrangements, 3PL or SMEs. The survey is ongoing.

The results from the survey will be analyzed by in-depth interviews with 3PL specialists and SME owners/executives from commerce and manufacturing industries.

The third section of the paper discuss the findings in line with the objectives of the study.

Finally we draw general conclusions, and we acknowledge the limitations of the study and needs for further investigations.

EXPECTED RESULTS:

Outsourcing 3PL services might be a preferable choice for some SMEs. We have preliminary information about SMEs making efforts to develop internal capabilities for managing logistic processes. This is a departure from their core competencies with uncertain results. Some have lately understood the stake of such endeavor and express intentions to become service providers for their peers. At the beginning they have not considered outsourcing as an option despite the presence in Romania of specialist firms. Our study aims primarily to identify the main factors that induce limitations to outsourcing of 3PL services by SMEs. Some of this factors are market and transaction related, some are SME
capacity related and some are related to what we may call the readiness of 3PL service providers to work with SMEs.
F: The role of services and service development in industrial policy
F1: Policy issues

Chair: Peter Smith
The impact of regulation of network and professional services on competition, growth and trade

Peter Smith

OBJECTIVES:
The paper will look at the impact of public policy on the performance of network and professional services in terms of competition, growth and trade. While network and knowledge intensive business services are important in their own right, they play a particularly important role through their interaction with manufacturing industry. This occurs first as a supplier of key inputs and second as a source of demand for the manufacturing sector, particularly technology intensive dedicated capital goods such as telecommunications and transport equipment. A recent study for the European Commission on the relation between industry and services in terms of productivity and value creation: http://ec.europa.eu/growth/industry/policy/publications/index_en.htm showed that competitive network services and KIBS have become a necessary condition for good performance of manufacturing in Europe. The objective of the paper is therefore to look at a key factor, regulation, affecting the performance of network and professional services and to make recommendations on which aspects of regulation attention needs to be concentrated to improve performance.

METHODOLOGY:
Previous work by the Australian Productivity Commission and the OECD has looked at the impact of regulation on price cost margins using aggregate measures of regulation. The results are then used to calculate tax equivalents. However from a policy point of view it is important to know which particular type of regulation has the greatest impact and on a wider range of important variables than the price-cost margin alone.

The paper will use OECD annual data on the regulation of entry, public ownership and market structure for electricity, telecommunications, postal, rail, road and air services. For professional services (legal, accounting, architectural and engineering), the paper will also use OECD data for two periods, 1996 and
2003, for a wider selection of regulations covering licensing, education requirements, on the form of business, on prices and fees, on advertising and on inter-professional cooperation.

Using panel data for nearly all firms in Belgium for the period 1997 to 2005, the paper will use appropriate regression techniques to look at the impact of the different forms of regulation on three types of variables: competition, growth and trade. The impact on competition will be measured through the effect on entry and exit as well as price-cost margins. The impact on growth will be measure through the annual growth in turnover, value added and employees. The impact on trade will be measured in particular through imports of the relevant service and the entry and performance of affiliates of foreign companies in Belgium.

EXPECTED RESULTS:

The paper should provide evidence on the regulations that should be addressed as a priority to improve the functioning of those services with the largest multipliers for the economy. Results on price-cost margins can be used to calculate the effect of changes in regulation on prices and these can then be related to forward multipliers from the input-output tables to estimate an effect on the competitiveness of manufacturing industry. Equally, results on the impact of regulation on growth of sales can be used to estimate the effect on demand for dedicated capital goods through the backwards multipliers. Expected results therefore cover both the direct impact on the services studied and the indirect impacts on manufacturing and the economy as a whole.

The Commission study showed that for small open economies such as Belgium only imports of services have a positive effect on the competitiveness of manufacturing industry. The degree to which changes in regulation can stimulate imports and inward foreign direct investment is an important issue on which the paper should shed light. It also contributes to the understanding of the possibilities opened up by market integration for these services.
Governance for collaborative development of service and system innovations

Kirsi Hyytinen

OBJECTIVES:

It has become evident that the big societal problems – concerning for example environmental issues – are extremely complex. The role of innovations has been emphasized when tackling these problems. Innovations needed are multiple in nature: technological and service-based novelties are interlinked with broad social and systemic changes (Rubalcaba et al., 2013; Gadrey, 2010).

To deal with these challenges, collaboration between multiple actors representing different sectors of society is required (Lévesque 2013; Moore & Hartley 2008, Gallouj et al. 2013). However, public and private services have been studied in isolation and thus the networked structure in services has been understood only partially (Hartley 2005, Moore & Hartley 2008, Rubalcaba et al. 2013).

Further, developing innovations to tackle system level problems requires understanding about the whole socio-technical system, including the dynamics and interplay between its parts (Geels 2002, 2004, 2010). That has significant implications to public policies and creates need for new governance approaches. Current governance mechanisms are a mix of administrative bureaucracy and New Public Management (NPM). They focus on economic and technologist views and do not take into account the interactive nature and complexity of innovation and service creation. Thus, they are no more sufficient in explaining and enhancing innovation dynamics and performance in a complex and networked society (Moore & Hartley 2008).

The objective in this paper is firstly to study the collaborative forms of system and service innovations and secondly illustrate how the collaboration in innovation can be supported with the mechanisms of network governance (e.g. Lévesque 2013, Hartley 2005, Moore & Hartley 2008). The focus is specifically on service and system innovations in the environmental sector.
METHODOLOGY:

The paper is both theoretical and empirical. Based on our case material, we describe multi-actor collaboration using the concept of ServPPINs (Gallouj et al. 2013). This concept refers to cooperative ventures between public, private and third-sector service organizations in innovation. In addition we concretize forms of such new governance mechanisms in which the solutions to societal problems are based on the integration of technological and service based novelties, and which appreciate partnerships, negotiation and trust between multiple kinds of actors (Hartley 2005, Voss et al. 2007, Moore & Hartley 2008, Levesqué 2013.)

Empirical data has been collected in Finland and focuses on a new policy instrument SHOKs (Strategic Centers for Science, Technology and Innovation), which include public-private innovation programs in various sectors. The specific SHOK studied aims at accelerating service, system and social innovations in the area of environmental sustainability. We have studied collaborative innovation in three ongoing programs (smart grids, distributed energy solutions and environmental measurement) and in the preparation of one new program (urban energy). Data has been gathered from face-to-face interviews (35 in total), observations of six collaborative workshops, program documents and other strategy material.

EXPECTED RESULTS:

As a result, we characterize the examined SHOK as a ServPPIN which aims to promote systemic change in the energy sector by redefining the architecture of future energy systems. Our study provides analytical material about the incorporation of rationales, goals and competences of various actors in the collaboration. It highlights the necessity of openness and trust in the operational culture and the significance of competences (understanding of the innovation system) in the system level change. Also the absence of some actor groups (e.g. citizens) in this particular case is pointed out.

From the viewpoint of the current governance system, our study reveals factors that threat the realization of targets in networked programs: ignoring their dynamic and long term performance is such a threat in particular. Based on the study, we make some policy conclusions to strengthen diversity, horizontality, co-production and adaptiveness in governance mechanisms.
Analysis of networked service systems based on value creation model

Takeshi Takenaka, Nariaki Nishino, Keita Kodama, Kenju Akai

OBJECTIVES:

Service industries as represented by the retail industry are reconstructing their business models to increase productivity and value for customers by enhancing collaboration with other services from sectors such as information, wholesale, logistics, and manufacturing. This paper presents a new analytical method to clarify how service system structures could create value in a society. Specifically, a service stakeholder network is produced, link relations are identified using the value creation model which was proposed by Ueda (2008). As a case study, we present a supermarket case and discuss the effectiveness of the proposed method.

METHODOLOGY:

Value creation model (VCM) describes forms of three types (providing value, adaptive value and co-creative value model) based on the incompleteness of the objective and environment in artifact synthesis problems. This study examines the extension of VCM to a networked environment. We conducted a questionnaire survey which asked executives of 300 supermarket companies about their business network and business strategies in each link of Fig 1.

Based on the questionnaire results, we created a dataset of 300 companies which describes business network and strategies as network topologies. Then we classified companies into some categories using category analysis. Finally, we analyzed business performances of some companies in detail using created network model, financial statements and interviews.
EXPECTED RESULTS:

Fig 2 shows an example of results, which is the case of a local supermarket chain company in Japan. It shows many class II relations to wholesalers are drawn, meaning that the supermarket company adapts to consumer demands and needs through an adaptive relation with wholesalers. On the other hand, this company directly seeks to build a co-creative relation with consumers. We also confirmed that this company has high competitiveness in the local area using financial statements analysis. Our study proposed a concrete method to describe service systems and to type its structure generally. The proposed method can visualize a service structure from a value creation perspective, which was fundamentally invisible.
G: Services and innovation in developing economies
G1: Service innovation in development countries

Chair: Andrew Berry
The greening of Chilean wineries through specialized services

Andrew Berry, Nanno Mulder and Ximena Olmos

OBJECTIVES:

This paper aims to analyze the link between the upgrading of Chilean wine in the global marketplace and the role of innovation and incorporation of specialized services by wineries in the country.

Chile has been a relatively successful player in the global wine market over the past fifteen years. By 2013, it had become the sixth largest wine producer in the world and fourth largest exporter. Over the same period, it has upgraded its participation in the global market, as suggested by a substantial increase in the relative price per liter sold relative to its competitors, a growing market share in the demanding markets of industrialized countries, and an increasing number of international awards for its wines.

During the same period, the Chilean wine industry has adopted many innovations and incorporated specialized services within most segments of the value chain. Examples of these services are those to identify the best land for grape cultivation, R&D services to develop the best seeds, certification and laboratory services in wineries, and marketing and distribution services in the downstream segments of the value chain.

The upgrading of Chile in the global wine market is probably linked to its innovation efforts and adoption of specialized services. This paper aims to test whether this is the case in the wineries, which is a crucial segment of the value chain.

METHODOLOGY:

The hypothesis of a link between the upgrading of wine production, on the one hand, and the innovation efforts and adoption of specialized services by wineries, on the other, is tested using the 2011 Survey of Wineries of the Chilean National Statistics Institute.
This survey covers 339 wineries in Chile and includes multiple variables that proxy the upgrading of production, one the one hand, and the innovation efforts and adoption of specialized services, on the other hand.

The paper surveys first the literature on upgrading in the global wine market and the main types of innovations and use of specialized services in wineries in selected countries. Moreover, several interviews with wine producers contributed to the selection of the variables from the Survey for the model.

We use a logit-probit model to test the causality using variables for the cross section for more than 300 wineries. The upgrading of production is measured by the proportion of wine that is sold in bottles instead of large containers (bulk wine). Innovation efforts are measured by the adoption of specialized machinery and equipment, for example for wine filtering. The incorporation of specialized services is proxied by the adoption of different types of certification, the use of three types of laboratory services, the type of waste water treatment, and services related to organic wine production.

The model also includes several control variables, such as the production size of wineries, participation of foreign capital in the winery, type of grapes and ownership of the vineyard.

EXPECTED RESULTS:

The preliminary affirmative results show a significant statistical relationship between upgrading of wine production and some of the innovation efforts and adoption of some types of specialized services by wineries in Chile.

The preliminary affirmative results for this case suggest which types of innovation and specialized services are important to upgrade the participation of developing country in global wine markets.
Sectoral engines of growth in developing countries: are services a chance for catching-up?

Gisela Di Meglio, Jorge Gallego Martínez-Alcocer, Andrés Maroto, Maria Savona

OBJECTIVES:

The sectoral composition of an economy matters for growth and development since sectors have different capabilities to induce productivity gains, promote the expansion of other sectors or benefit from demand growth. Kaldor (1966, 1967) claims that the manufacturing industry is the main "engine of growth" of economies. The empirical long-run relationships between manufacturing growth, productivity growth and output growth -commonly known as Kaldor’s Growth Laws- have actually been confirmed for different developed and developing countries (Thirlwall, 2013). Nevertheless, some recent facts are now challenging old Kaldorian ideas: the premature de-industrialization of many developing economies; the increased tradability of services by means of global value chains and the high productivity gains experienced by some service branches. At the same time, the contemporary debate is around the re-industrialisation of countries and the fostering of industrial policies as a means to achieve sustainable growth paths.

Facing Kaldor’s old ideas with recent facts and debates, our research hypothesis regards whether some specific service sectors may be a sectoral engine of growth in developing countries. Potentially, those services embodying knowledge and technology or with strong inter-industry linkages or highly tradable may serve as a mean to catching-up with advance economies by complementing manufacturing as an additional engine of growth. This may happen by the same productivity-growth connections that Kaldor uncovered for the manufacturing sector. Therefore, this paper aims to revisit and re-estimate Kaldor’s Growth Laws by taking into account disaggregated service sub-sectors across twenty-nine developing countries during 1975 and 2005.

METHODOLOGY:

The paper econometrically tests the validity of Kaldor’s Growth Laws by sectoral
panel data regressions.

The empirical exercise is performed for seven sectors: 1) manufacturing; 2) agriculture; 3) total services; 4) commerce (distributive trades and tourism); 5) transport and communications, 6) Business services (finance, insurance, real estate and business activities); 7) public services (community, social, personal and government services). Our country sample includes nine countries from Latin America, nine countries from Asia and eleven countries from Sub-Saharan Africa. Estimations are performed for the whole sample of countries as well as for the different sub-continents by OLS including country effects (with Panel Corrected Standard Error Estimations). This econometric exercise is complemented by a shift-share analysis that uncovers the contribution of sectoral shifts to productivity growth. The main data source is the Groningen Growth and Development Centre (GGDC) 10-Sector Database and the Africa Sector Database.

EXPECTED RESULTS:

We expect to confirm Kaldor’s Growth Laws across developing economies. As in previous literature, the empirical analysis should reveal that manufacturing is an engine of growth for the group of Asian, Latin American and African countries. Moreover, we would also expect to find some empirical support in favour of specific services activities as drivers of growth, particularly business services. The empirical exercise should also uncover regional differences as regards sectoral engines of growth. This would reflect heterogeneous productive structures within each set of countries which affect intra- and inter-industry linkages in the economy and, ultimately, productivity growth. All in all, the results obtained would be relevant for the industrial and development policy shaping in developing countries.
Innovation, Services and local Development: The case of Baja California marine aquaculture system

Minerva Celaya, Araceli Almaraz, and Alfredo Hualde

El Colegio de la Frontera Norte

Mexican experiences in fishing farm started early 20th Century, on the contrary, the aquaculture activities are significant in last decades. The main area focused on aquaculture activities is located in northwest Mexico. The specific zones are four: Sonora, Sinaloa, Baja California, and Baja California Sur. The marine aquaculture in this region rests on local and regional linkages, external markets and innovation activities. The main species are part of bivalve molluscs family (Abalone, Oyster, Shrimp, and Clam). Innovation for us is the most important, because of it’s potential to substitute external strategic services. Each aquaculture system in northwest Mexico depends on R&D centers. Universities and public centers are working directly and indirectly with economic agents to consolidate the management of aquaculture species. The local aquaculture systems are more linked to external commercial chains because of recent rising on global demand and because of local capacities followed by fishing farmers, entrepreneurs, researchers –biologists-, investors, and governmental offices.

Actually, the Mexican northwest goals in marine aquaculture imply working hard in some aspects. We already identified the relevance of dynamic innovation and biotechnological techniques, genetics improvement, nutritional issues, fatness process, and reproduction and management of biological inputs. On the other hand, we found the necessity of increase the phytosanitary control procedures, the management of health and pathologies organisms. It doesn´t matter if an aquaculture system is composed by endemic or introduced species. An aquaculture mature system has been focused on aspects mentioned above, they can determine the innovation pathways and regional development. In other words the territorial organization is a strategic guide to improve each part of local chains, included marine species until specialized services.

A mature aquaculture system needs advanced services. In addition, we identified in Baja California three local types of molluscs that are leading to consolidate the local aquaculture production and service chains, and permitting the construction of strong local linkages to upgrade the local aquaculture commercial chains. Besides that, the local governance is distinctive in the articulation between marine species, innovation activities, and offered services correspondingly to conduct the
local development. Finally, we consider that in the marine aquaculture systems, the territorial control of strategic services is based on specific and untraded knowledge, permanent innovation processes, integral research, and care marine species (vaccines). This is the main idea of this paper. We are rethinking the importance of services far away of the infrastructure for transportation, banking and public services, and commercial agencies activities. Specialized services, innovation and marine aquaculture are the core of this kind of local value chains.
G2: KIBs and e-services

Chair: Leonel Corona-Treviño
The trade service in Latin America (2002-2012)

Suzana Quinet Bastos

OBJECTIVES:

The trade in services is an opportunity for developing countries to generate foreign exchange and jobs. Latin American countries have advantages to compete in the services market, such as labor costs, skilled human resources, ICT infrastructure relatively developed, knowledge capacity in some sectors, similar time zone with the United States and cultural affinities.

Within this context, the aim of this study is to analyze the flow of services from Latin American countries except Cuba, with emphasis on exports of services. To this end services are separated according to Jimenez (2012) into three categories: contact services, shared services and services for skills development.

Contact service is set to lower value-added activities, low level of qualification and limited production integration with local companies. Shared services are central to boosting the scaling to a higher added value. The activities have a higher added value and require a medium level of qualification, with limited possibilities for productive integration with local companies. Services for skills development are related to research and development and information technology, software and consulting services.

METHODOLOGY:

The period of analysis are the years 2002 to 2012, and the database is the International Trade Centre, which brings together data from the International Monetary Fund reports, the World Bank, UN, UNCTAD and WTO.

EXPECTED RESULTS:

i) Contacts services were marketed more towards shared services. There has been a marked concentration in the category of travel, which refers mainly to tourism, with emphasis on Mexico and Brazil, and services shared the highlights
were, Brazil and Argentina with a large stake in the business services, informatics and information and financial.

ii) The trade balance of services in Latin America was deficient, however in an analysis by country, only Panama, Costa Rica, Dominican Republic, Uruguay have a surplus balance in services every year.

Generally countries with large volume of exports of services have further increased volumes of service imports, thus presenting deficit trade balance. The possibility to increase exports and reduce deficits is one of the main reasons which justify specific public policies for this sector. Services related to international travel are the most significant in deficits in most countries. The increase in the deficit on international travel is problematic because trips are not direct inputs to add value or product differentiation, being much related to leisure and entertainment.

Of the twelve countries with trade balance surplus, all belong to the region of Central America (except Argentina, Chile, Uruguay and Paraguay). Thus the region of Central America has great potential for the production of services and therefore for export. Although the database can not identify the destination of exports, it is assumed that in view of strong economic bond of the countries of central region with the United States most of the exports of services in this region are aimed at Americans.

For South America one policy to increase exports could be to incorporate services into goods in order to create new types of trade specialization. The incorporation of services into commodities (servitization) could be a complementary approach to their industrial processing. This strategy yields benefits also in terms of employment creation, technical progress, product diversification and quality improvement.

iii) Although travel and transport (contact services) have the largest shares, the rates of growth of shared services indicate changes in the region. These changes may be related to the growth (upgrading) of manufacturing activities related to FDI and also with FDI inflows linked to offshoring of various services. Thus, the participation of Latin America in the value chain in services can be crucial for their development.
La compétitivité des entreprises locales face aux multinationales dans les pays sous- développés d'Afrique : le rôle de la qualité des services

Chabi Benoît Kpassi Gobi

OBJECTIVES:

Depuis environ deux décennies, les marchés des pays sous-développés sont la cible des grandes firmes multinationales. Cette tendance pourrait se justifier par la saturation de leurs marchés domestiques et/ou de la forte croissance enregistrée dans les pays sous-développés. Elle pourrait également s'expliquer par l'émergence et le développement d'une classe moyenne dans les pays sous-développés, la participation des femmes à la vie active, et dans certains cas la possibilité d'accéder à des ressources stratégiques par l'implantation locale. Ces firmes multinationales ont des moyens financiers et techniques dont ne disposent pas les entreprises locales, qui sont pour la plupart des micros, petites ou moyennes entreprises. Aussi, les entreprises étrangères ont le bénéfice d'une image de marque et une réputation de qualité plus importantes, cela notamment en raison de la forte diffusion des TIC et l'accès aux chaînes de télévisions étrangères qui font la publicité de ces grandes marques. Il est également possible d'expliquer l'attrait des marques des entreprises multinationales comme étant une des conséquences de la colonisation des pays africains où le mythe du "blanc" est encore très vivace au sein des populations.

Dans un contexte aussi défavorable pour les entreprises locales, comment ces dernières peuvent-elles tirer leur épingle du jeu? Cette question mérite d'être posée car il est difficile aujourd'hui de citer des champions locaux dans la quasi-totalité des secteurs d'activité où ce sont très souvent les entreprises étrangères qui dominent le marché. Dans cet article, nous faisons l'hypothèse que les entreprises locales pourraient jouer sur les services (Vargo & Lusch, 2004), notamment leurs dimensions intangible, immatérielle et "culturelle" ou "locale" (Vargo & Lusch, 2008b), pour renverser la tendance en leur faveur.

La littérature en marketing des services et l’approche SDL (d'Aveni, 1995; Vargo
(Lusch & Vargo, 2006; Lusch, et al., 2006; Vargo & Lusch, 2008a) nous offrent des référents théoriques pour appuyer notre hypothèse de départ.

**METHODOLOGY:**

Pour tester cette hypothèse, nous avons choisi d'étudier le positionnement stratégique des entreprises locales dans le marché fortement concurrentiel (d'Aveni, 1997) des hydrocarbures au Sénégal. Ce marché est dominé par les "majors", des entreprises multinationales telles que Total et Shell. La présente étude sera de nature exploratoire par la méthode des cas (Yin, 2009). Ainsi, notre choix s'est porté sur deux acteurs locaux importants dans le marché des hydrocarbures au Sénégal : Elton et EDK. Des entretiens se feront avec les dirigeants et les clients de ces stations-services. Ces entretiens seront complétés par la recherche documentaire.

Elton et EDK se caractérisent par leur positionnement essentiellement basé sur la création de valeur pour les clients en leur offrant une diversité de services. Grâce à cette approche, Elton en un peu plus de dix ans d'existence s'est fait une place de choix dans le marché en occupant le quatrième rang derrière les géants que sont Total, Shell et Oilybia. Quant à EDK, elle réalise une percée spectaculaire en moins de quatre ans d'existence grâce notamment à l'implantation de ses points de services dans les grands axes routiers du Sénégal. Cette localisation aux entrées/sorties des agglomérations permet ainsi d'offrir aux voyageurs plusieurs prestations au-delà du réapprovisionnement en carburant.

**EXPECTED RESULTS:**

Nous souhaitons démontrer à travers cette recherche que les entreprises locales peuvent affronter les multinationales à travers la proposition d'une expérience-client différenciée et innovante. Elles peuvent réaliser une croissance durable en misant sur des services de qualité à travers certaines dimensions (Vargo & Lusch, 2008a) spécifiques pour se différencier des concurrents. De ce point de vue, cette recherche comporte un potentiel de contribution managériale très élevé dans un contexte et un secteur où les entreprises locales n’ont pas (ou peu) de marges pour assurer leur croissance.

Au plan théorique, cette recherche se veut contribuer au débat sur la compétitivité des petites entreprises locales en concurrence directe avec les multinationales.
multinationales. Elle vise à démontrer que la qualité des services (Vargo & Lusch, 2004) peut être source d'avantage compétitif dans un secteur fortement réglementé et concurrentiel (d'Aveni, 1995).
OBJECTIVES:

Whilst economic geographers have been at the forefront of pointing to the importance of understanding the rise of services in emerging economies, and have argued that this the rapid increase in relocation of service activities from the developed western economies to Asia has initiated a “second global shift” (Bryson, 2007), the focus has to date largely been concerned with lower order service industries (e.g. work on offshoring, software, or customer services) rather than KIBS.

The entry point of this paper is to argue that there is a substantial gap in current social scientific understanding, both empirical and theoretical, in relation to the nature of KIBS in emerging economies. This gap is reflected by the disconnect between the social science literature and recent policy and media commentaries which indicate both the presence and increasing sophistication of domestic KIBS industries within emerging economies. The paper therefore has three main goals: to question the veracity of this historical conceptualisation of KIBS in the global economy, to contest current understanding of the nature of KIBS within emerging economies and to argue furthermore that current theoretical approaches to understanding the nature and role of KIBS in the global economy are ill-equipped in relation to the current rapid rise of new KIBS activity in emerging economies. In relation to this last goal, we argue also from the perspective of economic geography that there is a lack of a conceptual, theoretical and empirical work related to the development of the spatial distribution pattern of the knowledge intensive business services (KIBS) in Asia. The literature on global economic development is yet to effectively deal with this issue in order to better understand and explain the nature of business service sector development in emerging economies below the aggregate level of trade and FDI (Daniels et al., 2012), and it is difficult to predict the future development trajectory (Noland et al., 2012).
METHODOLOGY:

The paper builds on primary and secondary data on the development of the KIBS industry in mature and emerging markets. It involves data from the World Bank, Asian Development Bank, EU Commission as well as from industry associations in the respective markets. The primary data builds on interviews made with policy makers and company representatives at location in Asia and Europe. These interviews are constructing the base for a case discussion on how KIBS firms perceive the development in emerging markets but also in relation to their competitive situation in the home market. These insights can then be connected to the more general pattern that we can find in regional and international statistics.

EXPECTED RESULTS:

The service industry in Asia is to a larger extent internalized than in the west. The industry is also characterized by service bundling within both manufacturing and services in general. Manufacturing firms supply services to clients based on long term relationships and financial institutions provide funding as well as other services to clients. The geographical dynamics within the region are complex due to the high degree of regional production networks demanding the most varied types of services. The agglomeration effect within the KIBS appears to be strong in Asia. The rapid development of new economic centers in the region will impact on the location choice, competitiveness and internationalization of KIBS firms. This relates to both firms entering the region from mature economies, but more importantly regionally based firms.

The economic geography of the KIBS industry is also highly dependent on the regulatory and policy environment. Current national policies aim at fostering capital regions and other larger cities as service or knowledge hubs. This development leads to competition between different cities and regions. However, to take full advantage of the economic potential within KIBS in Asia further integration of the markets is required. Research also points to the need of a continuous up-grading of the workforce within KIBS. A strong competence structure is a prerequisite in order to boost regional value-added activities. Domestic capacity building in Asia is based on different market structures, which may lead to a competitive challenge for current and future prospects of foreign service providers in the region. The continued growth path in East Asia to large extent hinges on further development of the service industry.
G4: Innovation dynamics in public services and governance

Chair: Céline Merlin-Brogniar
Industrial Ecology in developing countries: barriers, governance modes, and the role of services

Céline Merlin-Brogniart, Fédoua Kasmi

OBJECTIVES:

This paper aims at highlighting the benefits of the scientific proximity field and of the literature specialized in economics of services to better understand industrial ecology (IE) in developing countries.

Industrial ecology aims to create an analogy between natural ecosystems and industrial systems in a perspective of sustainable development (Frosch, Gallopoulos, 1989). Ehrenfeld (2004, p.827) defines industrial ecology as “a new paradigm that can offer a conceptual base for finding solutions to what have been intractable problems”. IE experiments have emerged mainly in “countries of the North”.

The objective of this article is to analyze the potential of development of industrial symbiosis in developing countries and the role of services activities linked to IE in a territorial development dynamic. We examine to what extent the process of implementation of an industrial symbiosis in developing countries is different from “countries of the north”. Are barriers detected in developed countries associated to IE exacerbated in developing countries? How public and private service activities could improve coordination between actors involved and could reduce transaction costs inherent to the creation of industrial symbiosis? Must the IE be regarded as a luxury restricted to rich countries? (Erkman, 2004).

METHODOLOGY:

This research is firstly based on a review of literature of the worldwide experiences of IE aiming to present the main difficulties that emerge in the implementation of these strategies particularly in developing countries.

The proximity literature as well as the literature specialized in economics of services are used to make a theoretical construction highlighting the role of actors and service activities in such an implementation.
Finally, to refine comparisons between “countries of the north” and “of the South”, the paper uses the result of a case study of one of the first cities in France to experience IE - Dunkirk. In this study, a series of qualitative interviews were used to analyze corporate strategies, modes of governance, and the role of services in terms of IE.

EXPECTED RESULTS:

As the industrialization of developing countries is experiencing a rapid development path, these countries have an incentive to prevent the approach end of pipe. IE is one of the best strategies to reduce the negative impacts of industrialization (Erkman, 2004).

This research examines the possibility of setting up industrial symbiosis in developing territories. It tries to identify the main difficulties experienced by these countries in the development of IE.

This article highlights the need for coordination (creation of networks of stakeholders, partnerships) associated with service activities linked to IE. He stressed the importance and the role of public and private stakeholders (local authorities, associations, professional organizations, companies) in the implementation of IE projects. The issue of governance is analyzed. This article proposes a detailed analysis of the role that service activities may play in the reduction of difficulties experienced in the implementation of IE.
Innovation in Public Services: A descriptive analysis of award-winning innovative experiences in Brazil

Lear Valadares Vieira, Mauro Cálio Araújo dos Reis, Antonio Isidro da Silva Filho

OBJECTIVES:

This paper aims to provide a description of awarded innovation experiences in the Brazilian public sector. With this description, we expect to identify the administrative structure and general characteristics of the public organizations with awarded innovations, as well as highlight the main types, barriers, facilitators, inductors and benefits of the innovations from the selected experiences. This paper will provide an overall understanding of the past and present characteristics of innovations with a high degree of relevance in the Brazilian public sector, which can potentially serve as a basis to the definition of future trends for the innovations in this context.

METHODOLOGY:

This paper will use data collected from the reports of award-winning innovative experiences in the Innovation Contest in Public Federal Administration, a contest promoted every year since 1996 by the National School of Public Administration to identify and award the best innovative practices of the Brazilian public sector. The data will be coded using a standardized content analysis protocol, which will enable the triangulation of categorized data by the researchers of this paper. This coding will be used in order to transform the data from its qualitative format in the reports to quantitative data in the database used for analysis. The variables used for this coding are: general characteristics of the organizations, types of innovations, barriers to the innovations, facilitators to the innovations, inductors of the innovations, and benefits achieved from the innovations. After the collection of data, descriptive analysis will be performed using the frequencies of the variables listed.

EXPECTED RESULTS:
The expected outcomes of this paper are the identification of common characteristics of the organizations and innovations in the Brazilian public sector awarded in the national Innovation Contest in Public Federal Administration. The analysis of the historical series of the experiences from the contest will enable the description of the main characteristics of the innovations being performed on the federal sphere of the Brazilian public sector, and can be used to build a basis for more explicative analysis concerning the innovation in Brazilian public organizations. We also expect, through the descriptive analysis to be performed, to identify possible trends for future innovation experiences on the Brazilian public organizations.
Service Innovation dynamics in solid waste sector: CDM landfill projects

Silvia Stuchi Cruz, Sonia Paulino, Delhi Paiva

OBJECTIVES:

Clean development mechanism (CDM) encompass activities aimed at reducing greenhouse gas (GHG) emissions by establishing projects across a wide range of sectors, including landfill sites. In line with article 12 of the Kyoto Protocol, these projects must also contribute to promoting sustainable development in their host countries, through the establishment of social and environmental co-benefits.

The paper aims to analyze the service innovation dynamics in solid waste sector to tackle the issue of co-benefits generation from carbon market projects. Two CDM landfill projects are considered: a public one, Bandeirantes, and a private one, Caieiras.

The discussion is based on two complementary theoretical framework. The characteristics-based model, developed by Gallouj and Weinstein (1997), useful to describe the conjunction of vectors of competences, techniques, and final characteristics of the service. And, the ServPPIN concept, useful in the identification and systematization of the aspects related to the interaction among agents, emphasizing the participation of associations and cooperatives surrounding landfills.

METHODOLOGY:

The São Paulo Metropolitan Area comprises 39 municipalities, and approximately 20 million inhabitants, generating around 16 thousand tonnes of solid waste per day (Cetesb, 2013). The landfills projects are concentrated in the southeastern region of the country, 23 of which are located in the State of São Paulo (UNEPRisoe, March, 2015). Thus, our research focuses on the São Paulo Metropolitan Area and outlines two CDM projects, the landfills for the empirical research were selected on the basis of the following criteria:

a) Project scope: Landfill projects
b) Localization: São Paulo metropolitan area

c) Methodology used to measure GHG emission reduction: ACM0001 – flaring or use of landfill gas

d) Monitoring period verified: With at least one monitoring period verified until the beginning of the empirical research (February, 2014)

e) Amount of Waste received (during the operational period): 5-7 thousand tons of waste /day

Through the prior criteria mentioned, the landfills selected are: Bandeirantes and Caieiras. The data on the CDM landfill projects, from 2003 to 2014, were obtained through documentary research in two databases: United Nations Environment Program (UNEPRisoe) and UNFCCC- CDM Registry, for accessing: monitoring reports; project design documents; and project documentation, based on Annex III of Resolution No. 01/ 2003 of the Inter-ministerial Commission on Climate Change (CIMGC) (document that describes the promotion of social and environmental co-benefits).

In order to address the modifications in landfills from the CDM implementation 23 indicators are proposed to evaluate the social and environmental outcomes that can be generated from CDM landfills, organized in the social and environmental dimensions. Those dimensions are subdivided into five themes: Social Dimension – participation, articulation, benefits; Environmental Dimension - Environmental quality monitoring; and Gas emissions monitoring.

The process of construction of indicators was participatory: the indicators were presented and discussed with stakeholders and take into account the validation by experts, through the Delphi technique (LINSTONE; TUROFF, 1975; RISTOLA, 2012, VARHO; TAPIO, 2013; TUOMINEN et al, 2014). In this research, 02 experts participated in the pre-test phase (October, 2014), 10 experts in the 1st round (November, 2014), and 09 experts in the 2nd round (January, 2015).

The data collected through the application of the indicators are organized and analyzed based on two complementary theoretical framework: The characteristics-based model (Gallouj and Weinstein, 1997), and the ServPPIN concept.

EXPECTED RESULTS:
Through the indicators of co-benefits is aimed at contributing to analyze the innovation dynamics, in order to clarify the modifications in services and gaps in terms of amendments claimed by stakeholders with the fulfillment of requirements relating to the promotion of co-benefits through CDM projects.

Based on the characteristics-based model and on the ServPPIN concept, the main goal was to evaluate to what extent the projects have fostered innovation in landfills and the concomitant promotion of social and environmental co-benefits, as well as the participation of stakeholders.

By adapting the model of Gallouj and Weinstein (1997) and the contributions of Gallouj (2002) and Windrum and García-Goñi (2008) to the context of CDM projects in landfills, the focus on competences and techniques related to service produced focuses on the analysis of innovation contributing to a better understanding - and discussion - of opportunities and limitations of CDM in waste sector. It is considered the soil and atmosphere contamination, and surface and groundwater.

The focus of articulation between public and private sectors and users, as well as policy makers whose purpose is service innovation, is based on the ServPPIN theoretical approach, highlighting the importance of organizational and relational aspects. However, is not overlooked the important role of the technical knowledge which is also part of service provision.
A labour process approach to derived typologies for service innovations for Mexican KIBS

Leonel Corona-Treviño, National University of Mexico UNAM

An innovation typology is developed based on the historical technology labor process changes taking into account services and goods at each stage. This dynamic approach goes together with productivity which is a function of the speed of capital flow depending on the economic cycle. The different kinds of services have an impact on innovation according to their function in the capital cycle: production, circulation or both. This top-bottom analysis is complemented with the application of these theories to 35 knowledge intensive business services, KIBS, in Mexico (mainly software & ICT) contrasting their output in innovations and market positioning with their inputs in investment in R & D, workers’ qualifications, components used in innovations and external knowledge links.

Introduction:

In a context of economic crisis Schumpeter’s innovation and entrepreneur concepts are related to the swings of “creative-destruction”. The long term economic waves of prosperity-recession, and depression-improvement result in the development of service economies that is, economies with half or more jobs in services (Schettkat & Yocarini, 2006), (Fuchs, 1968) (Evangelista & Savona, 2003). In this context, that is the evolution towards knowledge societies, we need to follow up the emergence of Technology goods and Knowledge intensive business service, KIBS, and the decline of different industries over time.

Research on innovation has been oriented towards measurement and the positioning of firms, regions and countries which has been very important for comparative studies. But this development has put aside Schumpeter’s theoretical approach of innovation (Drejer, 2004). So, the purpose of this paper is to point out the importance of going back to consider some abandoned theories such as the different kinds of labor processes and the functional spheres of the capital flow for both goods and service innovations.
So, innovations involving new products, processes, markets, resources and organizations are key concepts for theoretical and empirical research.

Literature Review

The evolution of the economic analysis of services and particularly of service innovation has been characterized in the following approaches: assimilation, demarcation and synthesis (Coombs & Miles, 2000). In the assimilation approach, service innovation is regarded as similar to innovation in manufacturing, while in the demarcation approach as services are different, they are considered to need a specific method. Then, anticipating a synthesis, the interrelations between goods and service innovations (Omachonu & Einspruch, 2014) involve a combination of new and old theories and concepts (Djellal & Gallouj, 2013).

Comparing service innovation with goods innovation, there is a ‘reverse innovation cycle’ which differs from the classical manufacturing one, as in the consumer services industries innovation begins with the efficiency of delivering the service, followed by process innovation that develops service quality, and finally, service product innovation achieved through new kinds of services (Barras, 1986).

In order to classify service innovation four characteristics are proposed (den Hertog, 2000): service concept, client interface, service delivery, and technology which are related to personal, organizational, marketing and competing capabilities. Another approach involves considering which factor is undergoing most change: physical (goods), information, Knowledge-based or people, or stressing intra-services differences in terms of the patterns of technologies used, relevant market characteristics and the technical skills required (Miles, 2008).

However the labour process and the capital cycle flow have not been considered in the literature to explain service innovation.

METHODOLOGY:

We used a deductive, top-down approach which involves: 1) considering historical changes in the labor process separating goods and services at each stage; 2) classifying services considering: a) whether they are part of the
production or circulation processes, as in the case of financing and marketing; and, b) whether the client is a consumer or producer or both: service co-terminality, and co-production or client interaction (Kvålshaugen, et al., 2008) – thus, they could be part of consumption or/and production.

First, the evolution of the labor process is classified into both services and goods used in production. The point of departure is the artisan process which needs hand instruments and knowledge related to specific skills. Then follows the industrial revolution that has two phases: one, manufacturing based on the division of labor between workers and two, the introduction of machinery using steam energy. So, machine-tools demand different services from maintenance on up to specialized skills, organizational services and energy require prospection and distribution services.

As the labor process tends towards automation, there is demand for supervision, control, information and computing services, as well as software and design. Next, science incorporates intellectual and creative knowledge, R&D, information systems, and networks services into production.

Besides labor, machinery, energy, information and commodities, the consumer who also serves as co-producer is added, generating a kind of co-producer and self-service.

Secondly, services are classified accordingly to their function in the process of the Circulation of Capital. So services could be inputs in production (e.g. design, business consulting), or they are part of the circulation process, mainly services of marketing and finance. If the product is a Service, S, it is delivered to the client so it does not become a commodity as in the case of Goods; a different kind are the tradable services. Also, some services are finished by the client, adding use value to it (eg. a transaction made in an ATM).

The two approaches are applied together, considering that the labor processes are all present as heterogeneity can be observed, meaning that the hand craft and manufacturing are present along with automated processes.

An inductive, bottom-up approach was then used starting with 35 Mexican KIBS applying this general typology and a specific indicator related to innovation and diffusion (INDICO), as well as the four-dimensional model of service innovation based on 1) service concept, 2) client interface, 3) service delivery, and 4) technology, thus establishing different patterns in the relationship between the supplier, service firm and client (den Hertog, 2000).
A correlation analysis is made with the data of the 35 firm in order to test the hypothesis of differences in the causes of innovativeness and service innovation patterns in function of: labor process, position in the circulation of capital, firm size (number of workers), R&D investment, client participation and knowledge-intensive service.

RESULTS:

A way to generate a typology is proposed based on the separation of the labor processes into goods and services, and the kind of economic activity in relation to the capital cycle, providing a new explanation to the descriptive variables presented in the literature, considering the heterogeneity of services and innovations.

An exploratory study of 35 innovative firms is made through direct interviews, along 2013 and 2014, based on a questionnaire.9

First an index of the firm innovativeness, called INDICO (Innovation, Diffusion and Competitiveness), has been proposed base on its capabilities and results.

Second, after different correlations to explain the firms’ innovativeness, the following linear regression accounts 60% of its dispersion:

\[
IN = 1.97 + 1.81Cl + 0.38KC + 3.35k; \quad R^2 = 0.60 \quad (eq.1)
\]

\[t, (3.36) \quad (2.27) \quad (1.10) \quad (6.28)\]

Where,

IN, Indico Index (0-10) which expresses the firm’s innovativeness (note 6).

Cl, client participation in the innovation (0-1).

KC, capital cycle phase: production (2), market (1) and finance (0).

k, proxy variable of the knowledge intensity of firms’ innovations: Software design and engineering.

\[t, t -\text{Student.}\]
The knowledge intensity of firms is used instead of the labor process index which was rejected statistically. This could be because there are different kinds of innovations depending on the level of labor, from artisan up to automated production and the scientific process. So, a more detailed analysis would be necessary.

Therefore, considering that most of the firms selected are related with software either because they sell it or use it, software and design and engineering knowledge content is applied as a proxy variable of knowledge intensity (k). For this variable the regression coefficient is the largest, explaining the marginal growth of innovation, 3.35. In second place comes client-producer participation with a coefficient of 1.81, which is only affirmative in 20% of the firms. So, a policy for promoting client inclusion for innovation could benefit the other 80% of the firms selected.

Unexpectedly, lifecycle (firm’s age), labor process, R&D expending and firm’s size (number of workers), show a low correlation with the innovation index, as these variables have been statistical rejected (t-student).

Discussion

The labor process as an explanation variable of service innovation has not been statistical proved at firm level. So, problems for future research include: 1) differentiating between varying types of innovation depending on the kind of labor process, and 2) applying our methodology to in a larger sample of firms. Nevertheless, there is a difference in the evolution of the labor process due to the coexistence inside the firm and between firms of artisan, manufacturing, automation and scientific processes. This notable heterogeneity has real impacts of innovation opportunities based on the ICT and could be a possible explanation for the importance of software and design and engineering in the firms’ innovativeness (eq.1).

In contrast, the position in the capital cycle has the lowest impact on service innovation (0.38, eq1). Accepting the analysis of the capital cycle, future research, it will need to look into its phases in more detail, perhaps dividing them or establishing other complementary functions10.

Client participation on innovation it is at present widely studied. Co-terminality of services (Miles, 2008), based on the viewpoint of “use value”, needs to be complemented with the “potential value” of client participation which is
implicitly transferred to diminishing firm’s production costs (Fig1). Thus, the consumer-as producer can increase innovation in 1.81 times. Hence, another line of research is to develop a typology of client participation in production, both as a value-user and in value-transfer.

Conclusions This paper addresses the following approaches to explain the variety of services:

1) Services and goods are both part of the evolution of the labor processes, from artisan, manufacturing, automation up to scientific processes (Table 1). As these labor processes coexist in a given period of time, they generate a production heterogeneity which is wider in services.

2) Mainly through services the Consumer-(as) producer is added to the traditional production components, Labor, Machinery, Energy, Information, Science (knowledge). The client’s participation as co-producer is impacting the production of services as well as on innovations.

3) Service innovations are influenced by the position of the firm in the phases of capital cycle.

The regression analysis of 35 firms shows that software and design and engineering knowledge has the largest marginal impact growth on innovation, 3.35. In second place comes the client-producer participation with a coefficient of 1.81; and thirdly, the position of the firm in the phases of capital, 0.38. (equation 1).
H: ICT's role in service development (A)
H1: ICT based service encounters and innovation

Chair: Flemming Sørensen
Co-production of the Service Recovery – Embodiment Perspectives for the Innovation from the ICT-centric Service Encounter

Jannick Kirk Sørensen

OBJECTIVES:

ICT-centric customer journeys depend on an a fragile interplay between the user’s goal, the user’s cognitive model of the customer journey, the affordances and procedures embedded in the ICT service interface, it’s information architecture, as well as the performance of supporting web-technologies such as authentication- / login-services, browsers, browser plug-ins etc. Traditionally, these areas are addressed independently in the research and among practitioners (e.g. system designers, interaction designers, programmers), although customers in many cases cannot identify which element cause the error in case of a service delivery failure.

The self-service character of the ICT-centric service-encounter, as well as the heterogeneous composition of user goals, user conceptual models, web technologies and telephone support changes the role of the user-customer in the service recovery into a more active one: With his or her possible technical knowledge and understanding of service structure, the error- / problem search and service recovery becomes a co-creation process.

METHODOLOGY:

The methodological assumption is that obstacles in an ICT-based customer encounter are different from those in face-to-face service encounters. In the ICT-centric service journey, the critical incidents neither can be understood exclusively as a matter of low usability, nor as a matter of technical problems or poor service touch-point design. The analysis must bridge different disciplines.

The paper performs a detailed critical incident study of the service journey and service recovery process related to online tax reporting. The case exemplifies in +240 steps of interaction documented via a diary and screendumps the (lack of) interplay between the web-interface, the browser and plug-ins, the user
cognitive model and the support provided via telephone. The paper subsequently positions this interplay in an analytical framework based on Paul Dourish’ (2001) concept of ‘Embodied interaction’.

EXPECTED RESULTS:

The analytical aim is to localize tensions in the service journey between web-interfaces, customer goals and hotline telephone feedback. The methodological aim is to bridge the service touch-point / customer journey tradition with the methods and approaches from the field of Human Computer Interaction research, particularly the framework of ‘embodied interaction’. The co-creation perspective on the service recovery process offers, combined with the ICT-platform, a new model for innovations from the ICT-centric customer encounter that is particularly relevant for long and complicated service journeys.
Online Review Site Data in Service Innovation

Tuomo Eloranta

OBJECTIVES:

While there seems to be consensus that customer cocreation can contribute to successfulness of innovation activities, less attention has been paid on how the potential benefits can actually be attained (Payne et al., 2008). Existing research on customer involvement has been especially criticized to be too conceptual and focused on listing generalized types instead of in depth examinations (Gustafsson et al, 2012). Thus there is a pressing need for studies focusing on the concrete benefits and challenges of the various ways of conducting customer cocreation in order to increase understanding on how companies should really approach customer involvement.

This study addresses this gap by studying online review sites - public web-based services that allow customers to rate and give open feedback to service producers. They present an intriguing possibility for actualizing customer cocreation. They are used voluntarily without monetary incentives, making them an inexpensive approach for collection of customer insight. Further, they allow democratic two-way interaction initiated by the customer, which has been noted as more fruitful approach to customer involvement than company- dominated one-directional communication (Gustafsson et al., 2012). Still, the suitability of online review sites for gaining insight for service innovation is not a trivial. When customers air their development ideas in virtual environments, they don’t necessarily spend much time doing it (Majchrzak and Malhotra, 2013). This raises questions whether the feedback is profound enough to act as input for development activities.

Thus, the main research question of the study is:

- What kind of input customer reviews posted in public online review sites can provide for the purposes of innovation activity in companies?

The focus is especially on understanding the content users post in their reviews, in order to understand what kind of development activities online review site data can best serve, if any. Secondary objective is to gain insight on challenges related to processing of online review data to understand the practical issues of
mining this information source.

METHODOLOGY:

To answer the research question, I collect public customer reviews addressed to two companies in related business (IT services) from online review site Trustpilot.com. One company is providing online publishing software-as-a-service and other online video streaming services. Resulting datasets consists of over 500 distinct reviews. The content of each review is analyzed qualitatively and I inductively generate a typology of feedback provided customers focusing especially on different areas that customers’ suggestions address (offering, operations, customer experience etc.). Quality of the feedback in terms of depth and information richness is also examined. Finally, I study the frequency of occurrence of different content types and compare the results of both companies.

EXPECTED RESULTS:

Main results of the study are qualitative insight on the content of user reviews in online review sites, typology of review content and quantitative insight the occurrence frequency of different content types. Based on these results I make inferences on online review sites as cocreation tools. I also reflect on the data analysis process, focusing especially on the amount of work required in order to weight the costs of the method against its benefits.
ICT-based service encounters in e-service development

Hannamaija Määttä, Inka Lappalainen

OBJECTIVES:

It has been long acknowledged that ICT plays an important role in service innovation and how with other resources enabling the rebundling and transfer of information in different contexts it creates new opportunities for service exchange and innovation (Vargo & Lucsh, 2004, 2008a, 2008b; Lusch and Vargo, 2014). More often nowadays, the service itself is ICT-based, for example e-services such as e-banking.

The role of employees in service encounters as drivers or even active actors for innovations has long been under-researched, as the focus has been on users and customers role in service innovation (e.g. Hasu et al. 2011). Recently, service encounter based innovation has been defined as innovation which is developed from the ideas, knowledge, or practices stemming from frontline service employees’ interaction with users during the service delivery process (Sørensen and Jensen, 2012; Sundbo et al., 2015). Some contributions to the service encounter based innovation, and particularly front line employees role in service development, have been made in the recent years (Fuglsang & Sorensen, 2011; Sorensen et al, 2013; Sundbo et al., 2015; Engen & Magnusson, 2015). Also the organizational conditions for service encounter based innovation and the competences service employees require in discovering and communicating the customer input have been researched (Sorensen et al., 2013; Sundbo et al., 2015). However, the service encounters where ICT network communication is utilised not only in value co-creation and related interaction but also to get ideas for service innovation has not yet been much studied (cf. Lusch & Nambisan 2015; Sundbo et al., 2015). There is thus a research gap in understanding the innovation processes related to the ICT-based service encounters (Henten, 2012).

This paper aims to fill this gap by examining how various ICT-based service encounters can be utilized in service development. Our focus is on a service organization operating in the insurance and financing industry where digitalization is highly topical.
METHODOLOGY:

In our paper we utilize a case study based approach (see e.g. Yin 2008, Eisenhardt 1989). We study a large Finnish company operating in the insurance and financial industry. As a method, we utilize semi-structured interviews with the managers responsible for the customer-driven development of web-based services. The interviews are conducted and analysed in May – July 2015. As a supplementary data, we will also utilize existing case material focusing on customer-oriented development practices gathered from the company during 2012-2013.

In our analysis, we will examine the different kinds of modes of ICT-based customer-employee interaction (see Henten, 2012) in the value creation process and examine their characteristics (similarities and differences), and move on to discovering how these encounters are utilized in service innovation.

EXPECTED RESULTS:

The results of this study will demonstrate the different characteristics of ICT-based service encounters and how these encounters are utilized in service development by our case organization from top-down and bottom up perspectives. We will also discuss the related barriers and benefits.

By examining the different ICT-based service encounters from innovation perspective, this paper contributes to the better understanding of the skills, resources and management methods needed to utilize the innovation potential of all actors involved in value co-creation in the ICT-based service encounters and their continuous collaborative development.
Comparing methods for involving users in ideation. The use of Future Workshops and Blogs in Library Innovation

Hanne Westh Nicolajsen, Ada Scupola, Flemming Sørensen

OBJECTIVES:

Innovation and especially open innovation (Chesbrough, 2003) is a topic that most organizations are interested in exploring. We are especially interested in the involvement of users in service innovation (Kristensson et al. 2003) and especially the use of technology such as social media for involving users in service innovation (Sundbo et al. 2012; Brabham, 2010; Howe, 2006).

The paper discusses and compares two different kinds of methods for involving users in the ideation phase. The use of workshops using the Future Scenario method and the use of online social media in form of a Blog. The two methods are rather different and are of course not straightforward to compare.

We discuss the strength and weaknesses of the two methods both on a theoretical level as well as on a practical level, with regard to resources spend, outcome in terms of number of ideas and how elaborated these ideas are, the roles of the involved, reach etc.

Following from the empirical investigation we also discuss how new ways to interact with users as well as the involvement of employees demands organizational learning, as new practices and new understandings are needed, and these needs to be accepted and learned. Finally we discuss how online innovation practices needs to develop to become more efficient and valuable.

METHODOLOGY:

This article combines desktop studies with experiments. During a number of years we have followed the innovation strategies and practices at Roskilde University Library (RUB), the public university library at Roskilde University. Some years ago we decided to move beyond investigating their established practices and decided to do some action research in the form of two experiments each focusing on the involvement of users in innovation.
The first experiment was use of an online media to invite users to communicate ideas for the development of the library following other experiments (eg. Magnusson et al. 2003). The Blog-media was chosen by RUB as the organization already did do some experiments internally using blogs. A blog called RUBminds was set up, with four small themes for contributions. The blog functioned like an online and open (transparent) suggestion box. The event was communicated through posters at campus etc.

The second experiment was use of Future Scenario workshops (JungK & Müllert, 1987) involving users and employees in three groups of six participants. The three workshops had different constellations of participants: only employees, only users and a mixed group. A Future Scenario is a workshop of four phases: critique, fantasy, reality & implementation.

EXPECTED RESULTS:

What we see is that many of the same ideas appear using the two different methods, however more ideas and different types of ideas appear in the blog compared to the workshop. An explanation could be that groupthink develops fast in a small intensive group. Very little development of the ideas appeared on the blog in terms of users commenting and thereby contributing to the ideas of others. In the workshop especially in the mixed groups the ideas got more developed as the usefulness of ideas could be tested and improved right away, pointing to the need of collaboration with users to develop succesfull services. The study thus points to the strength of combined methods, not just these two but eg. user panels.
H2: ICT, learning and innovation in health care services

Chair: Christian Bourret
Gamification as an enabler of mutual learning in complex health care systems

Johanna Leväsluoto, Kaupo Viitanen, Jouko Heikkilä, Joona Tuovinen, Janne Laine

OBJECTIVES:

Major challenges are emerging in the health care service system as chronic diseases are increasing and the population is ageing. At the same time new ICT solutions and citizens’ increased expectations have led to the situation where the health care system needs radical changes. New innovations and methods are needed to ensure the quality of health care services. However, at the same time, the service as a whole becomes increasingly complex and the needed change is difficult to specify and describe. Furthermore, this complexity makes it more difficult for the customers to understand and participate to their care processes.

A dialogue between organizations, professionals and customers is essential in ensuring the high quality health care services (Kivisaari et al.2004). We see gamification as a promising tool for collaborative learning and promoting dialogue and innovation. Gamification means the use of game-like elements and game-design principles in non-game applications (Deterding et al.2011). For instance, storytelling among a group of players allows the systemic aspects of health care processes to be discussed: different roles produce different perspectives and coherent storylines involving different stakeholders concretize the often fuzzy interactions between different actors and actions.

In this paper we examine the change process in organizations and whether change can be promoted through gamified solutions. Our focus is on improving collaborative learning by means of role-switching game. The objective of our game is to create a dialogue between actors representing different professions and to help them to create a shared understanding of the elements needed for change.

METHODOLOGY:

We studied collaborative learning in two case studies. In our first case, an
electronic medication storage unit was introduced which also induced the need to change the medication process and operational culture. In the second case, a clinical pathway for geriatric patients was implemented. In order for the clinical pathway to work as planned, changes in operation models are needed in private and public social and health care organizations. The study is based on 24 interviews and four workshops with gamified aspects.

EXPECTED RESULTS:

In both of our case studies the interviewees expected that the changes in their organizations would bring many benefits (patient safety, quality of care and efficiency) to both the professionals and the customers. However, they also expressed the concern that the changes would include alterations to work processes which might cause additional burden for some professionals. In addition, the attitudes towards new ways of doing things were seen as an obstacle for implementing changes.

The preliminary results indicate that gamification inspired and gave means for the personnel to enhance systemic understanding of their organization and to improve the dialogue between different personnel groups. The health care professionals that participated in game sessions found that gamification promoted their collective working methods and also gave inside information of the reasons of action. Our study indicates that it is useful to simulate being in the roles of others to enhance the understanding of a complex system where the actions of one professional affect the work of another one. Seeing and feeling the situation from another perspective can also be an effective tool in resolving conflicts.

We argue that these effects can help to reveal the issues related to organizational changes and also to provide solutions for dealing with them. As many organizations struggle with various obstacles when attempting to improve their activities, gamified solutions can be a valuable tool for assisting the implementation of changes.
Transforming health care through niche service innovations – the perspective of new entrepreneurial ventures

Arto Wallin

OBJECTIVES:

During past 20 years ICT has profoundly changed our everyday lives and transformed business logic in several industries. On the one hand, digitalization has initiated massive transformation in several, previously product-oriented, industries e.g. digital distribution of software, music and movies. Hence, information intensive goods are starting to behave like services or “as-a-service” (Ng et al. 2012). On the other hand, digitalization is transforming other industries such as banking from physical service activities to standardized digital services that behave more like goods (Ng et al. 2012). Despite digitalization in health care has progressed at much slower pace than in the banking sector, policy makers across globe are now looking to digitalize health care system in order to make it safer, more affordable and more accessible (Agarwal et al. 2010).

The renewal in health care was for long understood as the adoption of new medical tools and drugs (Djellal & Gallouj 2008). At the same time service innovations, which aimed to change heavily institutionalized structures and practices, seemed to be very rare and face considerable institutional barriers. However, now it finally seems that digitalization has also started to profoundly reshape health care sector, where the major pressure for change in sociotechnical regimes (see Geels & Schot, 2007) comes from two direction. Firstly, major changes at the landscape level, for example, to age-dependency ratio and spiraling health care costs, have created urgent need to rethink how health and social care service delivery is organized more effectively. Secondly, the sharp rise in new ventures that are aiming to introduce digital health service innovations to specific niche areas (digital health ventures) build up internal momentum for major changes.

With this paper we aim to increase the understanding of the ongoing digitalization in health care from the perspective of digital health ventures. Objective of our study is to explore and explain how these ventures pursue to
introduce entrepreneurial innovations (Autio et al. 2014) to the health care systems, and how multiple institutional logics (DiMaggio & Powell 1983) in health care domain promote and/or resists the change.

METHODOLOGY:

This research adopts a qualitative research approach, using a case study approach. Case study is especially suitable as a research method in this context due to the high complexity of the phenomenon and early stage of this field of inquiry (Yin, 2009). Also, our study can be categorized to micro-approach of innovation, focusing on study of individual actors, especially on entrepreneurial founders and teams (Garud et al. 2014).

Data for the study was collected from the 12 narrative interviews. Interviewees represented managers of six companies, which were developing digitally-enabled service that was supposed to transform specific niche area of health care system.

EXPECTED RESULTS:

Findings of the study explain how digital health ventures, which are mainly driven by the business logic, respond to challenges that they face when aiming to transform health care system where multiple institutional logics exists at the same time (Reay & Hinings 2009). Findings also highlight how previous institutional contexts of entrepreneurs’ can have a great influence on the innovation activities.

In the discussion section, paper draws managerial implications with an aim to help vast number of entrepreneurial ventures that are targeting to the digital health markets. We suggest also policy implications with an aim to improve conditions for creating radical entrepreneurial innovations in health care domain. Finally, our aim is to advance service research by discussing how multidisciplinary perspective promotes our theoretical understanding and capability to introduce systemic health care innovations within organizational field where multiple institutional logics co-exist (e.g. business and professional logics) (van den Broek et al. 2014).
Frameworks towards a virtual co-creation tool for fuzzy front-end of service development in health care context

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OBJECTIVES:

In this research paper we combine entrepreneurial behaviour and innovation with design thinking in order to investigate the use of the Idea Window, the ict-based tool planned for employee-driven service development (Lahtinen et al., 2014). We will investigate how employee-driven service development can be initiated by the virtual co-creation tool. Employee-driven innovations are exploration and exploitation of new processes and work practices that originate from ordinary employees.

Virtual co-creation (Grönroos & Voima, 2013) tool supports sharing of information and knowledge across communities of practice (Wenger, 1998), which enables the participation of more heterogeneous and larger group of people. That has been shown to be valuable for the success of the fuzzy front-end of innovation and renewal processes (Chesbrough, 2003; Lettl et al., 2006). Virtual tool also routinizes some of the behavioural patterns associated to effectual or entrepreneurial behaviour (Turner et al, 2006).

We are interested to know how virtual tool can be used for tackling the unknown - customer needs, tacit knowledge, hidden possibilities and initiatives in the working life context. We explore what kind of perspectives and topics the employees bring up when using a virtual tool in the front-end of service development.

Our main questions are: 1) How and by whom the virtual tool is used in fuzzy front-end of open and unstructured innovation process? 2) What kind of initiatives are raised up and which proceed into brainstorming phase?
METHODOLOGY:

Uncertainty is tightly intertwined with employee driven entrepreneurial renewal especially in the fuzzy front-end of innovation process (Smith & Reinertsen, 1991). The end product of the renewal process is still unknown at that stage and the uncertainty of the process is quite similar to business start-up process (Phan et al., 2009) even though the amount of risks and employees role as a risk bearer is different (Da Costa & Brettel, 2011). Effectuation theory (Sarasvathy, 2001; 2008), which was originally created to describe start-up process, offers a useful tool for our study to understand the entrepreneurial behaviour of employees under uncertainty. Tolerance of uncertainty, divergent thinking, and flexibility with change are the key elements also in design thinking which intends to offer very concrete solutions to complex problems highly ambiguous and not easy or certain to comprehend (Burns, 2006; Brown, 2009; Stevens & Moultrie, 2011). In our research, the theoretical framework consists of the effectuation theory and conceptualisations and methodology of the design practices.

The empirical study is based on action research project realized in two hospital wards. During the project, the project team implemented together with the health care professionals pilot projects utilizing ICT-based service design tool (Idea-window) in order to support co-creation processes in work community. In these pilots data was collected:

1) by using Idea-window. Ideas and in insight of health care professional were documented through Idea-window which has been placed in different parts of customer journey/service string in the ward.

2) By using electronic questionnaire, which was sent to whole personnel working in the wards. The questionnaire focused on the ‘fuzzy front-end’ of innovation process/service development.

EXPECTED RESULTS:

The research paper describes the results of the empirical study realized in May-June 2015. The study consists of investigation of the virtual co-creation tool, which enabled participation of heterogeneous group of people to fuzzy front-end service development in the health care organisation. The results increase understanding of employee driven entrepreneurial renewal processes, especially in fuzzy front-end of service development, and the potentials and limitations of virtual co-creation tools used in the processes.
New approaches to patients’ services and new uses of ICT (Information and Communication Technology) in Co-operative Interface Organizations as a lever to improve the French Healthcare System

Christian Bourret, University of Paris East Marne-la-Vallée (UPEM), France, DICEN IDF / IDFIS.

OBJECTIVES:

The French Healthcare System, considered as “out of breath” (H. Isaac), must evolve with a paradigm shift: from almost only curative to much preventive, relying on ICT (Isaac’s report). It is characterized by numerous divisions or walls, synonymous with poor quality, particularly between the primary care and the hospital sector with the full weight of the hospital sector (“hospital-centrism”). This is the challenge of implementing new forms of coordination from Interface Organizations (Bloch-Hénaut, Bourret). From the perspective of promoting innovation in territories (considered as Territorial Intelligence), the Godet-Durance-Mouli report emphasized the role of the Health field as an important innovation's field, pointing in particular the experience of Healthcare Networks (in French, réseaux de santé). In 2003, the Carayon’s report on Economic Intelligence had stressed the vital link between business competitiveness and social cohesion.

As an extension of the Companion-Ghali report (2014), we also insist on the need to promote the role of patients, leading to a true co-production of services through a new local citizenship (new stage of development of "health democracy" (démocratie sanitaire) valued in the law of March 2002 on “The Rights of patients and the Health system quality”. This is one of the main goals of the new public health law now under discussion in Parliament, which also aims at better use of data health to both improve the quality of care and better control spending, including by promoting the concept of patients’ care pathways (traceability of care), digital care territories (TSN : Territoires de Soins Numériques) with the evolution of DMP (patient’s medical record, Dossier medical Personnel), becoming better shared, and other ICT tools, with all the challenges of "augmented human" and "quantified self" (CNIL).
METHODOLOGY:

We position in the Information and Communication Sciences field, considered by F. Bernard at the convergence of four different problematics: that of link (relationships, interactions), meaning and knowledge for action. We are in the approaches of complexity (global and systemic) and Action Research: to produce usable knowledge for actions, validated by all the stakeholders. We begin with the situational and interactional semiotic approach (A. Mucchielli) and we propose an extension to integrate the experiences of actors including the emotions of patients, to promote their better involvement, relying in particular with the works of F. Martin Juchat and integrating a dynamic approach, considering the patient’s pathway as a process (quality management). Our work is based on co-operations established in France (particularly around students’ works in Masters: observation, participation in meetings, interviews with key actors, etc.) but also with comparisons abroad, including interface organization in the Spanish Basque Country.

EXPECTED RESULTS:

This work is a work in progress. We offer different tracks from experiments which we are associated. Beyond revisited DMP (Dossier Médical Personnel), we will analyze in particular the concept of Personalized Care Plan (PPS : Plans Personnalisés de Soins)) from two cases: those of PAERPA (Elderly People at Risk of loss of autonomy, in French : Personnes Agées en Risque de Perte d’Autonomie) in Aquitaine and GPS (Health Cooperation Group, in French: Groupement de Coopération Sanitaire) Diapason, whose mission is animation of the territory of Seine-et- Marne and testing of innovative practices involving the patient, especially diabetic, around the telemedicine project "Diabetes 2.0" (including the Healthcare Network Revesdiab). We will discuss the concept of care pathway information system.

We will propose an extension of the perspectives of the situational and interactional semiotics to experiences and emotions of the actors, especially for patients and their families and a dynamic process of change and continuous improvement (process). We thus situate in new approaches to innovation everyday (Alter, Godet) with a more integrated experience, emotions, feelings and needs of patients for a co-production of services on the model of Anglo-Saxon empowerment. We will insist particularly on the role of emotions in the services’ relationship (Maman), in our case, in the healthcare sector.
In a perspective of organizational innovation in the territories, the proposed ways correspond to a new approach of the territory from the perspective of "sustainable development" cf. Brundtland Report (1987) which cannot be reduced only to environmental issues but also based on two other pillars: economic (growth) and social (education, health and respect for freedoms).
I: ICT's role in service development (B)
I1: Mobile services

Chair: Ute Reuter
App communication on Instagram. A netnographic study of a young human brand Isac Elliot

Anu Helkkula, Apramey Dube, Maria Holmlund-Rytkönen, Tii Pylvänäinen, Arja Hallberg, Maria Hellberg

OBJECTIVES:

Communication in social media has exploded in recent years. Especially communication using smartphone applications (apps), which we call app communication, has gained more interest among marketers. In this study we focus on an image sharing app, Instagram, where people can share images with friends and other followers with no or minimal text. Instagram was the fastest growing social network in 2014 (Techcrunch 2014) Image sharing apps have also started to interest companies, and many brands have created accounts and used Instagram (FastCompany 2014; Walter and Gioglio 2014).

Despite the success of image-based app communication, to date, it has gained little interest in marketing research. As a result, there is a somewhat continuous chaos among practitioners and a small amount of academic studies emphasizing image-based app communication. (Kaplan and Haenlein 2010; 2012; Kaplan 2012; Davis et al. 2014; Enginkaya and Yilmaz 2014). To the best of our knowledge, this is among the first papers to focus on app communication on Instagram. The purpose of this research is to analyze app communication addressing how human brands engage followers on Instagram. Today many celebrities are brands themselves and offer brand extensions of their personal images. The amount of so-called human brands has increased due to the digital entertainment market. A human brand refers to “any well-known persona who is the subject of marketing communication efforts” (Kowalczyk & Royne, 2013:213).

METHODOLOGY:

The human brand in this study is a Finnish school boy, a young pop artist, singer Isac Elliot Lundén, with an artist name Isac Elliot. He published his first record in 2013 when he was thirteen years old. He has active fans in addition to his home country in Norway and Sweden. In 2014 he was nominated to be the "Innovator
of The Year” by Spotify in the Finnish Emma Gala for using digital media to be in contact with his followers. Currently Isac Elliot is trying to access the U.S. market. In just couple of years, he has transformed from a teenager schoolboy into a human brand.

We used netnography (Kotzinets 2002) and observed for 10 months in which way Isac Elliot as a human brand engages his followers on Instagram.

EXPECTED RESULTS:

In our netnographic study we addressed the following research questions: 1. What kind of pictures/videos does Isac Elliot post to his followers, and 2. What kind of app communication does he use in his postings.

The findings reveal that Isac Elliot actively engages his followers on Instagram. He distributes approximately two postings per day. We did a thematic analysis, and two main themes emerged from the data: 1. Promotion with an explicit, intended outcome, and 2. Pictures creating social contact without an explicit, intended outcome.

We further analyzed what kind of app communication is used in the promotion pictures with an explicit, intended outcome. We identified six categories: 1. marketing promotion of concerts, music, products, events etc. (42%), 2. use of a hashtag (#) that directly links to Isac Elliot (32%), 3. a specified message to his followers (10%), 4. questions to his fans (7%), 5. competitions or promotion of competitions (5%), and 6. voting or promotion to vote (4%).

Even if Isac Elliot visually promotes his human celebrity career on Instagram, over 40% of the pictures/videos are presented without an explicit, intended outcome. We further analyzed such pictures/videos and found that ca 50% of the pictures without an explicit, direct outcome focus on Isac Elliot’s everyday life. Many pictures were taken at his home, such as chilling with his dog or getting ready for school. The findings portray a young human celebrity, who using app communication up to some extent shares his everyday life with his followers and becomes part of his followers’ daily lives as they check his postings on a daily bases.

Our findings indicating that a human brand becomes an everyday partner in followers’ lives are supported by Thompson (2006), who identifies that the human brand relationships have the same expectations, cognitions, emotions and behavior than so-called normal interrelationships and the customers
consider a human brand as a pleasant companion, a good friend or even a romantic mate.

Researchers and companies need a new way of thinking and better understanding of image-based app communication. This study contributes to marketing communication and human brands by showing how a human brand becomes part of his followers’ everyday lives and as such becomes a peer rather than a commercial product. We conclude that an app-based social media, such as Instagram, has the potential to offer the arena of collaboration, integration, sharing and interaction at the everyday-life level between a human brand and his followers.
Electronic auctioning of services

Ute Reuter

OBJECTIVES:

In times of ever increasing financial pressure on business units, the utilization of electronic procurement devices such as electronic auctioning (e. a.), electronic catalogue management and electronic marketplaces is a viable possibility to achieve cost savings in purchasing. Experience in electronic purchasing of material shows high cost efficiency potential. A large share of this cost savings potential is achievable in purchasing services as well, even if considering the characteristic features of services. Of the three mentioned ways, e. a. is the one with the highest cost savings potential. Therefore, the proposed paper concentrates on e. a.

However, e. a. of services is a concept which meets a lot of resistance in business practice. If a company thinks about implementing e. a., it has to be considered which hindrances exist in the fields of human capital, management team, financial resources, organizational capital and external resources and how resistance can be overcome.

Research questions are:  RQ1: Which hindrances impede the implementation of e. a. of services? RQ2: How can these hindrances be successfully overcome?

METHODOLOGY:

Recent research in electronic procurement of services in general and in e. a. of services in particular is considered from a resource-based perspective. Resource-based hindrances in e. a. of services are clustered into categories of hindrances based on human capital, management team, financial resources, organizational capital, and external resources.

Branch-specific studies offer more insight than cross-branch studies and are especially useful in research projects with resource-based theoretical background. The analyzed branch is facility management in Germany.

A quantitative-empirical survey was done. 1,048 German companies were asked
to participate of which 134 answered questions relevant for this research project (12.79%). The items representing the named resource-based constructs were tested for correlation. All items which proved to be applicable in the description of the respective component were tested with explorative factor analysis. An equality test of group mean values was run and stepwise discriminant analysis showed which of the tested hindrances could be included in the canonic discriminant function. In this way, the hindrances most important to both groups could be identified.

Furthermore, qualitative-empirical research was done. Two exemplary case study companies were selected based on criterion sampling. Five in-depth expert interviews per case were conducted.

EXPECTED RESULTS:

From an empirical perspective, the paper’s main contributions are twofold. Quantitative-empirical analysis showed that the main hindrances in e. a. of services are management team, human capital and external resources.

According to qualitative-empirical analysis, these hindrances can be overcome by communication, the creation of ‘magical moments’, coaching, qualification, conflict management and compensation. The case studies confirm Ford and Ford (2009) in their assumption that it is reasonable to view resistance as a chance to reach better performance and be more successful.

The qualitative-empirical results are also important from a managerial perspective: practitioners can use them as guidelines to overcome resistance in their own company. Hence, the proposed paper offers guidance in what concerns the actual implementation of e. a. of services.

From a theoretical perspective, the paper’s main contribution is to show that the relational resource-based perspective is a theory very well suited to be used in purchasing and supply management research. Also, the proposed paper concludes with a discussion of the limitations in case study research and allows an outlook on further research possibilities in the field of e. a. of services.
Factors influencing the use of mobile apps: A Conceptual perspective on the high-street retails.

Khalid AL-Nabhani, Alan Wilson

OBJECTIVES:

Mobile commerce continue to emerge as a powerful and ubiquitous service delivery channel as it enables organizations to offer a variety of products and services to consumers through branded mobile applications (apps). In addition, the rapid advancement of the mobile technology is causing consumer behavior to evolve in terms of how they interact and utilise modern service delivery channels such as branded mobile apps that are accessible to consumers any time anywhere.

This paper presents an extended model of the United Theory of Acceptance and Use of Technology Two (UTAUT2) that integrates brand attitude, utilitarian and hedonic factors to investigate consumers’ use of branded mobile apps in the high-street retail industry. With this regard, the extended model explores the impact of consumers’ brand attitude on the use of branded mobile apps, in addition to its impact on utilitarian and hedonic factors that are known to play a role in influencing consumers to accept and adopt technologies and innovations. Therefore, this paper aims to explore the role of the brand attitude alongside the technology adoption factors as predictors in persuading consumers to use branded mobile apps.

Additional objectives of this study:

- Identify factors that Influence consumers to use branded mobile apps.
- Understanding the role of brand attitude in using branded mobile apps.
- Exploring the role of brand attitude on the utilitarian and hedonic factors and its impact on the use of branded mobile apps.
- Extending the UTAUT2 model to investigate factors influencing the use of branded mobile application within the high-street industry.
METHODOLOGY:

The conceptual model presented in this paper is designed based on conducting 21 semi-structured in-depth interviews with branded mobile app users. The population of interest in this study are non-students aged between 18-50 including both males and females. The in-depth interviews where then transcribed, coded and categorised using NVivo.

The in-depth interviews aimed to investigate consumers’ consumption of products and services through branded mobile apps within the high-street retail industry. In addition, the goal of conducting the in-depth interviews was to validate the factors identified from the literature, and to prepare the conceptual model to be tested quantitatively.

The current stage of this study is testing the conceptual model quantitatively through conducting an online survey with branded mobile apps users within the high-street retail industry.

EXPECTED RESULTS:

Findings from the in-depth interviews are in line with variables that were identified from the literature which are brand attitude, ease of use, usefulness, subjective norm, enjoyment, intention to use, age and gender. However, there were two variables that were added to the model, which are escapism and frequency of purchase as they were found to influence the use of a branded mobile applications within the high-street retail industry.

The in-depth interviews also suggests that consumers adopt branded mobile apps not only because of its utilitarian and hedonic features, but also because of their attitude toward the brand itself, in addition to the purchase frequency from the brand. Another interesting outcome from the in-depth interviews is that the use of branded mobile apps confirms what the consumer thought about the brand, and not necessarily drive the consumer’s attitude toward the brand to a higher level.

This research aims to contribute to the limited literature on the use of branded mobile applications in the mobile marketing research area.
I2: ICT and the urban

Chair: Jan Bröchner
ICT use in delivery of uncertain and complex project services: the case of building refurbishment

Ahmet Anil Sezer, Jan Bröchner

OBJECTIVES:

The aim is to study how the use of ICT support for service delivery depends on the ability to determine the state of artefacts subject to intervention at the client's site. As a case, actual use and attitudes to IT support in monitoring residential and office refurbishment projects are investigated.

METHODOLOGY:

Relying on theories of technology acceptance in organizations and by individuals, the study is based on a Swedish survey of 16 production managers with experiences of housing and office refurbishment projects. A questionnaire has been combined with face-to-face semi-structured interviews. The survey covers use of various ICT tools on refurbishment sites, managers' views on ease of ICT tool use, access to support and linkage to life-cycle design software, as well as the relation to clients' databases.

EXPECTED RESULTS:

Auto repair, industrial maintenance and certain medical services share with building refurbishment an uncertainty associated with the condition of the object that is to be serviced. Therefore, IT use for services that intervene in clients' complex artefacts is twofold: as for most other types of services IT will support more efficient delivery, but there is also a potential for more efficiency in diagnosing the initial condition.

The survey indicates that laptops, mobile telephones, printers and scanners are IT tools used commonly on refurbishment sites while tablets are rare. For production managers employed by refurbishment contractors, ease of entering data, of updating project information and of interpreting geometry with data on the screen are important for IT use. Access to IT support via smartphones is not
seen as critical. Managers' views are divided on the need for continuous access to IT support and rapid access to digital drawings. There is little need expressed for common platforms connecting them with client databases.

Contractors assess the condition of buildings relying on old drawings, superficial surveys and limited information from clients. Innovative diagnostic technologies such as 3D laser scanning have failed to gain acceptance. Successive discoveries reduce uncertainty as to state of the building during a project. This often leads to problem-solving discussions in a series of formal site meetings with the client, reflecting the coproduction nature of refurbishment projects.

The reluctance among production managers to engage in integrated IT models of buildings and linking to clients' IT systems can be understood as caused by the difficulty of assessing structural and other problems that are often encountered during refurbishment. Traditional craftsmanship remains important. This means that innovative and effective diagnostic methods are necessary for enjoying the benefits of IT model integration, which also would make it possible to monitor productivity and sustainability effects more closely for ongoing projects.
Smart Urban Services: data-driven service development for urban value creation systems

Inka Caroline Woyke, Jens Neuhüttler

OBJECTIVES:

The projected urbanization will issue various challenges to cities and urban areas around the world. On the one hand, they have to provide high-quality living, housing and working spaces for a growing number of citizens. Moreover, cities build the framework for economic activities of various stakeholders that work increasingly interconnected (e.g. in new sharing models), which leads to new and changing requirements. On the other hand, many cities face a rather tense budgetary position and therefore have a limited scope of action. In order to cope with the international competition for a highly-qualified workforce and the establishment of new businesses on these conditions, cities need to design and organize their value creation system more efficient, effective and flexible. Our paper presents a promising approach from an ongoing research project that supports cities to overcome these challenges by establishing so-called “Smart Urban Services”.

The main idea of our project is to connect different city sub-systems, such as mobility, logistics, health, environment, commerce, citizen services, that are currently regarded separately and to exploit the emerging potential for service innovation by designing a more integrative and collaborative urban value creation system. To set up the smart services, a platform is being designed to link together the various subsystems and the urban authorities that operate them, which will be implemented as a prototype.

One example for the potential of smart urban service platforms can be seen in the example of the sub-systems towards a holistic recycling management. Based on demand and status data from both sub-systems, new service offers, which are focused on the processing and logistics of waste products that can be utilized as raw material in the respective other field, can be developed. Our contribution displays the research approach and how data-driven services for urban value creation systems and their corresponding business models can be developed.
METHODOLOGY:

During the project, a smart urban service platform will be established that consists of three different layers: First of all, a prototypical sensor infrastructure is installed that collects urban data from the different sub-systems. On the second layer, collected data will be analysed and information made available for different stakeholders. Based on provided data, potential application fields for improving the urban value creation will be derived. New smart urban service offers will be implemented via the third layer, representing the actual service platform, on which city stakeholders can collaborate.

The smart urban service platform will be implemented as a prototype in two German cities.

EXPECTED RESULTS:

In the current first phase of the project, that lasts until RESER 2015, the following results are expected:

- Installed sensor infrastructure in two pilot cities
- Data protection concept
- Fields of potential in which data should be raised in the two pilot cities
L’Innovation des Services Publics à l’aide de Tics dans le contexte des Smart Cities

Milena Jael Silva-Morales

OBJECTIVES:


D’après GeSI (2012) actuellement 54 pour cent de la population mondiale vit dans des zones urbaines, bien qu’en 1950, 30 pour cent de la population mondiale était urbaine, et en 2050, 66 pour cent de la population mondiale devrait être urbaine. À niveau européen, le 75 pour cent de la population vit actuellement dans des zones urbaines et ce nombre devrait atteindre à 80 pour cent en 2020.

En écho aux problématiques du développement urbain, plusieurs stratégies reliées aux différents sens de la notion de smart city ont émergé. D’après Cocchia (2014) le concept de Smart City couvre plusieurs définitions, selon les significations du mot «Smart»: "intelligent city, knowledge city, sustainable city, digital city, ubiquitous city, green city, etc.".

L’objectif commun de toutes ces notions est d’améliorer la qualité de vie des individus. Dans ce contexte, des études récentes (GeSI 2008 et 2012; Laitner 2015; Hilty et Aebischer 2015) montrent que des solutions basées sur les Technologies de l’Information (TI) pourraient permettre un abattement des émissions à gaz effet serre, équivalent à 9.1 gigatonnes de dioxyde de carbone (GtCO2e), ce qui correspond à une réduction du 16,5 % des émissions totales en 2020.

A ce titre, les TI permettent de rendre les services urbains plus intelligents et de réduire les émissions de gaz à effet serre. Notamment, les TI permettent la digitalisation et dématérialisation des services offerts par les villes, ensuite, la collecte de données publics (e.g. open data), et l’intégration de systèmes, de
processus et d’activités (GeSI 2012). Aussi, les TI permettent de rendre interopérable (i.e. la capacité des systèmes à travailler ensemble avec d’autres systèmes du point de vue organisationnel, stratégique, social, juridique et technique) et de rendre ubiquitaire (i.e. la possibilité aux usagers de se connecter quel que soit le lieu, quel que soit le moment, quel que soit le support ou terminal utilisé) des services urbains de différents secteurs d’activité.

Dans ce contexte, cet article décrit l’innovation de services dans le secteur public conduit par les TI à travers deux études de cas approfondies pour mettre en place des services publics innovants. Un des objectifs de cet article est de mettre en exergue les difficultés auxquelles sont confrontées les villes souhaitant dématérialiser et connecter les services pour ses habitants, dans le contexte des Smart cities.

Pour cela, deux études empiriques ont été menées auprès du projet NFC au sein de deux Villes en France.

Du point de vue théorique, nous avons mobilisé la Science de Services et l’approche basé sur les ressources et les compétences.

**METHODOLOGY:**

Cette recherche présente deux études de cas (Yin 2009) avec le modèle dialogique (Avenier et Cajaiba 2012), à travers de l’observation participante, afin de conduire une recherche collaborative destinée à élaborer des savoirs académiques pertinents pour la pratique gestionnaire.

**EXPECTED RESULTS:**

Nous proposons un Framework pour la création de valeur des services urbains intelligents avec les différentes étapes de la mise en place des services urbains NFC. Nous étudions de particulièrement les services de transport, y compris toutes les parties prenantes, des acteurs du secteur public et privé. Basé sur une revue de la littérature nous proposons un cadre pour améliorer l’innovation de service dans le secteurs public conduite par l’TI.

La science de service ne dispose pas d’un approche pour le secteur public. D’après le travail de Djellal, Gallouj et Miles (2013 p. 98), l’innovation de service a été négligée pendant une longue période, mais l’innovation dans le secteur
public a été encore plus négligée. Les principales contributions de cet article se trouvent dans proposant un cadre qui favorise l’innovation de service dans le secteur public conduite pour la TI. Nous illustrons notre étude de cas approfondie et inférons des leçons qui peuvent être utiles aux gestionnaires qui souhaitant mettre en place des services urbains innovants basés sur la technologie NFC. Ce cadre comprend des dimensions stratégiques et opérationnelles pour aider les gestionnaires anticiper les défis et les principaux pièges dans des projets d’innovation de services dans le secteur public.
I3: Improving customer loyalty and management through

Chair: Jean Philippe
Loyalty program and meta-services: insights from the case of Airlines alliances

Vikrant Janawade, Pierre-Yves Leo, Jean Philippe

OBJECTIVES:

Modern day businesses are found to be increasingly expanding their service offerings to consumers through networks. We have called such service network meta-services. Meta-services are service offerings made by a multiple inter-linked service providers, which are run and organised by a federated structure that has proper governance in place. The objectives of the meta-services are to create value propositions for the consumers and also create value for themselves by employing several joint activities, such as procurement, operations & marketing.

Meta-services approach is often employed in some service industries. In this study, meta-services approach is viewed through the lenses of airline alliance. In the last few decades, airline industry has seen a phenomenal increase in multi-lateral alliance networks. While, their growth appears to be gradually evolving, it is also observed that their efforts to maintain and retain customer relations have also been developing equally. Traditionally, airline companies maintain their customer relationships through their own loyalty programs (frequent flyer program). However, with the advent of airline alliance networks, alliance carriers are not only maintaining their customer relationships through their loyalty program, but they are also assisting their partner’s customer relationships through an extended loyalty program. This study presents an exploratory research on loyalty programs offered by airline alliances and the way they are perceived by their customers. The main hypotheses are that, after experiencing the services delivered by airline alliances, consumers synthesize all their perceptions in terms of the perceived benefits of the loyalty program. Furthermore, this assessment will not only determine the perceived benefits of the loyalty program, but it also influences the perceived value of the airline alliance, customer satisfaction and their loyalty.

METHODOLOGY:
This research originated through a preliminary exploratory study carried out through a series of semi-structured interviews. Based, on the results which emerged from the qualitative research and by using the theoretical frameworks, a conceptual model was built. Furthermore, a questionnaire survey was developed to obtain the measures for the different variables employed in the study. The survey was launched online and sought responses from airline passengers who had a sound knowledge and experience flying with airline alliances. 278 responses from frequent flyers hailing from North America, Europe, Australia and Asia were collected. This study permitted to test the measures, the variables and the relationships between them.

EXPECTED RESULTS:

This study confirms that the principal hypotheses are acceptable. It demonstrates that loyalty program benefits are determined by some specific dimensions of an alliance, such as airline alliance’s perceived service quality, the perceived loyalty program assessment and the perceived monetary benefits. Furthermore, this study also demonstrates that airline alliance’s perceived quality is determined by the extended service network of the alliance and service congruence amongst the partners. With respect to the loyalty program assessments, this variable is determined through the airline alliance’s problem solving abilities and the airline alliance’s loyalty program registration and rewards policies. From a theoretical perspective, this research is a first step to provide a proper analysis of the customers’ perception of the loyalty program services offered by joint activities of an airline alliance. From a managerial perspective, the new determinants which emerged from this particular study can be helpful not only for the airline alliances’ joint marketing and relationship management strategies, but it also helps to understand the customers’ perception of loyalty program and their relationships with perceived value, satisfaction and loyalty.
Qu’est-ce qui crée la fidélité des consommateurs de drive? Une recherche sur le nouvel environnement des consommateurs. What will drive retail consumer loyalty? An investigation of a new consumer environment

Kenan Wassouf

OBJECTIVES:

L’objectif principal de cette recherche vise dans le cadre de l’approche relationnelle entreprise de service/clients d’analyser les conséquences de l’adoption d’une innovation commerciale, notamment le service de drive, sur la fidélité des clients de drive. En d’autres termes, nous visons à étudier la problématique de fidélité des clients de drive qui sont très mobiles dans l’espace grâce à leur automobile et dans le temps grâce à leur connexion internet.

Plus que jamais et avec l’augmentation de la concurrence sur le marché de grande distribution, fidéliser le client est devenu l’un des principaux objectifs des entreprises. La multiplication des canaux (physiques/virtuels) et des formules de distribution, ainsi que l’augmentation de la concurrence entre eux marquent une révolution dans la recherche en distribution.

De plus, avec le changement du comportement d’achat du client depuis plusieurs années, les tendances de consommation changent. Les courses en grandes surfaces sont perçues comme des « visites corvées » plus que comme des « visites plaisir ». Face à ce phénomène et pour toucher plus de consommateurs et maintenir ou augmenter leurs parts de marché, les grandes distributeurs ont développé une nouvelle stratégie de distribution s’appuyant sur le e-commerce : le Drive. Selon ce dernier, le consommateur se connecte à un site Web spécifique et constitue sa commande et choisit une horaire pour aller la récupérer. Ensuite, il se rend en voiture à une station de chargement prédéfinie et attend ses courses qui seront déposées directement dans le coffre de sa voiture en quelques minutes. De ce fait, l’innovation commerciale apparaît comme un moyen efficace pour répondre à cette exigence et elle a un rôle essentiel dans le domaine du comportement du consommateur.

Malgré l’importance de cette innovation commerciale, peu de recherches, à
notre connaissance, ont abordé la perception de celle-ci par les clients, notamment sur la fidélité des clients (Lehu, 2004). Le client de drive est un client multi canal. Autrement dit, il est moins fidèle à l’enseigne, parce qu’il dispose d’une voiture et d’un accès Internet ; ceci lui facilite l’accès à d’autres canaux ou à d’autres enseignes ainsi que la comparaison entre les offres.

METHODOLOGY:

Pour répondre à l’objectif de notre recherche, nous suivons une démarche méthodologique qui s’appuie d’abord sur les recherches sur l’innovation commerciale notamment le service de drive et son interaction avec la recherche de fidélité du client. Elle s’appuie ensuite sur une étude qualitative exploratoire auprès de vingt clients de drive dans trois enseignes à Aix-en-Provence/ France : Carrefour, Auchan et Leclerc. Au terme de cette étude qualitative exploratoire et de la revue des recherches théoriques sur l’innovation dans le commerce de détail, nous serons en mesure d’identifier les variables que nous souhaitons proposer un modèle de recherche qui fera ensuite tester lors d’une étude quantitative.

EXPECTED RESULTS:

Les résultats attendus de notre étude sont de plusieurs ordres: 1) arriver à une meilleure compréhension des fondements conceptuels de la recherche qui se base sur: l’innovation commerciale, l’adoption et la diffusion d’une innovation commerciale et la fidélité du consommateur. 2) savoir quelles théories d’innovation sont les plus pertinentes, compte tenu des stratégies mises en œuvre par les distributeurs pour expliquer l’essor du drive comme une nouvelle forme de distribution. 3) Identifier les variables les plus pertinentes pour notre recherché. 4) proposer un modèle de recherche que nous testerons pour fournir des outils aux distributeurs pour fidéliser leur clientèle.
Evolving the online customer experience - Is there a role for online customer support?

Graeme McLean, Alan Wilson

OBJECTIVES:

This paper explores the online customer experience in relation to the Government provision of business support services. Government supported economic development agencies provide businesses support services on growth, leadership, developing employees, exporting, funding and day-to-day advice on running a business. Large proportions of public money is spent on the development of web services to provide business support, yet little research has explored the factors that may influence a customer’s experience interacting with such services. The aim of this research is to understanding if there is a requirement for online customer support when searching on Government provided business support websites. There are four further research objectives:

1) Establish the variables capable of influencing the customer experience online while searching for Government provided business support services

2) Examine the role of emotions and level of satisfaction on the online customer experience

3) Explore the role customer support online in relation to a customer's online experience.

4) Examine the effect of the online customer experience in relation to customers having a successful search online.

METHODOLOGY:

First of all semi-structured in-depth interviews were conducted, which helped to provide comprehensiveness and parsimony by reducing the number of variables in the study to only those that were relevant. In addition, the in-depth interviews helped to create the basis of the quantitative stage of the research.

94 businesses were approached to take part in the in-depth interviews, of which
all had searched for Government provided business support services on an economic development agency’s website within the last 30 days. 14 in-depth interviews were conducted in total. Each interview was recorded using a digital recorder and fully transcribed. The data from the transcripts were colour coded for particular topics and then categorised into relevant themes so that the data could be easily analysed.

Following the in-depth interviews, an online experiment was conducted with 160 participants on three selected business support websites. Three tasks were set up for participants to complete on each website. Within the experiment, participants were given a business scenario and information or services to find. Participants could complete the task and move on to the next task, use a help card and move on to the next task or abandon the task and move on to the next task. No actual help was provided when a help card was used, help cards were symbolic in nature. The help cards illustrated when help would be required. Data were collected through an online survey immediately after the completion of each experiment.

EXPECTED RESULTS:

The findings of the in-depth interviews show that from the 14 variables identified in the literature, 7 variables appear to influence the customer experience when searching for Government provided business support services including; website aesthetics, flow, control, website credibility, information quality and emotions. In addition to the literature, a seventh variable of ‘time spent on the website’ emerged through the in-depth interviews.

Using Structural Equation Modelling in AMOS Graphics, an early indication of the quantitative results show a significant relationship between a second order variable of website characteristics (encompassing: website aesthetics, control, website credibility, information quality and flow) on the online customer experience. The time spent on the website appears to play a mediating role on variables influencing the customer experience. Additionally a significant relationship exists between the customer experience and the need to seek customer support online.

This research has introduced a novel context to the literature and extends the limited research within the domain of the online customer experience. Additionally, the concept of online customer support has been introduced exploring a further potential use for ICT in enhancing online service delivery.
Unlocking new business potential in the field of digital services

Hanna Komulainen, Heikki Karjaluoto, Pekka Puustinen, Hannu Saarijärvi, Saila Saraniemi, Kaisa Still, Pauliina Ulkuniemi

OBJECTIVES:

Continuous growth of new mobile devices and digital services has dramatically changed both b2c and b2b customers’ behavior in recent years. The most visible change relates to the role of customers in the value creation; the power is shifting from companies to customers and most of the decision-making currently takes place out of vendors’ reach in social networks and search engines. Also, the customers’ decision-making is more and more guided by emotional and experiential factors, not only rational criteria. Marketing Science Institute has suggested that understanding customer and the customer experiences will be the most important research priority in the following years. In understanding customers the most essential issue is to identify changed behavioral models and value creation processes through which the customers satisfy their needs.

In most industries, majority of the companies have not really understood the consequences of digitalization for customer behavior. In order to succeed in the new digitalization era, the firms need to get to know their customers more carefully and they need to tailor appropriate service packages for each customer type. The objective of the present study is to explore how digital value creation can be understood and used in developing new service businesses? We explore the possibilities of digitalization with the aid of four complementary theoretical approaches: customer experience, reverse use of customer data, omnichannel and digital business models. They are tools that aid us to understand digital revolution of value creation and to harness its business potential for the benefit of service firms. These approaches have gain scientific attention only recently and linking them to research digital value creation has been scarce. The theoretical and practical contribution of the study relates to using these approaches together to create comprehensive understanding of how to utilize digital value creation in developing new service businesses.

In this paper we create an overview of the identified main themes and develop a multidimensional theoretical framework linking these perspectives together.
towards understanding on how to unlock new business potential in digital service field. Hence, the study lays the foundations for the future research by suggesting propositions for the empirical exploration based on the research model.

METHODOLOGY:

This is a conceptual study that is a part of a larger research project. The objective of the project is to 1) understand how users/consumers/customers create value in mobile context, 2) transform this information to companies and finally 3) identify sources of key competitive advantage rooting from the mobile context and value creation in it. The empirical part of the study represents a multiple case study of three service companies striving towards harnessing the opportunities that the digitalization potentially offers in their business. We use the three cases as illustrative studies to explore the possibilities of the digitalization and the changes in the value creation.

EXPECTED RESULTS:

This study produces insights both into the theory and practice. It contributes to existing research by linking together the four under-researched theoretical approaches on digital value creation and presents a theoretical framework that aids in developing new digital opportunities in service business. Second, based on the framework we suggest several practically-oriented research propositions that will guide future research towards unlocking new business potential in digital services.
I4: Unlocking new potentials of ICT

Chair: Jørn Kjølseth Møller
Use of equipment lifecycle data in industrial services

Moramay Ocaña Flores, Miia Martinsuo

OBJECTIVES:

Manufacturing firms seek competitive advantage by extending their offering to services (Gebauer 2007). Services involve the customers as co-producers of added value and quality (Edvardsson & Olsson, 1996). During servitization, manufacturing firm needs to take over some of the customer’s processes, e.g., through remote access. This demands more flexible responses to changing business (Mezgár & Rauschecker 2014) and the collection and analysis of lifecycle data from the equipment in the customers’ use. Particularly the use and service phase of the product generates dynamic data (Yang et al. 2009).

Processing this data requires specialized skills that servitizing manufacturing firms do not necessarily possess. Consequently, these firms often take the role of integrators and use the expertise of other service providers to solve the customers’ needs (Finne & Holmström 2013). There is a possibility to offer new services based on the lifecycle data on product’s use patterns and an understanding of the customers’ needs (Yang et al. 2009). However, the use of lifecycle data is challenged by various issues in inter-organizational cooperation, such as agility, security, privacy and interoperability aspects (Mezgár & Rauschecker 2014), but they are poorly understood in the context of industrial services.

The objective of this study is increased understanding on the use of equipment lifecycle data in industrial services. We explore the use of lifecycle data particularly through stakeholders’ roles, data ownership and data security in the context of manufacturing firms and their prospective software service providers. Software companies providing services to store, analyze, process and visualize data need new business models to deliver the ultimate customer value contrasted with the possible security risks.

The focus is on two primary research questions:

- What expectations do personnel in engineering firms direct at lifecycle data use (roles, ownership, security), in their industrial services?
- How do personnel in software firms support the equipment lifecycle data
use in cooperation with manufacturing firms, in their software-based services?

METHODOLOGY:

A qualitative, interpretive study was conducted to understand the processes, possibilities, concerns and limitations of the use of lifecycle data in industrial services. As part of a broader study, we gained access to three companies offering software-based services and two manufacturing firms, all with an interest to involve in customer oriented industrial services. Altogether twenty semi-structured interviews were held with company personnel, exploring their experiences with industrial services, the use of lifecycle data, and cooperation with different stakeholders. The data are content analyzed, and the manufacturing firms' and software firms' viewpoints will be compared with each other.

EXPECTED RESULTS:

There is technical literature available regarding technologies to protect online data and its security. Some papers mention how important the topic is for the customers, and this has raised interest amongst the target companies in this study in particular. As a result, we will propose a new framework on the relevant dimensions of lifecycle data use in terms of stakeholder roles, data ownership and data security, and we will show how the triadic collaboration of software provider - manufacturer - customer fits the framework. We will report key factors in software-based (business) models that can better depict the benefits of sharing information and overcome the security issues regarding lifecycle data management in industrial services.
Actor roles in the Internet of Things ecosystems

Seppo Leminen, Mervi Rajahonka, and Mika Westerlund

OBJECTIVES:

Despite the vast potential that the Internet of Things (IoT) holds, the business promise has not yet been realized (Bucherer and Uckelmann, 2011). Westerlund et al. (2014) argue that the diversity of objects, the immaturity of innovation, and the unstructured ecosystems are primary challenges to developing business models for the IoT. Thus, research is needed on seizing the opportunities from the business perspective (Haller et al., 2009; Leminen et al., 2012). This study investigates the actor roles in emerging IoT ecosystems. Our research questions are: i) which roles can actors take and make in emerging IoT ecosystems?, ii) how are these ecosystems built?, and iii) how are the role options linked to the emergence of IoT ecosystems?

METHODOLOGY:

Our empirical data were drawn from eight interviews with organizations participating in emerging IoT ecosystems. We used the value design framework for IoT ecosystems by Westerlund et al. (2014) to analyse the perceived challenges of building business models and ecosystems that seize the opportunities created by the IoT. Furthermore, we identified four role configurations companies and other organizations are exploiting in IoT ecosystems. We labelled such roles as (i) butterfly, (ii) ant and greenfly, (iii) spider, and (iv) the swarm of bees.

EXPECTED RESULTS:

Our findings suggest that business model challenges in emerging ecosystems are at the ecosystem level. However, we also suggest that a company can choose the ecosystem it wants to be part of, and its role in it. Therefore there are different perspectives (or roles) to exploitation of the IoT that the companies can use, namely:
Butterfly focuses on relatively compact issues, and this configuration leads to limited but rather safe business model choices for a company. Case A recognizes the nodes (customers) and flows (possible products and services) of the new business model. There is not a need for a specific IoT ecosystem because the IoT solutions are add-ons offered in prevailing ecosystems.

Ant and greenfly refers to that a company (ant) will lock itself into a larger ecosystem (greenfly), as soon as it has been established. A company views and compares a variety of supplementary modules and connections between companies that are not used in the particular moment. Case B wants to understand the motivations and business logics of different actors, but several actors and particularly intermediaries are still missing in the emerging ecosystems. Case B wants to grasp the opportunities by offering infrastructure services for the actors, but for the moment it cannot do anything else but wait until the ecosystem has been built by the focal actors.

Spider weaves its own network in an IoT ecosystem. It aims to become a hub or leading part of the system. Cases C and D want to take active roles and build IoT ecosystems. Case C wants to become a focal actor, but Case D can take any role in the ecosystem. Spiders also aim at replicating their models either geographically or into more than one industry. Cases C and D are reluctant to cooperate with each other, because they consider each other as competitors.

New kinds of value designs may emerge for a swarm of bees, the final identified role configuration in IoT ecosystems. For example, bottom-up models may arise from the IoT developer and user communities, in which the users share their own expertise and knowhow and become producing actors (Fleisch, 2010; Kortuem et al., 2010). Case E wants to apply this model.

(References available upon request)
Utilization of Text Analytics in Service Development

Eugen Molnar, Rastislav Molnar

OBJECTIVES:

The aim of servitizing organization is to develop advanced services that fit customers’ requirements as much as possible. For better fitting of new services to customers’ expectations and need it is helpful to understand and analyze all communication with customers. To understand the meaning of communication is necessary to use ICT capabilities including: Text analytics and concept (information) extraction.

While Text analytics represents a mature technology, utilizing the system for concept extraction is a challenge. An additional research is required to identify communication patterns needed for automatic information processing related to concept extraction.

Conceptually, a knowledge-based system utilizing the information extraction based on the rules and knowledge management (knowledge representation and reasoning) is proposed.

METHODOLOGY:

In this paper two research methods have been utilized. First communication patterns in the communication between the company and customer have been identified using the systematic literature review of existing patterns. Later, a Design science research (DSR) approach is used for discovering and identifying required ITC capabilities relevant to concept (information) extraction and communication pattern collection.

EXPECTED RESULTS:

In our paper we present a model of knowledge-based system for enhancement of the understanding of communication between customer and servitizing company. We propose a utilization of extracted concepts within predefined communication patterns specially created for service development.
I5: Collaborative potentials of ICT

Chair: Iwona Windekkilde
Transaction costs and the sharing economy

Anders Henten, Iwona Windekkilde

OBJECTIVES:

During the past couple of decades, a wide variety of Internet-based platforms have sprung up – some of them extremely successful. eBay is a prominent example of one of the platforms established before the so-called dotcom crash. Airbnb (accommodation) and Uber (transportation) are successful examples of platforms established during the past 5-10 years. Airbnb and Uber are seen as examples of the emergence of a sharing economy, where people share human and physical resources. The paper examines the commercial kinds of developments and discusses the possible foundations and implications in terms of economic reasons and industrial structures.

The research question is concerned with the extent to which transaction cost theory can be used to explain the changing industrial structures in the application areas the Internet-based platforms are addressing and whether other theoretical frameworks can be helpful in understanding these developments.

METHODOLOGY:

The obvious explanatory framework is transaction cost theory (Coase, 1937), as the digital platforms allow for decreasing transaction costs – in the eBay case between sellers and buyers of all the items and services sold via eBay; in the Airbnb case between those offering and those buying accommodation; in the Uber case between those offering and buying transportation. Without the digital platforms, the transaction costs of searching, contacting, contracting, etc., for instance regarding accommodation, would be much too high for such markets to develop.

In the present paper, the transaction cost approach is seen as an important element in explaining the development of sharing on a mass-scale. However, this approach cannot stand on its own. It does, for instance, not explain the limits of the encroachment of sharing-services on established markets (e.g. hoteling and taxi driving). It actually does, in an inverse manner, contribute to explaining the
establishment of the new large companies in the Internet world. There have always been companies that live on transaction costs. Business lawyers are a good example, as their function is to see to the contracting and enforcement of business contracts. So are real estate brokers, establishing the connections between the sellers and buyers of houses. But the Internet has created a foundation for a large variety of new businesses that live on providing services lowering transaction costs. It may be that some of the explanatory frameworks that Coase discarded so quickly and other theoretical frameworks can offer elements of explanations for the structure of market developments.

EXPECTED RESULTS:

In the paper, case analyses of the new Internet-based platform services, exemplified by Airbnb and Uber, are provided as well as an analysis of the implications for the markets they are addressing. This analysis will be used for discussing additional theoretical approaches that are needed in order to explain these developments.

First, the paper discusses the concept of sharing and its different forms. This is followed by a theory section, where Coase’s approach to transaction costs and theories on substitution are presented. Thereafter, an overview of the different types of Internet-based platforms is put forward, followed by case analyses of Airbnb and Uber. Before the conclusion, the strengths and weaknesses of transaction cost theory and substitution theory in explaining business structures is discussed.
CoDiT: An integrated business partner discovery tool over SNSs

Memon, Atia Bano; Meyer, Kyrill; Meyer, Lars-Peter; Thieme, Michael

OBJECTIVES:

The success of open innovation alliances depends on the right selection of business partners (sources of complementary assets); which in turn is influenced by the organization's capacity to identify possible sources of the required assets. Screening and monitoring the technological environment to search and decide whom to collaborate with is not a trivial task for the organizations. This is particularly true for the companies who are neither equipped with sufficient information sources, nor are they financially capable to run an information system or buy such resources from external providers. Consequently, it becomes vital for such companies to discover and exploit new channels of collecting information about other businesses for indulging in successful open innovation alliances. In this realm, social networking sites (SNSs) provide new ways for dissemination, processing and exploitation of digitalized information. However, there exist several social networking sites which facilitate company pages for representation of companies. The platform specific boundaries and cross platform variations in information collection and presentation of different SNSs limit their potential for supporting business partner discovery. To address these inadequacies of SNSs in supporting discovery of business partners, we introduce an integrated web-based search tool (CoDiT – Company Discovery Tool) for searching companies on multiple social networking sites simultaneously in business specific manner. The tool is aimed to support open innovation process – during the ‘Find’ stage - by assisting organizations in locating complementary assets through the aggregation and exchange of information about potential partners available on SNSs.

METHODOLOGY:

The study follows two steps:

1. During first phase, we have conducted an exploratory investigation of the company pages facilitated on four distinct social networking sites:
Facebook, LinkedIn, Google+ and Xing in terms of the types and pieces of information available, the search interface features, underlying search procedures, search management functionalities and the ways of interaction with the company pages.

2. During second phase of the study, we have assessed the potential of existing social networking APIs available from Facebook and LinkedIn platforms to evaluate the possibilities of integration of company pages hosted on two platforms. The existing potential of APIs allow the third party developers to search for and fetch available information form the company pages hosted on their data servers. We have exploited this opportunity and developed the prototype of a web based search tool (CoDiT) which facilitates the simultaneous search for company pages over multiple social networking sites together with enhanced search features.

EXPECTED RESULTS:

We make two main contribution to the scientific literature:

1. We present a comparative analysis of the company pages facilitated on four social networking platforms which help to understand how the information is structured and disseminated on each platform and thereby enable to select the platform according to specific interests and goals of an organization.

2. We present a web based tool to show how information available on multiple platforms can be aggregated and utilized for B2B activities. The CoDIIT system accomplishes the task of assisting companies in their search for potential partners. It enables the users to determine the suitability of potential partners (by matching the resources of searched companies with their required assets) in an easy and efficient manner through the provision of several pieces of content-oriented metadata (such as offered services and the business sector), faceted filtering (based on the region, services and industry), and the effective and consistent information visualization.
Analysis on Collaborative Development of Meaningful Technologies in Services

Kentaro Watanabe, Masaaki Mochimaru

OBJECTIVES:

The role of ICT is becoming more important in services. The evolution of technologies including computational performance, portability, cost-effectiveness enables service providers to apply ICT to various issues from enterprise management to employees’ service activities to increase the service productivity. Meanwhile, technologies developed apart from users tend to be useless. For the development of meaningful technologies in services, various researchers and practitioners encourage the participation of users in the development phase. However, most of the studies on user participation in developing ICT for services handle established technologies that do not require R&D themselves. There are few studies on how to develop and apply advanced, early-phase technologies in the collaboration with service firms. We assume that this kind of R&D process has a potential to develop effective technologies to innovate services more efficiently. To clarify its effectiveness and success factors, a study on actual R&D projects is required. In this paper, we analyze collaborative R&D projects with service firms. The research questions are 1) how the R&D process in collaboration with service firms should be conducted and 2) what kinds of roles and capabilities are required in this R&D process.

METHODOLOGY:

We first conduct literature study on existing approaches of technology development in the collaboration with service firms. Then we analyze two R&D project cases. The first case is an R&D project of human sensing technologies for the analysis of employees’ activities. This project was performed in the collaboration with a restaurant service company. A set of technologies to estimate and visualize employees’ movement and activities were developed to improve work efficiency and customer satisfaction by quality control efforts. The second case is an R&D project of consumer behavior analysis method for the management of service operation. The restaurant company and a retail company joined this project. In this project, category mining and demand forecasting...
technologies were developed to support the decision making of shopowners.

As a research methodology, we conduct semi-structured interviews with the researchers who participated in the R&D projects. We mainly ask the R&D process (activities, events and important decision-making) and stakeholders (concerns, roles, characteristics, activities and their change). As a supplement of these interview results, we also analyze research records and project reports.

EXPECTED RESULTS:

Through this study, we expect the following findings.

- Required process in the R&D project Required tasks and pre-/post-conditions for the success of R&D projects would be specified.

- Requirements for researchers / service firms in projects Required roles, characteristics and capabilities for not only researchers but also stakeholders in service firms are expected in this study. Several roles in researchers / service firms might be required for the successful project.

- The learning process in collaboration The project organized by multiple stakeholders tends to have a dynamic nature. Researchers and service firms with different cultures would require a learning process for mutual understanding. This could be clarified through this study.
I6: ICT and innovation

Chair: Metka Stare
From web-platform to eco-system for innovation in tourism

Metka Stare, Dejan Krizaj

OBJECTIVES:

Web based platforms significantly enhance the potential of open innovation in services, leverage the marketing channels and enable engagement of new actors. In tourism, these platforms provide not only large opportunity for the emergence of innovative services and their marketing on the web but also for intensive cooperation and networking among actors (Abate, Souca, 2013). Based on the analysis of the web platform - Bank of Tourist Potentials of Slovenia (BTPS) that started as loosely coupled public private network - the paper aims to: a) explore whether and how web platform for innovation in tourism evolves towards eco-system for the promotion of innovation in tourism; b) identify and analyze the cases of new services that emerged within BTPS and co-create trends in tourism development, such as sustainability, eco-tourism, preservation of local specificities, sharing economy. The theoretical framework of analysis is based firstly on recently proposed concept of public-private innovation network (Djellal, Gallouj, 2013) and secondly on open innovation concept and democratization of innovation (Chesbrough, 2003; von Hippel, 2005). Our paper broadens the scope of open innovation concept in the direction of web platform as an intermediary that encourages creativity of stakeholders, promotes various innovation activities (idea generation and development; innovation implementation, marketing, brand building, learning) and enables networking among actors in innovation process. At the same time, our approach to open innovation extends the profile of actors that deepens further the democratization of innovation.

METHODOLOGY:

In the absence of detailed innovation statistics in tourism that would allow to capture highly diversified set of new niche services (or mix of services) enhanced by web platforms we use case study approach to depict the changes in innovation process enabled by web platforms, as well as to illustrate the features of innovative services that reflect emerging trends in tourism. It is
argued that case study analysis in tourism can mitigate some of the gaps by bringing accuracy, generality, complexity/coverage, and value/impact (Hyde et al., 2012; Yin, 2013). Our analysis is based on a unique data source available via BTPS platform since 2006 that collects data on ideas for innovation in tourism, resources and knowledge available and monitors the realization of innovation.

EXPECTED RESULT

The analysis of development phases of web based platform in tourism is expected to contribute to the assessment of its evolution from public private innovation network towards an emerging tourism innovation promotion ecosystem. It deals with different elements of the innovation process, such as type of actors, their institutional origin, characteristics of cooperation among actors and activities carried out within the network. On the other hand, the case study analysis allows for new insights into state-of-the-art in tourism innovation trends. Both dimensions of innovation process in tourism are relevant for policy shaping in order to provide more effective support to innovation in tourism and respond to the trend of sustainability and new experiences required by consumers. The contributions are of particular importance (1) for the development of niche markets in tourism services and empowerment of actors; (2) for insights into new theoretical concepts in tourism innovation. Most commonly, scholars analyze and advocate specific features of tourism innovation that distinguish it from general concepts of innovation (Camisón and Monfort-Mir, 2012). Similarly, open innovation is still not “a clear cut concept” and its multi-player dynamics are not well understood (Yström et al., 2015). It is expected that our research will advance the knowledge on specific features of open innovation in tourism via the examination of the innovation promotion leverages used by BTPS and its beneficiaries to generate innovations.
Governance and Innovation in public services: The case of digital library

Ada Scupola, Antonello Zanfei

OBJECTIVES:

Innovation has always been present in the public sector. Circumstances that may affect innovation in this sector include: technological factors, and particularly the massive introduction of ICTs in public services; economic factors, as public administrations (PAs) are increasingly forced to do better with less resources; and socio-demographic factors, ranging from ageing population, increasing needs to invest in knowledge intensive activities and in green technologies. This set of factors combines with changing ideological perspectives that have emerged and dominated in different phases of recent history such as a) the “traditional” public administration model, dominating in the post-World War II (WWII) for more than three decades; b) the “New Public Management” that has been pervading PAs since the mid-1980s; c) the “Networked Governance” model, emerged in the early 2000’s (Hartley, 2005, 2013). It has been argued that these paradigms can be associated with a very different nature of innovation, and with different roles of key players in innovative activities, including policy makers, public managers and users (Hartley 2005). The purpose of this paper is to evaluate whether and how the nature and organization of innovation and the roles of the actors involved have changed over time in relation to these paradigms in a specific public sector domain, i.e. university library services.

METHODOLOGY:

To investigate whether and how the nature and organization of innovation and the roles of the involved actors have changed over time in relation to the transition from a New Public Management paradigm to the first manifestations of the networked model in Hartley’s framework we conducted a longitudinal case study (Yin, 1994) of Roskilde University Library (RUB). We use primary and secondary data collected in 2004-2014. The primary data were obtained through qualitative explorative and semi-structured interviews; participation in meetings; organization of three future workshops; contents and online
observations of a blog established by RUB for idea generation and co-creation with the library users; continuous observations and use of the library services, e-services, self-services, building facilities. The secondary data include internal reports, minutes of meetings and surveys conducted by the library; different material and documents about the library services and e-services provision, organizational charts and strategic plans; quantitative tables about number of books, journals, employees, physical space at the library.

EXPECTED RESULTS:

Using a longitudinal case study of the introduction of new services with special focus on ICT related services at Roskilde University Library, we will show how the nature and organization of innovation and the roles of the actors involved has changed in the transition from one paradigm to the other. We will highlight that while the distinction between paradigms is still rather blurred in the examined case, one can indeed detect some remarkable changes in the nature and intensity of ICT related innovations being developed and up taken over time. In general terms, we will observe more and more emphasis on organizational innovation, a decreasing role played by radical technological innovation and increasing incremental, “bricolage” type of improvements in services, and a greater involvement of users in the co-creation of new services. It is suggested that analysing this in a long run perspective may help understand future avenues for innovation in both public and business services.
Innovation in retail: impact of mobile phone on consumer behavior

Zhuo ZHANG, CERGAM, Aix Marseille University

OBJECTIVES:

"...as consumers adopt new technologies, their behaviors change" (Han & Watson, 1998). With the rapid development of the smartphone and the wireless network from decades, consumers use more and more frequently their mobile phones to purchase and/or reserve the goods and services. The mobile commerce is growing to a field which cannot be ignored by managers and researchers. However, it still remains at the period of his infancy in research because too many papers concentrate on the technology acceptance model of m-commerce, but few of them pay attention to the context of using the mobile phone. In France, purchase on smartphone has represented 3.7 milliards euros in 2014 and the expected growth will place m-retail at 12% of the total e-retail. This paper aims to: (1.) discover the use context of m-commerce for the chain hypermarket clients in France by identify the critical factors in different phases of m-commerce; (2.) try to understand the importance of the mobile service by analyzing the interactions between the retailers and the customers in each phase (3.) to find out the change of the consumer behavior due to this new business model.

The products and the services accessible through the mobile phone and the wireless network engage the development of the M-commerce which is becoming a global subject. “The developments within m-commerce is subject to two major technological advances; the growth surge of smartphones and instant high speed mobile internet access” (ZHANG et al, 2013). This drives more and more researchers to focus on this topic, “Although a large volume of literature is available on mobile commerce (m-commerce), the topic is still in an underdeveloped stage and offers potential opportunities for further research and applications.” (Ngaia & Gunasekaran, 2007). Even there exist some papers of m-commerce adoption, which “helps to understand when mobile services generate superior value-in-use for customers and are preferred to other services, but little research exists on the subject.” (Gummerus & Pihlström, 2011). The traditional consumer is used to purchase in the face to face context and the e-commerce make the context more diverse. The online customer
experience (OCE) can help managers to raise the consumer’s loyalty. (Rose, Hair & Clark, 2011) But, m-commerce will change completely the purchase context by fragmenting the purchase channel. It’s hard to catch the consumers if the retailers don’t understand the new context. So, we are going to find out the use context of m-commerce and define the different phases of purchasing for the retailing industry.

METHODOLOGY:

This paper will report an exploratory qualitative survey done by interviewing the mobile customers in France. In order to examine how the m-commerce could change the consumer behaviour or not, we have conducted personal face-to-face semi-structured interviews with 20 people. The purpose was to identify the main variables to be measured in the future quantitative study. The respondents have been selected by different backgrounds such as age, sex, work, family role, etc. and the interviews have been carried on various situations i.e. in front of the supermarket, fast food store, train or bus station, university, office, and at home to distinct the different context of using mobile phone.

EXPECTED RESULTS:

The results obtained from the survey shed light into issues which have not yet been addressed in literature before. At the preliminary stage of analysis, we have identified some variables as the purchase context and the moment of purchase, the pace of transaction, the facility of recovery in case of wrong doing which seem to have an deep impact on consumer behaviour. We expect at the end of our survey analysis to propose a research model on the m-retail consumer behaviour.
J: Service management and marketing theory and research methods in an innovative perspective
J1: Co-creation

Chair: Donna Sundbo
Co-Creation of Value and Coproduction: A systematic review of the literature from the last 32 years

Lear Valadares Vieira, Mariana Carolina Barbosa Rêgo, Antonio Isidro da Silva Filho

OBJECTIVES:

The purpose of this paper is to systematically review and summarize the international scientific production about co-creation of value and coproduction over the last 30 years. Its main objectives are to describe the main characteristics of the production on these research fields, map different theoretical approaches and research streams on the subjects of co-creation of value and coproduction, and to highlight emerging trends and gaps on these fields in order to present a research agenda for the thematic.

METHODOLOGY:

This paper will use bibliometric data collected in a research conducted in selected databases and directories with the following keywords: co-creation, cocreation, co-production and coproduction. The databases and directories initially selected to perform the searches are: Annual Review, Oxford Journals, Scielo, Cambridge Journals Online, SpringerLink, JSTOR Arts & Sciences III Collection (Social Sciences), Academic Search Premier - ASP (EBSCO), Directory of Open Access Journals - DOAJ, Sage, ScienceDirect (Elsevier) and Emerald Fulltext. Besides the descriptive informations such as authors and their institutions, journals, number of citations, among others, a database will be built with the keywords assigned to each article selected, and a coding procedure will be employed to determine the content categories to which the papers will be assigned. A Multiple Correspondence Analysis will then be employed in order to determine and interpret the main streams and themes researched on this field.

EXPECTED RESULTS:

The expected outcomes of this paper are the identification of clusters composed of specific research streams and common themes within the subjects of co-
creation of value and coproduction. We also expect to map the theoretical perspectives supporting each of these clusters. Furthermore, future trends and research gaps should be identified in order to propose a research agenda for the field. This research may also impact on theory building on co-creation of value and coproduction, as well as management decision making and teaching on the subjects researched.
Exploring the manner of customer value co-creation in health care

Liudmila Bagdoniene, Neringa Langviniene

OBJECTIVES:

Value co-creation has gained the attention of academics and practitioners as an overarching concept that describes collaboration among multiple stakeholders (Ranjan, Read, 2014). Nowadays various industries become a context of co-creation’s researches: IT sector (Stucky et al, 2011; Vartiainen, Tuunanen, 2013); public services (Alves, 2013); tourism (Rihova et al, 2014); financial services (Chan et al, 2010); universities (Díaz-Méndez, Gummesson, 2012); SMEs sector (Ngugi, 2010) etc. Besides, many researchers focus on the different content of co-creation: customer engagement behaviour (Jaakkola and Aleksander, 2015), recovery strategy (Roggeveen et al, 2012); service innovation (Perks et al, 2012); consumers’ motives (Füller, 2010); consumer experience (Kelleher, Peppard, 2011); involvement in co-creation (Kristensson et al, 2008) etc. However, co-creation in health care is in its infancy and many aspects are not well understood. Thus, there is the need to eliminate or at least reduce this gap. Nowadays patients are named as consumers of health care. More and more they take responsibility for the decisions about their health and want to work with health care providers as collaborators. To be co-creators of health, patients ought to be supported for this new role and health care providers must adjust their worldview, as they become true health care partners (Lorig, 2002). But the patients cannot be active contributors of health care services if supporting processes, methods and tools that enable the co-creation are missed (Elg et al, 2012). Hence, co-creation success requires the changes in attitudes and behaviour on the part both customers (patients) and health services providers (Cayton, 2002).

The objective of our paper is to reveal the manner of health care providers in value co-creation with patients. Understanding how health care providers co-create value is important because co-creation influence psychological well-being of patients.

The paper will be structured in the following way. The co-creation in health care will be described in the first section of paper. The methodology of empirical research will be presented in the second part of paper and the findings of case studies will be discussed in third part of paper. Finally, we will provide some managerial implications for health care providers.

METHODOLOGY:
Our study is based on case study methodology. As the research method, the case study is used in many situations and contributes our knowledge of individual, group, organizational, social and related phenomenon (Yin, 2013). The case study is useful when the topic is broad and highly complex, when there is not a lot of theories available and when “context” is very important (Dul, Hak, 2008). The value co-creation in health care covers all these features.

We choose five cases from Lithuania health care sector: obstetrics and gynecology clinic, cancer institute, sanatorium, primary health care center and plastic surgeon center. The data will be collected using individual depth interview (IDI). The informants will be selected considering on his/her position and authority, as well as job experience. Depth interviews provide an effective means of obtaining rich insights into the phenomenon of interest as they provide detailed contextual information that cannot be obtained from the survey (McDaniel, Gates, 2007). The analysis of the content of web sites will be used as additional method.

**EXPECTED RESULTS:**

We expect to reveal multiple results: how inquired institutions presented by informants motivate and involve customers in value co-creations, what activities and tools are used for co-creation, what outcomes of value co-creation are expected by health care providers, how the personnel are prepared to co-create values with customers, what are ”dark side” of co-creation. Additionally the similarities as well as differences of value co-creation manner in various context of health care will be identified. We hope that the findings of our study will useful for deeper and broader investigation of the value co-creation in health care.
A multidimensional model for supply-demand interactions in knowledge intensive-business services.

Dra. Mariangélica Martínez (PhD), Estibaliz Hernández (PhD Candidate) MIK & Mondragon Unibertsitatea, Luis Rubalcaba (PhD) Universidad de Alcalá

OBJECTIVES:

The main goal of the research carried out is to propose and validate a method for the analysis of value creation in the KIS (Knowledge Intensive Services) from a perspective of strategic definition at a micro-economic level (twofold offer-demand approach) that allows:

- An understanding of the critical factors that define the relationships between companies that demand and offer KIS (how and why they are produced).
- An approximation to a method capable of showing the level of complexity of advanced services as a contribution towards overcoming the characterisation of KIBS through NACE.

METHODOLOGY:

Phase 1. Revision of the literature and construction of the theoretical model for an explanation of the phenomenon of advanced services.

The theoretical model developed is capable of explaining relationships between companies that offer and demand knowledge-intensive services. At the same time, a proposal with respect to the conditions that must characterise advanced services is prepared.

Phase 2: Design and development of the case study: The case study methodology, proposed by Yin (2009), has been used for the validation of the proposed model.

Three key axes have been identified for the research:

- Theoretical model: an extension of the model proposed by Miles (2012:}
19) is proposed to include the vision of the offer and the demand of advanced services.

- Conditions for the categorisation of advanced services: A revision of the literature has allowed us to define five conditions to be able to speak of an advanced service, and which are proposed based on the results of the research carried out by Hipp (1999), Muller and Doloreux (2009), Muro et al (2015) and Miles (2012):

1. They are companies which offer services demanded by other companies (B2B) and not by the end consumer.

2. They carry out complex operations of an intellectual nature where human capital is fundamental.

3. They establish a relationship of strong collaboration, co-creation and cooperation with their customers.

4. Their service is an important element of added value in the competitive positioning of their customers.

5. They build systems of creation and application of knowledge around themselves along with customers, R&D centres, universities, etc. That is, they act as a bridge between the world of knowledge and businesses.

- Cases: two cases of excellent companies have been identified; one offering and the other demanding knowledge-intensive services.

Phase 3. Adjustments to the model and identification of future lines of research.

The goal is to develop cross-cutting conclusions between both cases, to contrast the five conditions proposed on phase 2 and to build a new model to explain the twofold offer-demand approach.

EXPECTED RESULTS:

The results are assembled along the three axes:

- Theoretical model: based on the findings by Miles (2012) a new model is presented which offers the chance to explain the phenomenon of advanced services from a perspective of offer and demand.
- Conditions for the categorisation of advanced services: Through this research it has been possible to contrast the initial proposal formulated with respect to the five conditions to be able to speak of an advanced service and incorporate new indicators.

- Cases: Both cases allow us to reflect on the strategic definition process at a micro-economic level and on the challenges of SMEs in the new competitive environment.
J2: Service processes

Chair: Shuki Dror
QFD for design simulation experiments of service processes

Shuki Dror

OBJECTIVES:

Service processes encompass a large number of variegated factors. These elements and their interactions have to be considered when engineering a service process. A discrete-event simulation models the operation of service processes as a discrete sequence of events in time. Integration of design of experiment (DOE) in simulations (DOES) improve service performances by focusing on modeling the relationships between the output (performance measures) and the input (factors and interactions).

In the current study, a Quality Function Deployment (QFD) methodology is utilized as a supporting tool for the designer to focus on the factors to study through DOES.

METHODOLOGY:

One of the substantial aims of the designer is selecting appropriate scenarios. Nevertheless, even if the simulator is very fast, the complete set of possible scenarios is huge and realistically there is no way to run all possible scenarios. For example, a lot of different options representing all possible changes in all kinds of resources (human and physical) can be generated for the “staffing/allocation” factor. Alternatively, when faced with many factors, it is often useful to get “subjective” input to help screen out some factors, while bearing in mind that there is always the danger of missing important factors. The QFD methodology anticipates the risks of missing important factors and supports the designer in understanding the system and schematically deciding what data should be collected and how to generate appropriate scenarios.

A QFD matrix determines the required improvement level of each performance measure and its used to translate the required improvement level of the performance measures (e.g. throughput time, cost, and quality-service level) into the importance of two types of potential factors: control factor (e.g. resource capacity, flexibility, processes structure, flexibility, waiting line policy, etc.) and noise factors (types of customers, customer arrival process, etc.). A
Mean Square Error (MSE) criterion is utilized for selecting the vital factors to be integrated in the DOES.

EXPECTED RESULTS:

We illustrate our methodology using the case of a customer order handling process to exemplify the selection of factors and interactions. The goal of the process is to supply ordered and available goods to a customer whose credit (or payment ability) is approved. The QFD supported by the MSE criterion reveals five factors to be used through DOES: X1 – process structure (control factor); X2 – customer arrival rate (noise factor); X3 – customer credit percentage (noise factor); X4 – warehouse flexibility (control factor); X5 – sales capacity (control factor). We run a full factorial experiment using Arena software, we analysed the results using SPSS' General Linear Model (GLM) software. The following factors and interactions were found to be significant: X1; X2; X3; X1X3; X2X5.
Competence Screening: Introducing a Concept for Competence Management in Service Divisions

Marc Rusch, Ute David

OBJECTIVES:

Services play an increasingly important role and evolve as the most profitable business division within industrial enterprises. Physical goods are increasingly considered appliances for the provision of services and services are the major basis for economic exchange. Major challenges for industrial service provision are demographic changes and the increasing complexity of products and respective services.

In order to ensure efficient and high quality service provision, resources need to be analyzed and optimized according to the specific requirements of service provision. Personnel need to be allocated to specific tasks or assigned to teams depending on their individual competences and service requirements.

In this paper, the "Competence Screening" concept for effective and efficient competence management in service divisions is developed. This concept introduces competences into the analysis of tasks and processes. Compared to existing methods, this concept supports the allocation of personnel, and management and development of competences. Based on Competence Screening, individual competences are managed, allocated and developed to ensure timely, high quality and efficient service provision. The concept reveals competence shortages and oversupply and supports planning and managing personnel rotation, training measures and recruitment.

METHODOLOGY:

The Competence Screening concept is developed by drawing on existing frameworks as service blueprinting and process chain network, and by analyzing requirements of competence management in service divisions. Within this paper, processes for delivering different industrial services and associated competences are recorded, e.g. in machine repairs and maintenance. The processes are complemented by competences necessary to perform single steps.
Praxis analyses and validation are conducted over a two year horizon and incorporate German industrial enterprises.

Within case studies, competences for providing entire or parts of services are shown. The competence requirements are compared to the competences available within existing personnel. Deviations of required and available competences are detected. Competence Screening supports management and development of competences and processes, and service provision as a whole.

EXPECTED RESULTS:

The result of this paper is the Competence Screening concept which illustrates the competences required for providing specific services. This is necessary to optimize competence planning and development in service divisions, and identify inefficiencies and shortages. The approach may e.g. be applied when new services are introduced or existing competences, capacities and processes are evaluated.

Competence Screening extends existing literature on service and competence management. Competence Screening is a contribution to management methods that fills a gap that is so far not covered by other approaches. Furthermore, Competence Screening contributes to service design literature.

In the industrial context, the concept enables solving the current challenges imposed by rising costs, new and complex services, specialized work force and demographic changes.
The concept of commitment in explaining micro-level vitality of an sdl- network

Sami Berghäll, Liina Häyrinen, Anne Toppinen, Jari Kuusisto

OBJECTIVES:

Service dominant logic (Vargo & Lusch, 2004, 2008, 2011 among others) has been a clear line of service science research since its introduction in Journal of Marketing in 2004. A core of the service dominant logic (SDL) is the notion that, in exchange, the service value of the “commodity” defines the value of the exchange relationship to the “customer”. While this exchange can have a monetary value definition, in the actual exchange setting, the actual valuation is done by the individual entering this exchange relationship. While value can be co-created (Gronroos et. al.) as a process, in essence, it is the valuation done by each of the exchange partners separately. Thus, valuation of the “commodity” is a perceptual matter. Further, as value can be derived from very different features of the exchange, the criteria defining the valuation can be very different from what the original producer intended. Thus, for us, the core ingredient and motivation leading the partners to an exchange relationship, i.e. the service relationship, is what we try to understand.

METHODOLOGY:

We approach the issue from an institutional perspective. Vargo (2014) builds an institutional theory framework around the core ideas of SDL. He argues that radical innovations only happen with institutional change. In practice this means that the social system values, roles, role definitions and structures need to change in order to provide a path into new ideas, solutions and innovation. He uses the concept of network vitality to describe the generic capability of the network to enter into in-depth exchange relationships derivative of radical exchanges. Our paper makes an inquiry into this concept of vitality through the concept of commitment (and trust).

EXPECTED RESULTS:
We argue that the nature of the exchanges is defined by the level of commitment existing in the exchange relationship. Thus, on a very basic level of the dyad, the depth and quality of the exchange is defined by the will and ability of the partners to challenge the “existing” wisdom. While the level of commitment (and trust) can vary between network members, and is even likely to be asymmetric, the vitality of a network is defined, on a micro-level (of the institutional theory) through the level of commitment existing. Thus, we build a basis of micro-level vitality through the concept of commitment.
J3: New service values - New service concepts

Chair: Claire Forder
Enhancing the service value proposition in tradition to transformative service research

Neringa Langviniene, Liudmila Bagdoniene

OBJECTIVES:

Transformative service research (TSR) is related to the platform of service researches, empathizing the well-being of individuals (customers and providers) and communities (family, society). Services are perceived no longer as final product, but as engine for societal transformations (Sangiorgi, 2011). The traditional service research discovers the impact of service, service quality on consuming, satisfaction of a customer, his loyalty (Rosenbaum et al, 2011; Rosenbaum, 2015). TSR examines positive and negative affect (Davis, Pechmann, 2013) of service consuming on well-being of different entities: individuals, collectives, and ecosystem (Mick et al, 2012; Anderson et al, 2013), giving the focus on long-term impact. TSR uses the wider approach to consuming of any service, emphasizing the need to supply more (in value for any concerned part) for less (attempt, resources used, etc.); emphasizing the benefit both for consumers and service entities (Davis, Pechmann, 2013).

Among strategic services research priorities – TSR is distinguished already for several years (Ostrom et al, 2010; Anderson et al, 2011; Ostrom et al, 2015; Sweeney et al, 2015); as well as many other strategic research priorities are developed: measuring and optimizing service outcomes, understanding service value in global context, enhancing the positive outcomes in services, etc. Research questions for discovering the transformative impact on well-being arise such as how to improve the wellbeing, how to reduce negative impact of consuming, and what service value preposition is significant etc., arise. Ostrom et al (2015) present the framework for services research priorities 2015, where many dependence relations among strategic priorities, design priorities, value creation priorities and outcome priorities are developed.

The aim of the paper is to conceptualize a research framework for discovering the impact of service value preposition on wellbeing of service customers.

METHODOLOGY:
Scientific literature analysis, synthesis will be used for framing the transformative services research, aiming to conceptualize the value proposition for service customer; the subjective perception of well-being of customers; and relationship points in providing the service value proposition (from the viewpoint of providers) and perception of the services value (from the viewpoint of consumers).

Focus group of researchers in services science is going to be organized, aiming to identify the concept of value proposition in improving the wellbeing of customers, what considered subjectively by customers, as shaping the positive impact on their well-being.

EXPECTED RESULTS:

The conceptual framework that can be used as tool for identifying, measuring and optimizing (or/and improving) the service value proposition for customers’ wellbeing is expected. The managerial implications will cover guidelines for service researches, who are doing researches in tradition to transformative service research, highlighting the necessity to improve the wellbeing of different entities through service, as framework will serve as a tool for further transformative and customer researches, too. The insights for service providers in transformative services industry, with conceptual path in identifying, measuring the service value proposition, identifying the gaps between service value preposition and customers’ value perception, taking strategic decisions on enhancing the value in order to improve the well-being of service customers, are expected.
Exploring Customer Value in the Experience Economy
Service Encounter: An Exploratory Study

Claire Forder

OBJECTIVES:

The concepts of co-production, co-creation, and co-creation of value have, since the end of the nineties, been defined as the new drivers of competitive advantage. According to various theorists (Vargo & Lusch, 2008, Prahalad & Ramaswamy, 2004, Sørensen & Jensen, 2014, Grönroos, 2006) if companies can actively and effectively tap into these drivers, they may unlock the key to sustainable competitive advantage. But what is a service encounter? Is it the mechanism by which value is created or co-created. Who creates the value and what value is being created? Do companies and customers create the same or different types of values and what do these values consist of? The purpose of this article is to further shed light on the process of co-creation of value within the tourism service encounter experience by attempting to answer these questions by (and) further developing the S-D logic model of co-creation of value.

METHODOLOGY:

In order to elicit frontline managers’ descriptions of, amongst other things, expected customer value in the service encounter, a 15 item semi-structured interview guideline with open questions about two central themes was developed: 1) how the service encounter is understood and 2) how value in the service encounter is understood. In this paper, the focus is on how front line managers describe the expected customer value of a service encounter.

Taking an iterative, grounded theory approach, no one particular theory drove the development of the semi-structured interviews, rather inspiration from already existing theories were used. The interview guideline was debated in a focus group session consisting of a panel of selected interviewers to ensure common understanding of the questions and agreement on recording techniques who tested informant understanding of the questions. The guideline
was readjusted after feedback from the panel and then used by teachers in a Danish educational institution, who undertook thirty interviews across a broad range of service sector companies.

Out of the pool of thirty interviews, fifteen were selected using two predetermined criteria: 1) the informants had to work in organisations operating within the experience economy classified by the Danish Association of Hotels, Restaurants and Tourism (HORESTA) as being "experience and adventure economy" i.e. tourism, hotels and restaurants only" (Road, 2012). A second criterion was the length of informants' sector experience. It was considered that the longer the sector tenure the higher informant credibility through more 'accurate' accounts. Interviews which did not meet these two criteria were excluded from the analysis. The selection of interviews resulted in a cross-sector sample group who had an average working tenure of approximately 10 years. The majority were women and highest educational level was at Bachelor level, although the majority of the informants had taken a two year tertiary level education. Most of the participants worked in the hotel sector.

The interviews were recorded and transcribed verbatim by both the researcher. The interviews were conducted in both Danish and English. Interviews held in Danish were not fully translated into English, but those parts of the interviews used in the analysis were.

EXPECTED RESULTS:

The results of the study revealed, from the organisational viewpoint, three differing yet co-existent spheres of value residing within the tourism service. These "value spheres" were identified as; desired organisational value tapped from the service encounter, primarily viewed from a functional/instrumental viewpoint; value gained by front-line employees and expected customer value which was mainly described from a symbolic/expressive and experiential/hedonic outlook.

This article contributes with a unique perspective on the apparently disconnected triadic relationship of value spheres (desired company value, frontline employee value and expected customer value) in the tourism service encounter from the organisational perspective. Additionally, these spheres encapsulate various concrete variables not previously seen collected into one paper.
Clarifying Service Classification Concepts: An In-Depth Literature Review

Erik Kolek, Dennis Behrens, Ralf Knackstedt

OBJECTIVES:

Very different views, meanings, concepts, and definitions of services are illustrating the importance of service classifications and the need for service classifications. There are numerous different types of service classifications with highly diverse dimensions, scopes, and representations developed in the service science literature. To conduct a comparison and to detect current research gaps seems to be impossible because of the extreme variety of service classifications. This high variety leads to the objective to clarify the existing service classification concepts.

METHODOLOGY:

An in-depth literature review is an effective method of choice to answer the research questions: Which service classification concepts exist? Which concepts are demonstrating research gaps? Therefore, a three-dimensional framework is developed for an in-depth literature review. This review is grounded on different dimensions stated as concepts of service classifications: scopes, representations, and dimensionality. These are illustrated in a concept matrix to demonstrate current research gaps. The first references are gained over keyword search in different databases and the most references are found over the backward and forward search. Based on this conceptual foundation in the realized in-depth literature review the analysis of the concept matrix visualizes the needed further research as a meaningful research agenda of open research gaps.

EXPECTED RESULTS:

The conducted literature review validates understandable the time based development of the open and closed research gaps.
Starting in the 1960s service classifications are one- or three-dimensional, material products and immaterial services are represented and covering the scopes service immateriality and service interaction.

Later, in the 1970s one and two dimensions, immaterial services and service business models, and the scopes service interaction, service individualization, and service production process were in the discussion of service science researchers.

From 1980 the research of service classifications became famous in service science. Here, the researchers focused on two-dimensional service classifications for positioning immaterial services applying the scopes customer integration, service interaction, service complexity, and service production process.

This growth of conducted service classification research increased to its top in the 1990s. Scientists are concentrating on two dimensional service classifications, highlighting immaterial services and service business models, using the scopes service immateriality, customer integration, service interaction, service complexity, service individualization, and service production process.

Since the year 2000 service classification research seems to be decreasing. Nonetheless, two dimensional service classifications are established to demonstrate material products and immaterial services covering the scopes customer integration, service interaction, service technology use, service complexity, service individualization, and service production process.

Service classification research since 2010 focused on one and two dimensions, immaterial services and service business models, service immateriality, customer integration, service interaction, service technology use, and service complexity.

Further research must close the current research gaps. New three- and multi-dimensional service classifications must be developed. This is realized on a conceptual and then on an empirical foundation. The focus is on representing hybrid service bundles including different allocations of both material products and immaterial services. Motivated by the scopes service classification researchers must reflect the service technology use, service encounter, and service time consumption. The blueprinting method and other service modelling languages can be developed or enhanced concerning the contributions of this in-depth literature review.
J4: Innovative tools

Chair: Marie-Christine Monnoyer
Know Your Customers: Developing Innovative Services to Enhance Acceptance of Electric Vehicles

Sabrina Cocca, Michaela Friedrich

OBJECTIVES:

Electrically powered vehicles—including but not limited to electric cars, e-bikes, e-scooters, buses and lorries—are still undergoing a process of rapid technological development. Other related issues, such as the standardisation of charging technology and autonomous vehicles that navigate automatically to charging points, are in the focus of numerous research and development activities worldwide. At the same time, however, suppliers are facing a considerable marketing issue, since electric vehicles do not yet meet with sufficient acceptance in the market. Nevertheless this consideration is only one side of the coin reflecting a typical dilemma between supply and demand: potential users are supposed to adopt the new mobility concept—but do not find the wide-area infrastructure necessary to make the use or even purchase of electric vehicles useful and attractive in the first place. The activities of the presented findings are based on a German research project: DELFIN (German acronym for “services for e-mobility—fostering innovation and user-friendliness”). Germany is an interesting case for researching the acceptance of electric vehicles: until now, the focus here has been on technological development, which means that the technical conditions are overall quite positive. But at the same time, acceptance of electric mobility in the population seems to be comparably low: there are 23,611 pure-electric cars and 123,767 hybrids (incl. plug-in hybrids) on German roads (as of 1 July 2015).

- To address these issues and explore the potential of e-mobility services, the research project follows these objectives:
- To investigate the role of services in supporting the diffusion process of electric mobility in the market
- To analyse and explore how services help to improve the user-friendliness of electric mobility, in order to achieve better acceptance in the market
- To find a practical solution for implementing user orientation in the process of developing new services in the field of electric mobility
METHODOLOGY:

First, a comprehensive research on 250 publicly funded projects in the field of electric mobility in Germany was conducted in order to get an overview of those services that are implicitly as well as explicitly required to support the dissemination of electric mobility over and above technical progress. Based on these first findings, 27 expert interviews were conducted in order to get an idea of the importance of services for the diffusion of e-mobility offerings.

Second, research on existing models for developing new services was conducted in order to detect trends and white spots. Then a comprehensive analysis of 85 methods for user analysis and user integration was carried out, covering different disciplines such as new product development, software development, and new service development (NSD). Each of the methods was evaluated to determine the phase of NSD in which it is applicable. In addition, international case studies are being conducted (ongoing) to find examples of good practice as to how services are used to support the implementation of e-mobility offerings in the market.

Third, a survey among e-mobility users and providers will be conducted in order to validate the findings so far and to generate additional information for the Service Engineering reference model to be developed.

EXPECTED RESULTS:

The first result is a framework for developing e-mobility services. It consists of six levels: Service Engineering reference model, user analysis and user integration, configuration mechanism, process-activity model, organisational arrangements, methods and tools, case examples. This framework will be filled to achieve a comprehensive innovation model for e-mobility services. To deliver support for companies, this theoretic reference framework will be accompanied by a guideline for companies that intend to develop and offer services in the field of e-mobility, as well as by workshops and consulting offerings.
Le rôle de l’animation dans la construction de projets innovants, le cas des structures hospitalières.

Sid Ahmed Gozim, MC Monnoyer

OBJECTIVES:

Le développement de la réflexion sur l’innovation dans les services a permis de mettre en évidence la complexité d’un processus qui suppose une multiplicité d’opérations matérielles, informationnelles, méthodologiques, et relationnelles et s’appuie également sur des compétences très diverses tant chez l’innovateur que ses partenaires (Djella & al., 2004). Pour être mené à son terme, ce processus se construit via plusieurs phases ou étapes. Scheuing & Johnsson (1989) en identifient 15, que Flipo (2001) a regroupé en 4 phases.


L’absence de rapprochement dans la littérature des services entre veille et innovation et plus spécifiquement entre les deux processus et leurs différentes étapes a conduit Gozim (2015) à investiguer les liens entre la pratique de la veille et la dynamique de l’innovation dans ce secteur d’activités. Quoiqu’étudié par quelques auteurs

(Jain, 1984 ; Engledow & Lenz, 1985; Fuld, 1991 ; Lesca & Chokron, 2002), le rôle de l’animation sur la richesse de la veille nous a semblé sous estimé et par là même son impact sur le processus d’innovation de services.

METHODOLOGY:

Cette question de recherche a été confrontée au terrain hospitalier, via 4 études de cas réalisées dans les secteurs privé et public sur des innovations non

EXPECTED RESULTS:

Cette confrontation a fait apparaître des différences importantes entre les projets selon la nature privée ou publique de l’organisation mettant en œuvre l’innovation. Elle a conduit notamment à pointer les effets négatifs des structures très hiérarchisées, ayant tendance à négliger le rôle de l’animation dans la dynamique entrepreneuriale des veilleurs et des porteurs de projets.

Par ailleurs, Le rôle du chef de projet, considéré dans la majorité des cas comme l’animateur (Quang & Gonin, 1992), le meneur d’hommes (Rojot & Bergmann, 1989) dans la conduite du processus d’innovation semble être compris de façon différente selon les structures. Nous pensons pouvoir montrer dans cette communication que la fonction d’animation intervient en amont du projet et lors de sa phase opérationnelle, qu’elle relève du contexte managérial et non pas seulement des caractéristiques personnelles de l’animateur. Elle favorise ainsi tant la conduite du processus d’innovation, que l’émergence d’innovations complémentaires.
Innovation management in healthcare services. Two countries in comparison.

Laura Johanna Castren, Markus Scheuer, Karl Blum

OBJECTIVES:
This comparative study measures management performance in terms of management’s capability to induce new service concepts in a healthcare context in Finland and Germany.

METHODOLOGY:
This multiple case study audits management performance in terms of development of service innovations. This study applies the multiple case study approach since boundaries between phenomenon and context are blurred, the research addresses processes and innovations and the phenomenon do not allow manipulation (Yin, 1994).

In order to measure service innovations in terms of management practices we use a survey method that includes five core dimensions: a development strategy, organization culture and climate, management techniques, a structure and performance, communication and social capital.

To collect the data we contacted key persons in study healthcare organizations: a chairman of the board, CEO, service manager, and executive of medical director. The respondents hold a management position in their organizations and they are informed that we study management practices in the Finnish and German healthcare organizations. The data will be collected during May and June.

In Finland healthcare is based on public and private healthcare providers, whereas in Germany healthcare services are provided by public, private and non-profit organizations.

EXPECTED RESULTS:
Based on earlier studies we expect that private healthcare organizations are best managed in terms of new service development process, whereas public healthcare organizations and non-profit organizations lack tools to implement potential innovative ideas.

Technical Remark:

This study builds on previous efforts of RESER-teams from different countries to engage in common research.

This 2-countries-approach is the result of meeting in person at the last RESER-conferences in Aix-en-Provence and Helsinki.

This paper is considered as being the first step in the comparison of different and diverse countries in which RESER-teams work. The authors are hoping to continue their common work in the years to come, maybe interesting teams from more countries to join them.