

A. UNIK Application Form

1.	Name and address of the University <i>The postal address that should be used by the Danish Agency for Science, Technology and Innovation</i>	Roskilde Universitetscenter (RUC) Universitetsvej 1 DK-4000 Roskilde
2.	Contact details for the UNIK contact person at the University <i>The single individual at the University responsible vis-à-vis the Danish Agency for Science, Technology and Innovation.</i>	Professor Jan Pries-Heje, User Driven IT-innovation research group in Computer Science and Informatics, Department of Communication, Business and New Technologies (CBIT). Universitetvej 1, 4000 Roskilde Email: Janph@ruc.dk
3.	Title of the proposal (in Danish and English) <i>The project title is used, among other things, when grants are announced.</i>	Praksisorienteret designvidenskab i oplevelses- og serviceøkonomien. Practice-Oriented Design Science Research for Experiences and Services (PODES)
4.	State (max 10) key words that best describe the proposed UNIK	Services, Service economy, Experiences, Experience economy, Performance Design, IT innovation, IT design, Participatory design, Tourism, Design Science, Design Science Research, Meta-method.
5.	Total amount applied for from the UNIK initiative	80 Million DKK
6.	During which time period will the amount applied for be used?	2009-2013
7.	Have you applied for the amount stated in item 5 from other sources?	No

	<p>If yes:</p> <ul style="list-style-type: none"> • From where? • Which budget items does it concern? 	
<p>8.</p>	<p>List researchers with a leading position in the proposed UNIK</p> <p><i>State name, title and place of employment. If a researcher is not known at the time of application, enter NN</i></p> <p>Indicate a total number of (1) prospective PhD and (2) postdoctoral grant recipients involved with the UNIK</p>	<p>Professor Jan Pries-Heje, User Driven IT-innovation research group in Computer Science and Informatics, CBIT.</p> <p>Professor Olav Harsløf, Performance Design, CBIT.</p> <p>Professor Jon Sundbo, Social Sciences and Business Administration, CBIT.</p> <p>Professor Jan Mattsson, Social Sciences and Business Administration, CBIT.</p> <p>Associate Professor Bente Halkier, Knowledge Production and Communication, CBIT</p> <p>Associate Professor Jesper Simonsen, Computer Science and Informatics, CBIT.</p> <p>Associate Professor Jørgen Ole Bærenholdt, Culture, Tourism and Regional Development, ENSPAC.</p>
<p>9.</p>	<p>Popular scientific description of the UNIK activity suitable for publication – max 1500 characters (in Danish and English).</p> <p><i>The text must be suitable for publication and formulated so that the nature of the UNIK is comprehensible to non-experts.</i></p>	<p>Dansk:</p> <p>Siden 1920'erne har Danmark været kendt for sit design af produkter. Men når det drejer sig om design af mere immaterielle produkter som produktion og leverancer af serviceydelser og oplevelser er der ikke nogen verdensleder. I realiteten udføres disse designprocesser ikke systematisk nogen steder.</p> <p>Nye innovative måder at levere og forbruge serviceydelser og oplevelser på vil blive kritiske parametre i konkurrencen om økonomisk vækst, arbejde, velfærd og menneskelig livskvalitet. Forskning i hvordan design kan gennemføres inden for disse områder vil blive af afgørende vigtighed – og kan endnu en gang bringe Danmark i en førerposition.</p> <p>En systematisering af designprocessen inden for services og oplevelser – ofte understøttet af IT – kan opnås ved at kombinere den eksisterende forskning inden for services, oplevelser og IT til ét fælles område, som designer og udvikler metoder til innovation, produktion og leverance af serviceydelser og oplevelser.</p> <p>Oplevelser og Services vil omfatte innovative offentlige såvel som markedsbaserede ydelser, leveret af enkeltpersoner eller organisationer, samt enhver form for begivenhedsrige oplevelser for brugere og borgere i samfundet.</p> <p>Forskningsindsatsen i PODES vil dreje sig om at udvikle en meta-metode baseret på Designvidenskab. Designvidenskab drejer sig om</p>

	<p>hvordan man kan skabe, forme, forny, fremføre, ændre osv. ethvert objekt for menneskelig stræben.</p> <p>Vores forskning vil være praksisorienteret, idet vi vil designe og udvikle konkrete processer og produkter. Vi vil dække komplette forløb fra designoplæg over udvikling til indførelse og anvendelse.</p> <p>Forskningen vil blive ledet af forskningsgrupper fra CBIT instituttet på RUC med den rette viden og erfaring inden for området.</p> <p>English:</p> <p>Since the 1920s, Denmark has been known for its design of products. However, when it comes to designing more immaterial products such as the production and delivery of services and experiences there is no leader in the world to-day. In fact these design processes are not carried out systematically anywhere.</p> <p>New innovative approaches to delivering and using services and experiences will become critical parameters in the competition for economic growth, employment, welfare and the wellbeing of citizens. Scientific research into how to manage the design of these areas will be of utmost importance – and could put Denmark in a leading position in this area too.</p> <p>The systematisation of the design process for services and experiences – often supported by IT – can be achieved by combining existing research in services, experiences and IT into one new field that designs and develops methods for innovation, production and delivery of services and experiences.</p> <p>Experiences and Services comprise both innovative public or private services offered by individuals or organisations as well as any kind of eventful experiences for users and citizens.</p> <p>The research to be carried out in PODES is aimed at developing a meta-method based on Design Science, which is the science of how to innovate, how to create, how to perform, how to deliver, how to change, and so forth. The object of this science can be any human endeavour.</p> <p>Our research will be practice-oriented, which means that we will design and develop artefacts in the form of processes and products. We will encompass whole design cycles from initial design and development to implementation and use.</p> <p>The research will be headed by research groups from the CBIT institute at RUC with extensive knowledge and experience in the area.</p>
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10. Total budget for the project — broken down by calendar year (1/1-31/12)

The budget may only include expenses that are directly attributable to the project plus overhead

Budget item		DKK	
		Person months	
1st calendar year	Salaries/academic staff	191	8,200,000
	Salaries/techn.-adm. staff	57	1,600,000
	Equipment		1,000,000
	Operational expenses		2,328,000
	Overhead/adm.contributions		2,626,000
	Total		15,754,000
2nd calendar year	Salaries/academic staff	311	13,200,000
	Salaries/techn.-adm. staff	57	1,600,000
	Equipment		0
	Operational expenses		2,328,000
	Overhead/adm.contributions		3,426,000
	Total		20,554,000
3rd calendar year	Salaries/academic staff	311	13,200,000
	Salaries/techn.-adm. staff	57	1,600,000
	Equipment		0
	Operational expenses		2,328,000
	Overhead/adm.contributions		3,426,000
	Total		20,554,000
4th calendar year	Salaries/academic staff	191	8,200,000
	Salaries/techn.-adm. staff	57	1,600,000
	Equipment		0
	Operational expenses		2,328,000
	Overhead/adm.contributions		2,426,000
	Total		14,554,000
5th year	Salaries/academic staff	71	3,200,000
	Salaries/techn.-adm. staff	57	1,600,000

Total			8,584,000
6th calendar	Salaries/academic staff	0	0
	Salaries/techn.-adm. staff	0	0
	Equipment		0
	Operational expenses		0
	Overhead/adm.contributions		0
Total			0
Total for all years			80,000,000

Has the University within the last three years received grants from other sources for part(s) of the proposed UNIK activity? Please indicate source of funding.
 (only grants above DKK 1,000,000)

Year	Amount granted	Project title and source of funding

Has the University within the last three years allocated core funding for research (*basismidler*) to (parts of) the proposed UNIK?
 (Indicate approximate amounts in mio. DKK)

Year	Amount granted	Project title

List of appendices (the enclosures required are specified in the call text)

DOCUMENT B: EXECUTIVE SUMMARY

DOCUMENT C: DOCUMENTATION OF MANAGEMENT STRUCTURE AND LEADERSHIP

DOCUMENT D: RESEARCH PROPOSAL

DOCUMENT E: DOCUMENTATION OF RESEARCHER EXCELLENCE AND PAST PERFORMANCE

The University herewith confirms that all the information given is correct (signed by the level of Rector (Vice Chancellor) or similar).

Date, stamp and signature: _____

Paul Hol



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B. Executive Summary

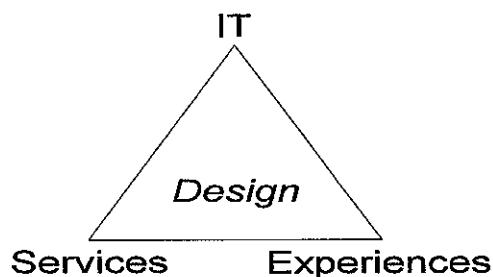
PODES' research endeavour will be to create a meta-method that develops general rules and models about how to design new services and experiences in combination with Information Technology (IT). This will represent a scientific break-through.

We imagine our meta-method design approach being used for: designing new ways of supplying public services and products; designing the development and distribution of knowledge services and products in the private sector; and designing the development and execution of experiences like cultural events, performances, festivals, and tourism.

New innovative approaches to designing, delivering and using services and experiences will become critical parameters in the competition for economic growth, employment, welfare and the wellbeing of citizens. Scientific research into how to manage the design of these areas will be of utmost importance – and could put Denmark in a leading position in this area.

Research has demonstrated that innovation and production processes in services and, to some degree also in experiences, are not very systematically carried out. The social and economic benefits to society and enterprises of these innovations are therefore not as high as they could be.

We believe that the systematisation of design processes can be achieved by combining existing research in services, experiences and IT into one new field that designs and develops methods for innovation, production and delivery of services and experiences – as expressed in the following figure:



We envision that the systematisation of design processes can be obtained by learning from research into IT as well as from theoretical explanations of empirical experiences based on studies of service and experience processes. Further, we foresee that a close, *systematic*, relationship between service innovations and users will result in radically improved innovation, production and delivery methods. Experiences can further add the tradition for artistic creativity that will enrich IT as well as service innovation processes.

The rules and models developed will also take into consideration that service and experience production is a social process – also when IT is used. Social systems and behavioural patterns must therefore be included in the meta-method.

This new design meta-method should encompass principles for:

- practice-orientation – including participatory, design, iterative development and effect-driven approaches
- situated design (meeting concrete constraints) – including design as planning
- what constitutes scientific design research
- what common features characterise experiences – including how best to design experiences
- what common features characterise services – including how best to design services
- how artistic creativity and IT can be combined

Most important, however, will be the combination of the above-mentioned principles to form a usable approach in an organisational framework where many people must co-operate and use new technology. This combination constitutes the meta-part of the new design meta-method and will be PODES' most innovative research contribution.

There is an increasing need for competencies that bridge practical skills with scientific foundations, where practical projects and scientific methodology and theory are closely combined.

The PODES *vision* is to combine service design, experience design and IT design into one new field that designs and develops methods for innovation, production and the delivery of services and experiences.

The *original idea* is that research into and development of a new meta-method can be founded in the discipline of Design Science Research (DSR). The core idea in DSR is that you design to learn. A meta-method using DSR will enable practitioners from a wide range of different areas to design innovative or radically improved processes that can change our society, life and wellbeing in new or alternative ways.

We intend to combine:

1. A *Practice-Oriented* science characterised by having people, organisations and IT as its area of study. It is prescriptive (rather than descriptive) due to its developing scientific frameworks supporting reflective professional practitioners in designing intentional and innovative experiences and services driven by needs and demands.
2. *Experiences and Services* comprising any kind of eventful (possibly thrilling) experiences and innovative public or private services offered by individuals or organisations. This includes products and services in the service sectors such as the healthcare and financial sector as well as artistic and cultural experiences such as performance designed events, or by using innovative human computer interfaces such as the iPhone.
3. *Design Science Research* studying the real-life processes involved in the innovative creation (design) and the development of new experiences and services and their resulting products and deliveries.

During PODES we will investigate five major sub-themes and a number of research actions. These sub-themes and actions will research subjects in specific areas, and also enable cross-fertilisation between different research areas and groups.

The PODES research will develop a meta-method based on Design Science. The research will be practice-oriented which means that we will develop artefacts in the form of processes and products. We will encompass whole design cycles including initial design and development, implementation and use.

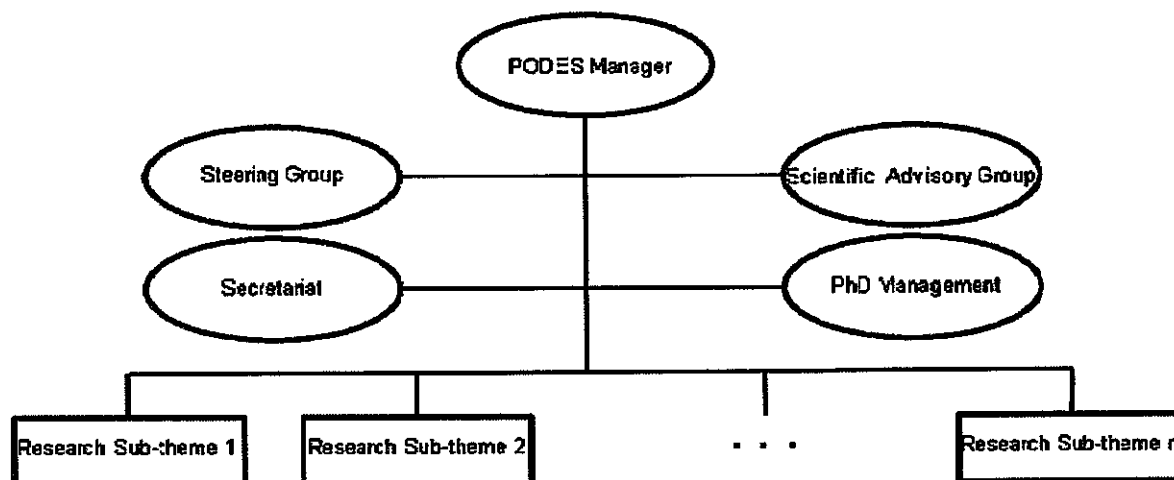
PODES involves five competent research groups from RUC, most members of which have been cooperating for a number of years. They possess extensive national and international networks of researchers, research institutions, public organisations and private companies. Each of the research groups has in their own research areas the specific and necessary competences to be able to contribute positively to PODES. Together they will be able to produce a scientific break-through in the DSR field through the synergy envisioned in PODES. And they will be able to exploit the results after PODES.

We are applying for 80 million DKK to be used over a period of five years. This includes 20 PhD students fully financed, as well as significant internationalisation in the form of visitors, travel and conferences. Finally, it includes a multi-media experience laboratory where – in real-life settings – we will be able to build and evaluate the design processes and products developed.

C. Documentation of management structure and leadership

C.1 The organisational structure of the proposal

The organisational structure of PODES is designed to reflect the different needs of ground-breaking, creative research in uncharted territory on the one hand – and strict administrative, financial, and quality control on the other. This is reflected in the organisational chart in the figure below.



Research framework manager: PODES top manager will be a competent internationally recognised researcher (professorial level) with documented experience in managing cross-disciplinary research projects. The selection of this manager will be based on an international job advertisement and will carry the same rank as a professor at the university. The PODES manager will be the person in charge of the day-to-day operations.

Steering Group: A steering group will be appointed with one member from each of the participating research groups to assist the PODES manager. The members will be the day-to-day managers of these research groups. The steering group will coordinate all the research activities in PODES and ensure that the decisions taken at the management level of PODES will be carried out in their respective research groups. The PODES manager will chair the steering committee. Should there be insurmountable disagreement among the members of the steering group, the PODES manager will have the final vote.

Scientific Advisory Committee: A scientific advisory committee will be appointed to ensure that ground-breaking research will take place in PODES. The committee will consist of internationally recognised researchers in the PODES fields of research. The scientific advisory committee will advise and help PODES to achieve its goals and serve as an assurance of the scientific quality.

Secretariat: A secretariat will be established to handle all matters of administration and financial control. The secretariat will also be responsible for quality assurance of the research products as well as all reporting and evaluations of PODES. The secretariat will employ an administrative manager and one secretary.

PhD Management: A senior researcher will be appointed as the PhD Manager in order to manage the large number of PhD projects involved in PODES. The PhD manager will be the contact point for the university with relation to the PhD programmes undertaken in PODES. The PODES secretariat will support the PhD manager in all practical matters.

Research Sub-themes: A research sub-theme can consist of independent research activities. All research will be organised in teams. Researchers from the involved permanent research groups at RUC and international guest researchers will be involved. The new PODES sub-themes and the traditions in the existing research groups will cross-fertilise each other. Each sub-theme/activity will be managed by a senior researcher in charge of all the work assigned by the PODES steering committee. The activity/sub-theme manager is responsible for detailed planning, execution, and quality assurance of the work.

C.2 The University's motivation and commitment to advancing the proposed research

Roskilde University undertook a major re-organisation in 2006, resulting in a new organisation of the research units at the University. Subject areas were brought together in a new way and new research groups were formed to supplement a number of existing groups. This proposal comes out of the new organisation and the synergy that comes from the merges and re-definition of the organisation. The University has always had a focus on promoting cross-disciplinary research and education and the research suggested in this project is an excellent example of the research that RU wants to promote in Denmark and internationally. It shows how different disciplines may benefit from each other and complement each other to bring forward new and exiting research. As part of the re-organisation of the departments, the PhD programmes were also redefined to supplement the organisation of the research groups. The PhD programmes reflect the University's interdisciplinary approach to research, focussing on specific themes that are supported by advanced research locally and strong international partnerships. In this way they also indicate areas that RU wants to focus on in a future perspective.

PODES will be a prime example of the distinctness of RUC, namely its ability to combine practice-oriented collaboration with societal actors with the creation of fundamental scientific knowledge. PODES will provide general principles for this way of undertaking research, thus making a major contribution to the new role and function of the university.

As part of the re-organisation of the departments, the PhD programmes were also redefined to supplement the organisation of the research groups. The PhD programmes reflect the interdisciplinary approach to research, but are also an indication of the areas that RUC wants to focus on in the future.

Practice-Oriented Design is an area which brings together several research programmes both within RUC and within the Department of Communication, Business and Information Technologies (CBIT). The project integrates the main academic fields: Humanities, Social Sciences and the Natural Sciences and shows the interdisciplinary approach to teaching and research at RUC. The project relates to and draws on such different research activities at RUC such as Cultural Heritage, the Experience Economy, Innovation, Informatics and Tourism.

RUC has identified Design Science Research as a focus area in the strategy plan: *Roskilde University 2020*. A focus area is one which will have a significant impact on research and education at RUC in the years ahead. The first milestone has been the creation of a new study programme called The Humanistic-Technological Basic Studies Programme. The activities of the PODES group will have a strong influence on and will be the driving force of the new study programme. The programme starts in September 2008 and will become a scientific and educational platform for a number of RUC's researchers who will work together on developing the future curriculum of the scientific area: Design Science.

C.3 Embedding parts of proposal in the University's strategy

It is crucial that RUC maintains its ability to bring together researchers to explore new areas of cooperation and take advantage of the long tradition of interdisciplinary research and education. Practice-Oriented Design is a good example of a cross-disciplinary approach to research and the exploitation of the competences in different research groups at RUC. The subjects involved are: Computer Science, Business studies, Geography, Communications and Performance Design. They are all well-established subject areas at RUC and each have a large international network of collaboration partners. A strengthening of the research area Practice-Oriented Design at RUC will make it possible to create even stronger partnerships, both in academia and in the more local environment where the collaboration partners are culture and event centres, business incubators, museums, urban development participants, tourism organisations, nature and environment organisations, festival organisers, theatres and music events.

The investment in this UNIK project is also an investment in the future. The UNIK grant will make it possible to fast track the development of a strong and long-lasting research group that will have a large

impact on the activities not only at RUC, but in this area internationally. The UNIK funding will make it possible to attract young as well as established researchers to RUC and thereby expand the existing knowledge in the area considerably.

RUC has great expectations that the PODES research framework will be able to attract further funding due to its high level of activity. Being a focus area of the University, the research centre will of course also get high priority when allocating University funds. The University is expecting the PODES research framework to have a long-lasting impact on the research activities of the University and act as inspiration to other research groups. This demands excellent management and RUC is firmly convinced that the staff involved in the centre will be able to make this kind of impact.

C.4 Educational and training activities for PhD students

PODES will result in 20 PhDs, each candidate will be assigned one of the PODES senior researchers as their supervisor possibly supplemented by an assistant senior researcher. The PhD candidates will be enrolled in RUC's PhD programs, e.g. the program in Design and Management of Information Technology (partner of the Danish Research School for Information Systems (DaRSIS)), and the PhD program in Communication, Journalism and Media. The latter program integrates the disciplines of Performance Design and embraces the perspectives of new media production and includes the interplay between informative and aesthetic aspects of communication.

PODES will appoint one senior researcher to be the PhD manager for the educational and training activities offered by PODES. The plans for activities are to be reviewed by the Scientific Advisory Committee. The PhD manager is supported by the Secretariat and Scientific Advisory Committee.

The PhD candidates will be allocated to sub-themes, but they will also be offered extensive activities and educational support as a group. PODES will offer the PhD candidates a variety of PhD activities including:

- Long courses (one week course, 5 ECTS) will be offered once every year, with the participation of international guest researchers. Long courses will be organised for all PODES PhDs possibly in cooperation with selected international PhD candidates
- Short courses (three day course, 2-3 ECTS) offered four times per annum, with the participation of international guest researchers. Short courses are organised within one or more sub-themes but will be open to all PODES PhDs.
- Network meetings (lasting a half to one day) offered at least six times per annum. The network meetings will be organised for all PODES PhDs in order to present their work and exchange experiences.

The PhD candidates will be supported in obtaining substantial international experience, especially through participation in the international doctoral consortiums in collaboration with international conferences, e.g. DESRIST, PDC, Performance Design Symposium and others. The PhD candidates will, in addition, benefit from exchange agreements with our existing international university partners. Each PhD candidate will be encouraged (and PODES will offer financial support) to visit an international university partner for a period of at least six months.

C.5 CVs for the principal investigators

This section presents the main researchers in alphabetic order.

C.5.1 Associate Professor Bente Halkier

Bente Halkier is Associate Professor in the Sociology of Knowledge, CBIT, RUC. She holds master degrees in both sociology and political science, and her PhD thesis (1998) was about how ordinary consumers in their everyday practices handle environmental challenges arising from public debate. One of the main

research interests running across the content of her research in consumption and communication is the quality of the use of various qualitative methods.

Bente Halkier is head of the research group "Knowledge Production and Communication" that was initiated in summer 2006. She has research and research management experience from five major externally funded research projects in the area of food, consumption and communication, with funding from national research councils, from national strategic programmes, and from the EU

Bente Halkier has 24 peer reviewed publications and has just received a contract with an international publisher for a monograph entitled "Consumption Challenged. Practice Theoretical Perspectives on Food in Media Society" She has served as peer referee for eight different international journals, and for several different research councils. She has also been a member of 10 national and international PhD evaluation committees.

Bente Halkier teaches qualitative methods at all levels from 2nd year students to doctoral courses, and she has organised a number of specifically methodology focused doctoral courses nationally and internationally.

Selected publications

- Halkier, B. & I. Jensen (2008, submitted). Det sociale som performativitet. Et praksisteoretisk perspektiv på analyse og metode. (The social as performativity. A practice theoretical perspective on analysis and method). Dansk Sociologi. (Danish sociology journal).
- Halkier, B. (2008). Fokusgrupper. 2. udgave. (Focus groups 2nd edition). Frederiksberg: Samfundslitteratur.
- Halkier, B., L. Holm, M. Domingues, P. Magaudda, A. Nielsen & L. Terragni (2007). Trusting, Complex, Quality Conscious or Unprotected? Constructing the food consumer in different European national contexts. Journal of Consumer Culture. Vol 7, 295-318.
- Halkier, B. (2003). The Challenge of Qualitative Generalisations in Communication Research. Nordicom Review. 24 (1).
- Halkier, B. (2001). Routinization or Reflexivity? Consumers and Normative Claims for Environmental Consideration. In: J. Gronow and A. Warde (eds.). Ordinary Consumption London: Routledge.

C.5.2 Professor Olav Harsløf

Professor of Performance Design (music/sound, visual arts, drama, dance and new media), CBII RUC.

Olav Harsløf has been an Assistant Professor of Drama and Communication at Aalborg University 1976-79, Rector of The Danish Rhythmic Music Conservatory 1988-91, Rector of The Danish Theatre School 1991-97, Research Director at The Rhythmic Music Conservatory 1997-2000, and Exhibition Curator at The Danish Royal Library and project manager of The Danish Rock History and Museum 2000-04.

He has been advisor to the Danish Music Council and member of the Board of the conference on: Music in the European Market 1990; an advisor for the Ministry of Culture in musical, theatrical and educational matters, presenting papers for planning and discussion of educational policy; a member of Ministerial boards planning new educational programmes and schools for Modern Dance, Dramatists, Theatre Technicians and Children's Theatre 1990-2000; A member of the board planning the establishing of the Danish Rock Museum in Roskilde (since 2004); a member of the editorial board planning and writing the Danish Jazz History 1950-2000 (2006); a member of the Performance Studies International (PSi) conference planning committee (Copenhagen August 2008).

Olav Harsløf is head of the "Visual Culture and Performance Design" research group that was initiated in summer 2006. He researches the interactive structures in music and architecture and the experience economy concerned with music, food and space. He will be actively involved in a new Centre for Culture and Experience Economy at RUC funded by government funds and run by the combined research groups of Performance Design and Business Studies at RUC (September 2008).

Together with Professor Dorita Hannah, Performance Design at Massey University, Wellington, New Zealand, Olav Harsløf has established an international network and created the 1st International Conference

on Performance Design at the Danish Academy in Rome January 2006. A short report has been published in the *NY ARTS MAGAZINE* Vol. 11 no 5/6 (New York 2006).

Olav Harsløf has been Project Evaluator for the Norwegian Research Board since 2005 and External Review Panel (ERP) member of the Arts Quality Assurance Framework (AQAF) set up by the Ministry of Education (MOE), Singapore (2007-2009).

Olav Harsløf teaches performance theory and cultural organisation and cultural economy. He has published 17 books and 80 articles and held 10 national and international conferences on design, performance and cultural policy.

Selected Publications

- Harsløf, O. (2008). *PHantom of the Operas in Sydney and Copenhagen*. In: Dorita H. & O. Harsløf (eds.). *Performance Design*. Museum Tusulanum Press, Copenhagen.
- Harsløf, O. (2007). *Musik for misbrugere. (Music for Abusers – with an English summary)*. *Tidsskriftet Antropologi (Danish Journal of Anthropology)*. No 54.
- Harsløf, O. (2006). *For Europeans Only – The Don Redman European Concert Tour 1946*, *Festschrift zu Walter Baumgartner (Ernst-Moritz-Arndt-Universität, Greifswald)*
- Harsløf, O. (2003). *Pressen – Periodische Flugschrift*. Herausgegeben von Der Neuen Studenten-Gesellschaft, Kopenhagen 1923 – 24. Berlin.
- Harsløf, O. (2001). *Kjeld Abell: Mellem Pirandello og Sartre. (Kjeld Abell: Between Pirandello and Sartre)*. *Studi Nordici VII. (Istituti Editoriali e Poligrafici Internazionali)*, Pisa.
- Harsløf, O. (2000). *Lysår – Kunstens kulturhistorie i Danmark i det 20. Århundrede. (The Cultural History of the Arts in Denmark in the 20th Century)*. Høst & Søn, Copenhagen.
- Harsløf, O. (1997). *Mondegruppen 1928-1932 (analyzing the 'Clartéism' in Denmark in the 1920th and the beginning of the 1930th)*, Museum Tusulanum, Copenhagen (with an English summary).

C.5.3 Professor Jan Mattsson

Professor Jan Mattsson holds the chair (since May 1996) in business administration, CBIT, RUC. His research field has mainly been service marketing and management. He has held several professorships and visiting professorships in marketing in New Zealand, Australia and Scandinavia. Jan Mattsson has had the chair of the PhD program in Society, Business and Globalisation at RUC and been supervisor to many PhD students. He has been member of a series of PhD and professorship assessment committees internationally.

Professor Mattsson is currently active in service marketing with a focus on how to best manage customer relationships. He has authored several books and has published more than 70 peer-reviewed articles in top journals such as the *International Journal of Research in Marketing* and the *Journal of Economic Psychology*. He serves on eight editorial boards of international journals in marketing and services and takes part in many international research projects.

Professor Mattsson has an extensive international research network, which is demonstrated by the many co-authored articles.

Selected publications

- Van Dolen, J., Lemmink, I., Rohen & J. Mattsson (2001). *Affective Responses in Service Encounters: The Emotional Content in Narratives of Critical Incidents*, *Journal of Economic Psychology*, vol. 22, pp. 359-376.
- Liljander, V. & J. Mattsson (2002). *Impact of Customer Pre-consumption Mood on the Evaluation of Employee Behaviour in Service Encounters*, *Psychology and Marketing*, vol. 19, no. 10, pp. 837-860.
- Lemmink, J. & J. Mattsson (2002). *Employee Behaviour, Feelings of Warmth and Customer Perception in Service Encounters*, *International Journal of Retail & Distribution Management*, vol. 30, no. 1, pp. 18-33.
- Eriksson, K. & J. Mattsson (2002). *Managers' Perception of Relationship Management in Heterogeneous Markets*, *Industrial Marketing Management*, vol. 31, no. 6, pp. 535-543.

- Mattsson, J., Lemmink, J. & McColl, R. (2004), The Effect of Verbalized Emotions on Loyalty in Written Complaints, *Total Quality Management and Business Excellence*, vol. 15, no. 7, pp. 941-958.
- Mattsson, J. & H. Helmersson (2005). Internet Banking: Modelling the E-competence of Customers with a Text Analytic IT Approach, *International Journal of Bank Marketing*, vol. 23, no. 6, pp. 470-483.
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C.5.4 Professor Jan Pries-Heje

Professor in Information Systems. Head of the User Driven IT-innovation Research Group, CBII, RUC. Research Manager for several projects of which currently is a 16 million DKK project entitled SourceIT. Jan Pries-Heje holds MSc and PhD degrees from Copenhagen Business School. He is a certified ISO 9000 auditor and Bootstrap assessor, and has been project manager for a number of multi-media and IT-related change projects. Before coming to RUC, Jan Pries-Heje worked at the IT University of Copenhagen and as Professor in Software Engineering and Management at the IT University in Gothenburg.

Jan Pries-Heje is President of the Association of Information Systems in Scandinavia (IRIS), and he serves as the Danish National Representative to IFIP Technical Committee 8 on Information Systems where he is also Vice-Chair. Jan is currently Associate Editor for *MIS Quarterly*, *Information Systems Journal*, and *European Journal of Information Systems*; three of the top 10 journals in the field of IS.

Jan Pries-Heje's research interests include information systems development, software engineering, and software process improvement. He focuses on organisational and managerial issues, and has a special interest in designing and building solutions. Jan Pries-Heje participated in the first Design Science Research in IT conference (DESRIST) and has given papers in every conference since. Jan Pries-Heje has published 14 books, 27 chapters in books and more than 100 papers in high quality journals and conference proceedings.

Selected publications

- Pries-Heje, J. & R. Baskerville (2008). The Design Theory Nexus. *MIS Quarterly*, 32(3), Special Issue on Design Science research.
- Pries-Heje, J. & J. Johansen (2007). Improve IT: A book for improving software projects. DELTA, Copenhagen.
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C.5.5 Associate Professor Jesper Simonsen

Associate Professor, PhD, of Computer Science and Informatics, CBIT, RUC. His area of expertise is Participatory Design (PD) focusing on offering theories and methods for systems design in an organisational context. This research area also includes Computer Supported Cooperative Work (CSCW), Knowledge Management (KM), Human Computer Interaction (HCI), and Computer Mediated Communication (CMC).

Since 1991, Jesper Simonsen has conducted research in collaboration with industry on IT design focusing on how IT designers can cooperate with users and their management especially relating to the clarification of goals, the formulation of needs, and the design and evaluation of coherent visions for change.

Jesper Simonsen has over 40 peer reviewed international research publications. He is program chair for the 10th biannual Conference on Participatory Design (PDC 2008). He is manager of the Effects-Driven IT Development research program (Effects-DrivenIT.dk). Past management of research programs include, HII (2004-2007, healthcareit.dk), DIWA (1999-2003, diwa.dk), and MUST (1991-1999, must.ruc.dk). The MUST research program resulted in a contemporary and widely published Participative Design method.

Selected publications

- Simonsen, J. (2007). Involving Top Management in IT Projects: Aligning Business Needs and IT Solutions with the Problem Mapping Technique, Communications of the ACM, 50(8), pp. 52-58.
- Bødker, K., F. Kensing & J. Simonsen (2004). Participatory IT Design. Designing for Business and Workplace Realities. MII press.
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C.5.6 Professor Jon Sundbo

Professor at the Department of Social Sciences and Business Administration specialising in innovation and technology development, CBIT RUC.

Jon Sundbo is the Director of a PhD programme on Society, Business and Globalisation (former: Innovation Studies) at RUC 1995-2004; a member of the board of the FIOL PhD school (Research School in Organization and Management); a member of the board of professors of the Danish entrepreneurship academy IDEA and the directing board of the Zealand region part of IDEA. Has been a member of several advisory boards to Danish ministries, including the commission on work and organisational aspects of the information society in the Ministry of Labour 1998-99, expert groups on development of the service sector (1995), innovation policy (1999) and service research (1999-2000) in the Danish Ministry of Industry. He has been advisor to several Danish service firms and Danish trade organisations and unions. He has participated in projects in co-operation with Danish firms, among others projects in collaboration with ISS, DTI (Danish Technological Institute), the consultancy firm NewInsight, the association IKI (Initiative for Creativity and Innovation), which has a series of large Danish firms as its members.

Member of several PhD evaluation and professorship committees in Denmark and other countries.

Referee of articles for several journals including International Journal of Service Industry Management, Scandinavian Journal of Hospitality and Tourism and Creativity and Innovation Management.

Professor Sundbo has been an expert member of the committee for developing a strategy for service research, the Norwegian Research Council 1999; evaluator of an application for a research centre in innovation at Manchester University (CRIC) for the British research council 2004, and of a research service program in Centre for service research, Karlstad University, Sweden 2005. He has been reviewer for the Norwegian, Danish and Finish research council and Nordic Innovation Centre on projects on innovation and service. He is member of the EU-expert group on service development and innovation in DG Enterprise.

Selected publications

- Sundbo, J. (2001). *The Strategic Management of Innovation*, Cheltenham: Edward Elgar.
- Sundbo, J., R. Johnston, J. Mattsson & B. Miller (2001). Innovation in service internationalization: the crucial role of the entrepreneur, *Entrepreneurship and Regional Development* vol. 13, p. 247-267.
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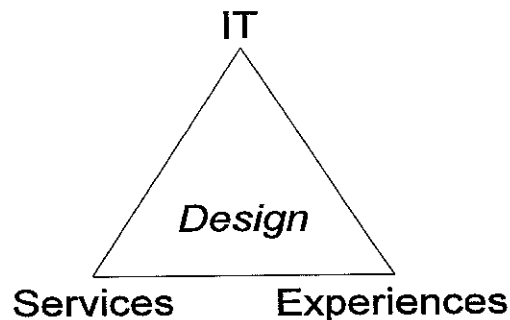
D. Research Plan

In this section we formulate the overall theme and vision for PODES. We elaborate the vision and formulate hypotheses after which we describe Design Science Research (DSR) as our strategy and we detail five sub-themes. Then we consider the infrastructure and technology necessary to realise the vision and strategy. Finally we elaborate on the relevance of our proposal to society, research and education.

D.1 Vision, original ideas, relevant questions and hypotheses

In the future, experiences and services (including knowledge services) will create the highest value both in the market and in the public sector for producers as well as users, particularly if they are mutually combined and permeated by Information Technology (IT). Research has demonstrated that innovation and production processes in services and, to some degree also in experiences, are not carried out very systematically. The social and economic benefits to society and enterprises of these innovations are therefore not as high as they could be. We envision that a systematisation of the design process can be obtained by learning from IT scientific work as well as from theoretical elaborations of empirical experiences based on studies of service and experience processes. Further, we foresee that the close relation of service innovations to users, when performed systematically, will result in radically improved innovation, production and delivery methods. Experiences can further add the tradition for artistic creativity that will enrich IT as well as service innovation processes.

The PODES *vision* is to combine service design, experience design and IT design into one new field that designs and develops methods for innovation, production and delivery of services and experiences.



PODES specific research effort is to develop a meta-method that develops general rules and models for how to design new services and experiences based on the use of IT. This will represent a scientific break-through. These rules and models will also take into consideration that service and experience production is a social process – also when IT is used. Social systems and behavioural patterns must therefore be included in the meta-method.

The meta-method will be applicable in a wide range of situations – useful for many diverse development and design processes and products – and solidly scientific. The meta-method will combine relevance and rigor. *Relevance* obtained from a solid grounding in practice; the needs and problems of people, organisations and technology. *Rigor* obtained from always eliciting existing knowledge before designing, from using scientific methods in designing, and from reporting solutions (designs) back to the scientific world in the form of journal or conference papers. By creating a solid scientific foundation for future innovative design and the development of services and experiences we are confident that both the Danish public and private sectors will be able to establish themselves as leaders on the world market.

The new design meta-method will establish general principles for creating new experiences and services particularly emphasizing how IT can be used as a tool for construction, production and provision of experiences and services.

The new design method should include principles for:

- practice-orientation – including participatory, design, iterative development and effect-driven approaches
- situated design (meeting concrete constraints) – including design as planning
- what constitutes scientific design research
- what common features characterise experiences – including how best to design experiences
- what common features characterise services – including how best to design services
- how artistic creativity and IT can be combined

Most important, however, will be the combination of the above-mentioned principles to form a usable approach in an organisational framework where many people must co-operate and use new technology. This combination constitutes the meta-part of the new design meta-method and will be the most innovative research contribution of PODES.

The *original idea* is that research into and development of a new meta-method can be founded in the discipline called Design Science Research (DSR). The core idea in DSR is that you design to learn. A meta-method using DSR will enable practitioners from a wide range of different areas to design innovative or radically improved processes that can change our society, life and wellbeing in new or alternative ways. We imagine our meta-method design approach being used for: designing new ways of supplying public services and products; designing the development and distribution of knowledge services and products in the private sector; and designing the development and execution of cultural events, like performances, festivals, tourism and urban planning. It can also form the basis for new education systems and research traditions. Possibly even a new kind of university totally freed of analytic “ivory tower” and instead deeply grounded in both research and solutions for practice can emerge!

The PODES overall *hypothesis* is that collocated methodological knowledge from the experience, service and IT use can stimulate each other and lead to a new innovative meta-method field.

This overall hypothesis leads to a set of more specific *hypotheses* that will be pursued in PODES:

1. There exists a set of common features that characterise all strands of scientific research which are practice-oriented. We acknowledge that these features may be situated – dependent on the situation. Therefore our meta-method approach to design needs to be practice-oriented when addressing application areas that are complex, unpredictable, contingent, and context dependent.
2. Services are increasingly becoming IT based (for example as self-service via the Internet or mobile phones, or interactive games on the Internet)
3. Artistic creativity as exists in experience organisations can advantageously be combined with existing innovation and production systems in services and lead to new innovation and production principles.
4. Customer or user relations as emphasised in service delivery can advantageously be combined with the supplier-oriented perspective that artistic productions and IT-use often includes.
5. Application of systematic IT-methods on service and experience production organisations will lead to new beneficial ways of organising innovation, production and delivery activities within these organisations resulting in higher profitability or improved quality for all.

D.2 Important milestones

The sub-themes in PODES (detailed later in the application) will be executed in parallel and evaluated individually after their completion. In order to manage the sub-themes properly, however, we have divided them into two groups, where one group will be executed in the first half of the five year period and the other group in the second half.

After two years, the results obtained by PODES as a whole will be evaluated. This might entail revisions within each sub-theme as well as establishing new or revised sub-themes and/or projects bridging one or more sub-themes. The focus will be on designing, using and validating the general approaches developed so far in order to confirm or change the research strategy and ensure the success of PODES.

D.3 Research strategy

Our proposed research strategy is our long term plan of action to achieve the vision for PODES. First we outline the overall plan for using design science research. In a later section, we define the sub-themes we have elicited from our overall PODES theme.

One view of research is that it is about achieving a better understanding of phenomena. Natural science seeks to understand natural phenomena while behavioural science tries to understand the phenomena revolving around human behaviour. Another view of research is that it is about finding better ways to achieve given ends and guidance about how to act in the world. The research strategy *Design Science Research (DSR)* – that we will apply – incorporates knowledge about phenomena from both natural and behavioural sciences to develop means and prescriptions as an approach to achieve human goals. Further, we will use the term DSR with an emphasis on the scientific – as it should be at a university.

DSR can be considered a meta-method. The innovative contribution of PODES to science will be a new meta-method for developing experiences and services by using IT. This meta-method will develop understandings and principles for methods and approaches to develop and produce experiences and services (including the management and organisation of these) when IT is used. IT must be considered not only a tool for supporting services and experiences, but also a structuring principle that influences the service and experience products as well as the production and delivery organisations themselves. We will also develop general principles for innovation processes in services and experiences (similar to the principle for industrial innovations which is based on laboratory work, cf. Latour 1987).

There have been earlier attempts to create social engineering and recently service engineering (Hefley and Murphy 2008) as general meta-methods. However, DSR is an innovation. First because DSR more than just replicates the industrial engineering method. It unites principles from this more deductive logic with principles from inductive sociological and anthropological observation. In this respect, DSR differentiates itself from, for example, cybernetics. Secondly DSR can be considered a general social technology (different from the chemical and physical industrial technologies) that must be seen as an integrated part of social systems. Finally, because DSR is at a clear meta-level it will reflect critically upon the methods used in innovation, production and delivery of experiences and services. These reflections will, for example, include questions such as how artistic creativity can beneficially be combined with systematic IT-methods.

PODES' research strategy is to use DSR prescriptively. We will develop artefacts in the form of processes and products. We will develop grounded solutions taking into account both the emergence and the degree to which solutions are situated. Therefore we need to be practice-oriented. We will limit ourselves to DSR for experiences and services. This includes performance design, information systems, innovation, process improvement, tourism, organisational change, spatial design as well as designing communication.

The concepts in the title of our proposal reflect our research approach and its field:

A Practice-Oriented science is characterised by having people, organisations and technology (especially IT) as its area of study. It is prescriptive (rather than descriptive) by developing scientific frameworks supporting reflective professional practitioners in designing intentional and innovative experiences and services driven by needs and demands.

Experiences and Services comprise any kind of eventful (possibly thrilling) experiences and innovative public or private services offered by individuals or organisations. This includes products and services in the service sectors such as the healthcare and financial sector as well as artistic and cultural experiences such as performance designed events, or by using innovative human computer interfaces such as the iPhone.

Design Science Research studies the real-life processes involved in the innovative creation (design) and development of new experiences and services and their resulting products and deliveries (Hevner et al. 2004). Design Science Research is an existing school of thought that is currently coming of age. For example, the first international conference on design science research in IT (DESRIST) was held in 2006.

Our overall approach is based in the principles known from the scientific experiment: Setting up a hypothesis; choosing a method testing the hypothesis; conducting the experiment; evaluating the experiment

and the hypothesis. Principles from the scientific experiments must be combined with humanistic and social science traditions in order to form a systematic approach to develop new experiences and services. Such projects are characterised by experiments, driven by participation and expected/intended effects, communication, negotiation and mutual adjustments, assessment and critical evaluations.

Hefley, B. & W. Murphy (eds.) (2008). *Service science, management and engineering*, Berlin (Springer)

Hevner, A., S. March, J. Park & S. Ram (2004). *Design Science in Information Systems Research*. MIS Quarterly, Vol. 28, No. 1, pp. 75-105

Latour, B. (1987). *Science In Action: How to Follow Scientists and Engineers Through Society*. Harvard University Press, Cambridge Mass., USA.

D.4 Synergies with existing research at RUC

A number of practice-oriented research and subject areas exist at universities and especially at RUC: Business area studies, communications, computer science and informatics, performance design, geography to name a few. They engage in practice-oriented design science from the perspective of their respective different subjects areas and they will all gain from our design science research because it is inherently interdisciplinary.

The synergies between PODES and the different research areas are detailed in the part of the application entitled *Researcher excellence and past performance*.

D.5 Research sub-themes

Within the overall theme of Practice-Oriented Design Science Research for Experiences and Services we will pursue the following sub-themes:

1. The *Practice-Orientation* theme
2. The *Design* theme
3. The *Design Science Research* theme
4. The *Experience* theme
5. The *Service* theme

The overall hypothesis will be addressed by all sub-themes and accompanying projects: From the perspective of each sub-theme projects will identify, clarify, and analyse the design approaches and processes as well as elicit and document the inherent nature of the iterative, experimental strategies that they undertake.

Features and approaches across the sub-themes are compared and combined and further developed using a consistent interdisciplinary perspective with regard to theory as well as practice. This way knowledge is captured, documented, disseminated, and reused across sub-themes and projects subsequently enabling a synthesis of universal common features and approaches that characterise practice-oriented design science. The result includes a general and coherent approach to genuine and innovative design and effective design processes comprising new qualitative criteria such as functionality, aesthetics, user-friendliness, economic profitability, environmental sustainability, quality of life, ethics, values, etc.

D.5.1 The Practice-Orientation theme

Research Question: What are the common features and approaches characterising *practice-orientation*?

Description: This theme has actors, organisations, and technology (especially IT) as its area of study. It focuses on prescriptive frameworks supporting different actors comprising professional practitioners, users, customers, entrepreneurs, and other relevant actors involved in design processes. This includes clarifying issues such as: How can and should context-specific needs and demands (to be addressed by designs) be approached? What role can and should different actors play in design? How do different approaches pursue design processes that lead to desirable utility value and usage effects?

The Practice-Orientation theme studies change enabled and driven by the design and implementation of technology at all levels (organisational, group- and project-oriented as well as individual). This involves a number of actors and different stakeholders. The theme aims at analysing and developing prescriptive frameworks supporting the different actors' intentions and participation throughout the overall design process. Basically, it is acknowledged that actors, organisations, and technology are inherently intertwined (Leavitt, 1964).

The theme will encompass whole design cycles including initial design and development, implementation and use as well as on-going re-configuration of the technology. Approaches will include participatory design encompassing mutual learning processes among the involved actors (Bødker et al. 2004); more "ethnographic" views of design including views of socio-technical research about design; iterative real-life experiments inspired by the task-artefact cycle (Carroll et al. 1991); effects-driven approaches aiming at establishing strategic partnerships designing solutions with proven utility value and a measured effect on the supported work domains (Simonsen and Hertzum 2006); lean principles known from the 'Toyota-approach' (Womack and Jones 1996); and contemporary change management models prescribing sustained, iterative, incremental approaches to trigger major organisational changes, such as technochange management (Markus 2004) and improvisational change management (Orlikowski and Hofman 1997).

Design processes entail complex modes of organising different actors as experienced for example within large scale service solutions such as Enterprise Resource Planning (ERP), Electronic Health Records (EHR), and Electronic File and Document Management known from the Danish E-government's strategy as 'ESDH' (The Danish Government et al. 2007). Suppliers of such large IT solutions today offer flexible IT systems that might be configured to meet a client's specific needs – and that might be re-configured to meet on-going demands for change. Classic agency theory indicates that client and supplier have conflicting interests and that there is an information asymmetry which exposes the client to a number of risks (Eisenhardt 1989). The alternative is to establish strategic partnerships between client and supplier based on trust (Braynov & Sandholm 2002). A central part of the Practice-Orientation theme is studying which parts of the designed solution the supplier should configure and maintain, and which parts are most efficiently configured and maintained by the client having the expertise in the domain in question as well as local needs and conditions. There is a need for practice-oriented processes that meet mutual interests with regard to organising design and on-going re-configuration the most optimal way.

Research in Practice-Orientation will for a large part take place in the form of field studies, action research, or with the use of more ethnographic approaches. However, there is also a need for multimedia laboratory facilities to experiment and conduct analyses of e.g. fast iterative learning cycles.

Approach: Large project; three senior researchers and three to four PhD students. Associate Professor Jesper Simonsen will lead this effort and be one of the senior researchers. 2nd half of the five year period.

- Bødker, K., F. Kensing & J. Simonsen (2004): *Participatory IT Design. Designing for Business and Workplace Realities*, Cambridge, Massachusetts, MIT press.
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- Eisenhardt, K. M. (1989). *Agency Theory: An Assessment and Review*. *The Academy of Management Review*, Vol. 14, No. 1, pp. 57-74.
- Leavitt, H. J. (1964). *Applied Organizational Change in Industry: Structural, Technological and Humanistic Approaches*. In: Cooper W. & H. J. Leavitt (eds.). *New Perspectives in Organizational Research*. New York. Vol.2, pp. 54-71.
- Markus, L. (2004). *Technochange management: using IT to drive organizational change*. *Journal of Information Technology*, Vol. 19, No. 1, pp. 4-20.
- Orlikowski, W. & D. Hofman (1997). *An improvisational model for change management: The case of Groupware technologies*. *Sloan Management Review*, Vol. 38, No. 2, pp. 11-22

- Simonsen, J. & M. Hertzum (2006). A Regional PD Strategy for EPR Systems: Evidence-Based IT Development. Proceedings of the 2006 Participatory Design Conference, ACM Press, pp. 125-128.
- The Danish Government, Local Government Denmark (LGDK), and Danish Regions (2007). The Danish E-government strategy, 2007-2010 – Towards better digital service, increased efficiency and stronger collaboration. www.modernisering.dk.
- Womack, J. P. & D. T. Jones (1996) Lean Thinking: Banish Waste and Create Wealth in Your Corporation. London. Simon and Schuster.

D.5.2 The Design theme

Research Question: What are the common features and approaches characterising *design*?

Description: This theme investigates design viewed as a strategic and creative practice conducted in an unpredictable, contingent and situated context. This includes clarifying issues such as: How the situation influences the design, and how it emerges over time? How can the fact that every design implies change be taken into account?

Design involves human productions of invention and innovation that may be analytical or generative. Analytical design is a rule-based, determinate form of reasoning that develops a design as a result of propositional understanding (e.g. database design through normalisation). Generative design is a creative production that is indeterminate and subjective. Kant, in his book the *Critique of Judgment* suggests that such aesthetic productions are within the realm of reason, but that they involve a momentum of ideas into a figural schema that is more complete than nature (Groat & Wang 2002). That is, designs erupt from an accelerating flow of thought that might be described as super-rational.

Despite many attempts to establish better tools and more effective approaches for managing design projects the challenges involved in and the complexity of designs have increased over the last decade. Managers and developers are still struggling with the overwhelming complexity and contingency of the work, and they still spend much effort in searching for the “optimal” solution. This research sub-theme addresses some core characteristics of design and aims at suggesting a **set of dimensions** along which it could be useful to characterise design projects.

The literature on design processes and products is very rich, presenting approaches, models, techniques, etc. However, surprisingly few of the contributions are based upon thorough in-depth scientific studies of how design is conducted in real-life practical settings. This research sub-theme will involve in-depth case studies of design work in different areas and different companies. From these studies – and inspired by the scientific design literature – we will suggest **characteristics** of importance for design.

The core idea in situated theory – or contingency theory – is that organisations that want to optimise performance need to adopt the structure that fits best with the situation they are in - the contingencies given them. Thus contingency theory is adverse to the idea of one size fits all. Donaldson (2001, p. 5) formally defines contingency theory in the following way: “At the most abstract level, the contingency approach says that the effect of one variable on another depends on some third variable”

Our hypothesis is that the best design is highly contingent. Thus we will focus on the situatedness of design in order to identify dimensions of influence. There is a known tendency to support a contingency model in difficult settings that involve ambiguous goals, multiple perspectives, and information that is susceptible to multiple interpretations, especially where interactive multi-person communication medium such as face-to-face meetings are impractical (Galegher et al. 1994). We will try to identify such settings. We will develop a **situated design theory** (including both process and product). And we will evaluate this design theory in practice.

When designing a process you often start making a plan. Thus our second hypothesis is that planning and plans become an important part of our design theme. Designing plans raises key issues about how to design systematic and simple concepts to guide processes involving the complexity of the many types of actors and factors involved, including the non-present and the non-human. Models for innovation and planning have often been taken from manufacturing and bare physical planning, but they are insufficient when it comes to

the creation and continuous reassembling of attractive places, where many kinds of people come and go. Planning for the unpredictable encounter or event, building on principles of contingency or situatedness requires new design processes.

In PODES we will instantiate our study of design in the form of planning for better services or experiences. This may lead to designs for indoor experience facilities such as theatres, museums, or outdoors in urban space.

For developing the situated design theory as well as looking at design as planning, we will need access to multimedia laboratory facilities where many different designs – both products and processes – can be evaluated, and where facilities exist to record and analyse what is happening during design evaluations.

Approach: Large project; three senior researchers and four to six PhD students. Professor Jan Pries-Heje will lead this effort. The other senior researchers will be Associate Professor Jørgen Ole Bærenholdt and Associate Professor Keld Bødker. 1st half of the five year period.

Donaldson, L. (2001). *The Contingency Theory of Organizations* Sage Publications, Thousand Oaks, California.

Galegher, J., and Kraut, R.E. (1994). Computer-mediated communication for intellectual teamwork: An experiment in group writing, *Information Systems Research* (5:2) 1994, pp 110-138.

Groat, L. & D. Wang (2002), *Architectural Research Methods*. New York: John Wiley and Sons.

D.5.3 The Design Science Research theme

Research Question: What are the common features and approaches characterising *Design Science Research*?

Description: This sub-theme looks at DSR as methodology. This includes clarifying issues such as: When and what makes Design become scientific research? What characterises the role of qualitative methods?

Design involves building or construction of artefacts. While it is often contextualised in the fields of the humanities (such as art, architecture, theatre, music etc.), its prominence in fields such as economics, medicine, science and engineering is growing. With this growing prominence, design for the purpose of creating artistic, scientific and technical artefacts is attracting increasing interest in the study of IT and communication artefacts, an interest simultaneously fuelled by the need for organisational and managerial studies (Van Aken 2004).

The terms “design research” and “design science” are sometimes used synonymously and sometimes distinctively. Design science is a form of “science of the artificial” (Simon 1996) that involves the scientific adaptation of means-ends rationality to an environment. Designers, with ends in mind (a goal), search for the means by which artefacts will achieve those ends. Design science connects human aims to artefacts that achieve those aims. Design science originated as a hypothetical-deductive view of research, developing artefacts that were acknowledged as subjects of natural law (Simon 1996, p. 3), and complete with systems of hypotheses (Walls et al. 1992) for evaluation. Within the disciplines of engineering, computer science and information systems, design science is most directly concerned with the design, specification, and evaluation of technological artefacts.

A very influential paper on DSR was published by Walls et al. (1992). They proposed the idea of a Design Theory, which they assert should have seven components. They argued that design is both a *product* and a *process*. Thus a design theory must on one side deal with the design product and on the other side it should deal with the design process. This opened up for a broader understanding of design research. So in PODES, the term “design research” is used to distinguish a broader representation of the study of design that incorporates not only a design science of technological artefacts, but also a design science that encompasses the social complexity of the human and organisational context. This understanding of design research acknowledges the relative and constructed character of all types of knowledge (Burr 2003, Law 2004) involved in design processes.

Such an understanding of design science research was further developed into a framework (Hevner et al. 2004). At the core of the framework is a cycle between the build/develop (theorise) and justify/evaluate activities with input from various social actors and different types of knowledge. The input from different social actors and types of knowledge in relation to the design process are best produced by various scientific qualitative methods, such as interviewing (Holstein & Gubrium 2003, Spradley 1979), focus groups (Puchta & Potter 2004), participant observation (Dicks et al. 2006), and text analysis (Phillips & Jørgensen 2002). Since qualitative methods are sensitive to contexts and processes, they are the most suitable to scientifically qualify, validate (Kvale 1995) and generalise (Halkier 2003) practical and procedural social knowledge - also in designing. The perspectivist turn in the field of qualitative methods fits with the broad understanding of design science research since both argue for relational scientific epistemologies.

Analysing the practices of design processes from the approach of the broad understanding of design science research and using qualitative methods with a perspectivist epistemology will lead to new applications (artefacts) in concrete settings as well as additions to the general knowledge base in the form of new and improved theoretical concepts. For the study of design processes it is necessary to have access to a multimedia laboratory where many different kinds of design are developed and evaluated.

Approach: Small project; two senior researchers and two to three PhD students. Associate Professor Bente Halkier will lead this effort and be one of the senior researchers. 2nd half of the five year period

Burr, V. (2003). *Social constructionism*. London: Routledge.

Dicks, B., B. Soyinka & A Coffey (2006). *Multimodal Ethnography*. *Qualitative Research*, 6 (1).

Halkier, B. (2003). The challenge of qualitative generalisations in communication research. *Nordicom Review*. Vol. 24 (1).

Hevner, A., S. March, J. Park & S. Ram (2004). *Design Science in Information Systems Research*. *MIS Quarterly*, Vol. 28, No. 1, pp. 75-105.

Holstein, J. A. & J. F. Gubrium (2003). *Active interviewing*. In: Gubrium, J.F. & J.A. Holstein (eds). *Postmodern interviewing*. London: Sage.

Kvale, S. (1995). *The Social Construction of Validity*. *Qualitative Inquiry*, 1 (1).

Law, J. (2004). *After Method. Mess in Social Science Research*. London: Routledge.

Phillips, L. & M. W. Jørgensen (2002). *Discourse analysis as theory and method*. London: Sage.

Puchta, C & J. Potter (2004). *Focus group practice*. London: Sage.

Simon, H.A. (1996). *The Science of the Artificial*, (3rd ed.) MIT Press, Cambridge, Mass.

Spradley, J.P. (1979). *The ethnographic interview*. Fort Worth: Holt, Rinehart and Winston.

Van Aken, J.E. (2004). *Management Research Based on the Paradigm of the Design Sciences: The Quest for Field-Tested and Grounded Technological Rules*. *Journal of Management Studies* (41:2), pp 219-246

Walls, J.G., G.R. Widmeyer & O A. El Sawy (1992). *Building an information system design theory for vigilant EIS*. *Information Systems Research* (3:1), pp 36-59.

D.5.4 The Experience theme

Research Question: What are the common features and approaches characterising *experience*?

Description: This sub-theme focuses on the design and redesign processes in art and culture production and management.

The music, theatre/musical, dance, entertainment and food industries will expand enormously during the next ten years. Design of facilities, concepts and experiences for live performances and mediated performances will be very sought-after. The same makes itself felt in the redesigning of history and ancient architecture (theatres, concert halls, castles, military fortifications, harbours etc.) But historical and philosophical constructs in particular will be the challenge and aim for redesign projects to create better thinking, better education, better science, better democracy, better laws, better societies etc. Redesign projects take in rituals and processes which have been in excellent use several hundred years ago (Schechner 2003). Through transformations and modern information technology, it is possible to renew these ancient skills and constructions for modern and future purposes.

From a postmodern point of view, life is not to be seen as a condition between history and the future. Today life is action and experience, history has to be an acting and experiencing part of the future. Cultural inheritance is not just preservation of the past. It is the vitalising of myths, rituals, religions and historical actions (Turner 1982, Harsløf 2007). For this purpose the practice-oriented design science of PODES will deal with theories and tools for analysing the new behaviour of consciousness, and cultural and social acting in order to create new concepts, new experience productions and new markets.

The main projects will be about the design/redesign of museum exhibitions, performances (music, theatre and dance), food, catering and restaurant concepts.

The art and design museums as well as the historical (and cultural) museums all over the world are desperately seeking more visitors especially from social groups who do not normally go to museums. For this purpose it is necessary to redesign the concept of exhibitions as well as the concept of experiences in a museum

The music, theatre/opera and festival industries are growing all over the world. Artists, bands and ensembles are brought around – to metropolises and small villages, high-tech facilities and festival tents in the country – to meet old and new audiences with very different social, cultural and religious backgrounds (Østergaard Andersen 1993). For this purpose, a practice-oriented design concept capable of dealing with the art, the ideology and the ever-changing conditions of production will be developed in PODES.

For an ever growing part of the world, food has become more than survival, social behaviour and culture. Food, cooking, serving and eating the meals has developed into a matter of life style, health standards, cultural innovations, performances – and for some chefs: art (Bærenholdt & Sundbo 2007). The distance between the kids' packed lunch and the Crown Prince's wedding dinner is today not long. In the modern experience society both have to be designed with care, artistic feeling and ecological understanding. The combination of the meal with music, theatre, dance, sport, travelling, education, meetings and every sort of cultural and social events has already created an enormous catering industry. But the design of satisfactory concepts for most of the eating situations and spaces are lacking. This great challenge for the practice-oriented design research of PODES will be pursued in this action.

In order to be able to perform practice-oriented design research in these complex artistic and cultural areas we have asked, as part of our PODES application, for the funding of an infrastructure which consists of laboratory facilities with advanced multi-media technology. In this laboratory it will be possible to build and evaluate designs of many different kinds and purposes – artistic and cultural exhibitions, performances, restaurants, events, social and cultural meetings.

Approach: Large project; three senior researchers and four to six PhD students. Professor Olav Harsløf will lead this effort and be one of the senior researchers (+Associate Professor Bjørn Laursen, Associate Professor Henriette Christrup and Associate Professor Keld Bødker). 1st half of the five year period.

Østergaard Andersen, J. (1993). *Rituel Performance og Æstetik. (Ritual Performance and Aesthetics)*. In: Østergaard Andersen, J. (eds.). *Ritual & Performance. Kulturstudier 20*. Århus: Århus Universitetsforlag, pp. 11 - 43.

Bærenholdt, J.O. & J. Sundbo (eds.) (2007). *Oplevelsesøkonomi: Produktion, Forbrug, Kultur. (Experience Economy: Production, Consumption, Culture)*. Frederiksberg: Samfundslitteratur.

Harsløf, O. (2007). *Musik for misbrugere. (Music for Abusers – with an English summary)*. *Tidsskriftet Antropologi (Danish Journal of Anthropology)*. No 54.

Schechner, R. (2003). *Towards a Poetics of Performance*. In: *Performance Theory. Revised and expanded edition, with a new preface by the author*. London and New York: Routledge, 2003. pp. 170-210.

Turner V. (1982) *Introduction*. In: *From Ritual to Theatre. The Human Seriousness of Play* New York: PAJ Publications. pp. 7-19.

D.5.5 The Service theme

Research Question: What are the common features and approaches characterising *service*?

Description: The concept of service comprises activities such as knowledge production and distribution; manual activities such as cleaning and transport; and personal care such as health care service and hairdressing (Illeris 1996); and tourism. Services may be produced and delivered on a market basis or as a public good. Service industries (including the public sector) account for more than 75% of the economy, and even manufacturing adds service to goods. The service sector is therefore a major economic factor in today's society with an immense influence on economic growth, welfare and employment. Of special importance are so called knowledge services which distribute knowledge throughout society and contribute to innovation (Andersen et al. 2000).

Services and how they are composed and delivered are of importance to citizens. Services provide solutions to problems and wellbeing. Manual services such as cleaning solve practical tasks for citizens, health care services and coaching increase the quality of life for citizens. The quality of the service is important to the citizens. Service quality has therefore become a discipline (Edvardsson et al. 1994), which not only focuses on the technical quality of the service product, but also the way in which the service is delivered. Since services are often delivered by personal contact directly (face-to-face) to the customer, the behaviour of the contact person becomes central to quality. Particularly important is the customers' assessment of the service and how the service fits into the customers' life. This has for example been demonstrated in tourism (Barenholdt et al. 2008).

Innovation in services thus creates economic growth in the service firms, provides employment and delivers better services to citizens and firms. However, the development of innovations in services have been demonstrated to be a rather unsystematic process (Sundbo 2008, Boden & Miles 2000), which means that the full potentials of innovation are not utilised. A systematisation of the innovation processes is needed. Service innovations today are not based on research, rather on practical knowledge about customers and the problems in society that service activities should solve. The R&D model known from manufacturing is not applicable to services. Other forms of systematisation that involve knowledge are needed. Practice-Oriented Design Research can fulfil this need. Practice-Oriented Design Research will lead to a general method for systematic development of new services and service processes. It unites practice and practical knowledge about users/customers and scientific knowledge. The first three sub-themes can provide useful elements to new methods for systematic service innovation.

Service innovation can be open (cf. Chesbrough 2003), strategic (cf. Sundbo 2001) or user-based (cf. von Hippel 2005). However, entrepreneurship, which means that an individual starts and carries out an innovation process, either by establishing a new firm or within existing firms (Kanter 1983) is also a prevalent feature in services. Increasingly, service innovation is driven by technological development, particularly of IT. All service aspects mentioned here will be in focus in this sub-theme.

The special nature of service innovations has been demonstrated in tourism. Models for innovation have often been taken from manufacturing, but they are insufficient when it comes to the creation and continuous reassembling of attractive places, where many kinds of people come and go. The tourist site (rather than just the attraction or the place) is a provisional "stage", which is stabilised (non-provisional) by the flow of visitors crossing through and passing by. Innovations and development of tourist products should be seen within that framework.

The sub-theme differs from earlier attempts to study innovation and quality in services (Aa & Elfving 2002) by not only being observatory, but also being action and method oriented. The sub-theme will therefore develop service innovation research further. Practice-Oriented Design Research is the right method for this.

Some of the existing attempts to systematise service innovation have been called service design (Edvardsson et al 2000). The general approach suggested in this proposal will aim at further developing earlier research attempts to better direct innovation in services. Furthermore, our approach to Practice-Oriented Design Research to services will be integrated with those generated in the other sub-themes of this application.

This cross-fertilising is further obvious as experiences are additions to goods and services and thus experience and services must be seen and innovated together (Pine & Gilmore 1999). Furthermore services – in particular knowledge services – are increasingly IT based.

Practice-Oriented Design Research could not only improve the innovation process and thus provide new and more relevant services to the users – whether citizens or enterprises. It can also contribute to improve the quality of existing services so that the users experience better service. This once more improves business performance of firms and thus their competitive ability as well as the wellbeing of individuals both as consumers and citizens.

The application of Practice-Oriented Design Research in this sub-theme will result in development of: new methods for innovation; new knowledge about innovation processes in services; new possibilities of developing systematic methods based on practice and scientific knowledge; concrete service innovations; and a renewal of the existing service management theory (e.g. Grönroos 2000, van Looy et al. 1998).

These results will be obtained by the following methods: theoretical development of service innovation and production/delivery methods based on Practice-Oriented Design Research; case studies and experiments in service firms and public institutions; laboratory experiments – for which the laboratory facilities mentioned in section D.6 will be used.

The research in the service theme needs access to the multimedia laboratory facilities of PODES for evaluation and testing of new IT-based services in reality before these services are launched on the market. The laboratory tests will decrease the costs and risks of launching new service products.

More specifically, research actions including PhD projects will be created. These projects will be based on cooperation with service firms and public institutions and will also involve users. The general methods will consist of a mixture of objective observation and action research where the researchers influence the objects and participate in the processes in firms, institutions or user groups. The objectives are the social processes for developing, producing and delivering services and IT in these processes.

Approach: Large project; four senior researchers and four to six PhD students. Professor Jon Sundbo will lead this effort and be one of the senior researchers. The other senior researchers will be Professor Jan Mattsson, Associate Professor Lars Fuglsang, and Associate Professor Michael Haldrup. 1st half of the five year period.

Aa, W. van & T. Elfring (2002), Realizing Innovation in Services, *Scandinavian Journal of Management*, vol. 18 no. 2 pp. 155-71.

Andersen, T., I. Jensen & A. Prahl, (eds.) (2000). *Kompetenceudvikling - i et organisatorisk perspektiv (Competence Development – in an organizational perspective)*. Frederiksberg: Roskilde Universitetsforlag.

Boden, M. & I. Miles (eds.) (2000). *Services and the Knowledge-Based Economy*. London: Continuum.

Bærenholdt, J.O., M. Haldrup & J. Larsen (2008). *Performing Cultural Attractions*. In: Darmer, P. & J. Sundbo (eds). *Production of Experiences*, Cheltenham. Edward Elgar (in press).

Chesbrough, H. (2003), *Open innovation: the new imperative for creating and profiting from technology*, Boston: Harvard Business School Press.

Edvardsson, B., B. Thomasson & J. Øvretveit (1994), *Quality of service*, London: McGraw-Hill.

Edvardsson, B., A. Gustafsson, M. Johnson & B. Sanden (2000), *New Service Development and Innovation in the Service Economy*, Lund: Studentlitteratur

Grönroos, C. (2000), *Service Management and Marketing*, Chichester: Wiley

Kanter, R.M. (1983). *The Change Masters*. London: Unwin

Pine, B.J. & J.H. Gilmore (1999), *The Experience Economy*, Boston: Harvard Business School

van Looy, B., K. Krois, D. Buyens & T. Vandenbossche (1998), *The role of empowerment in service organisations*. In: van Looy, B., R. Dierdonck & P. Gemmel (eds.), *Services Management*, Harlow: Prentice Hall

von Hippel, E. (2005), *Democratizing Innovation*, Cambridge Mass: MIT Press.

D.6 Methodology, technology and infrastructure

What type of knowledge can be qualified through a design practice? The answer is: knowledge about creation and planning; crafts and services; architecture and performances; and art forms and cultural history. The world famous crossing of the Atlantic last summer in a full scale model of the Viking ship Havhingsten (Sea Stallion) sailing like Svend Tveskæg (Svein Forkbeard) and Knud den Store (King Canute) from Roskilde via Stavanger to Dublin was not merely a reconstruction of a cultural historical event. It was a redesign of tales, myths, and sailors' knowledge qualified through experimental practice.

Design Science Research (DSR) seeks to extend the boundaries of human and organisational capabilities to create new and innovative design artefacts. In the DSR paradigm, knowledge and understanding of a problem domain and its solutions are achieved in the building and application of the designed artefacts.

In our application of DSR, we will start out from a natural-science perspective where things progress through hypotheses, experiments, justification or falsification. We will try to apply a human-centred approach, building on historical fantasy that interprets, reproduces and redesigns. By doing so, we will throw new light on processes and phenomena in the form of development and artefacts as well as concepts and inventions.

The targeted search for truth in the natural sciences combined with the retrospective redefining and redesigning of the human sciences leads to new and never tried opportunities which open up countless combinations of experimental and artistic approaches in doing research.

A commonly held view is that science always has a goal or a vision whereas art always is carried by urge, impulse, idealism or self realisation. Never the less, the history of science shows us many examples of how scientific results have been designed in the same way as experimental art. An example is the PH-lamp known all over the world, where the vision was to create the perception of soft gaslight through the use of an incandescent lamp seen through hand-blown and sand-blasted solid opal glass. Thus the experiment starting from an antediluvian construction led to an artistic and scientific success at the time.

The same kind of future-historic experiment was seen when the modern musical combined the concept of opera found in Wagner with modern light and sound research used for missions in outer space.

We will apply experiments and iterations in our design approach both for developing and refining the design approach and possibly as an integral part of the approach we create. When we talk about the performance design area, experimental technology is typically applied within the area of light and sound. In designing architecture, urban space, or events experiments and iterations will also be able to supply solutions for future art, buildings, urban renewal, traffic and infrastructure. Finally, experiments and iterations are already known to be valued in design interfaces for IT systems.

Our design approach will apply two forms of evaluation: naturalistic and artificial.

Naturalistic evaluation explores the performance of a solution in its real environment i.e., within the organisation. It embraces all of the complexities of human practice in real organisations. Naturalistic evaluation may be difficult (and costly) because it must discern the effects of many confounding variables in the real world. Naturalistic evaluation is empirical and may be interpretivist, positivist, and/or critical. Examples of naturalistic evaluation methods include case studies, field studies, surveys, ethnography, action research, etc. Naturalistic evaluation relates closely to the three realities described by Sun & Kantor (2006) in that a naturalistic setting would involve real users using real systems to solve real problems (or to accomplish real tasks in real settings). To the extent that naturalistic evaluation is affected by confounding variables or misinterpretation, evaluation results may not be precise or even truthful about an artefact's utility or efficacy in real use.

Artificial evaluation is predominantly positivist, but it is not impossible to use interpretivist or even critical techniques. It evaluates a solution in a contrived and non-realistic way. For example, artificial evaluation includes laboratory experiments, field experiments, simulations, etc. Artificial evaluation is then unreal in some way or ways according to the three realities (Sun & Kantor 2006), such as unreal users, unreal systems, and especially unreal problems (not held by the users and/or not real tasks, etc.). To the extent that an artificial evaluation setting is unreal, evaluation results may not be applicable to real use.

Technology and infrastructure

In order to be able to perform practice-oriented design research, real-life experiments must be constructed. Scientific experiments in complex artistic, cultural and social areas often need to be performed in the controlled settings of a laboratory. As a part of our PODES application we therefore ask for the funding of the necessary technology and infrastructure. This infrastructure consists of laboratory facilities with advanced multimedia technology. In this laboratory we will build and evaluate designs of many different kinds, which are relevant for all the PODES sub-themes and research actions. For example, within these premises we intend to build different "Experimentariums" including programming and production equipment for visuals, music sound and video, as well as scenic and acoustic modules.

Investment in installations for the multimedia design laboratory:

• Interior arrangements/walls modules	300,000 DKK
• IT-equipment	250,000 DKK
• Video-equipment	150,000 DKK
• Sound equipment	100,000 DKK
• Light equipment	100,000 DKK
• Mobile stage modules	50,000 DKK
• Mobile installations	50,000 DKK
• Installations total	1,000,000 DKK

To run the laboratory, we apply for:

• 1 IT-technician	300,000 DKK per annum
• 1 AV-technician	300,000 DKK per annum
• Maintenance of equipment	100,000 DKK per annum
• Costs for actual performances	300,000 DKK per annum
• Total running costs	1,000,000 DKK per annum

This multimedia design laboratory will also attract international researchers and students, each of them bringing ideas and projects which can confirm our design approach and will be seen by the global design intelligentsia.

Sun, Y. & P. Kantor (2006). Cross-evaluation: A New Model for Information System Evaluation. The Journal of American Society for Information Science and Technology 56(5), 614-628

D.7 Relevance to society, research and education

Design Science Research is relevant to society, research and education as we will show in the following.

Relevance to society:

Danish society is already heavily influenced by the global competition in which IT, services and experiences are increasingly becoming core elements. In the future, new innovative approaches to delivering and using services and experiences will become critical parameters in the competition for economic growth, employment, welfare and the wellbeing of the citizens. Practice-Oriented design science can improve the performance of all these parameters because it concentrates on designing something irrespective of the domain.

Practice-Oriented design science can be used in all areas of employment, organisation and education – especially in areas where Denmark is already in a leading position in the world. E.g. our research will enable: the design and development of "products" for the service area and public sector and the rapidly growing experience sector; the design and development of the global expansion of Danish companies (since they often include service, experience and the use of IT in their product concept); the design and development of new or alternative processes for business and organisational changes; the development of IT innovations; and the design and development of our educational concept for the continuous socialisation and learning of our

3-19 year olds – one of the most important raw materials of this country – building on Denmark’s leading position in education from pre-school over public school to high-school and university.

Relevance to research:

PODES will be based on the disciplines: Information Sciences, Computer Science and Information Systems, Business administration, Geography, Communication and Performance-design. Strong synergies between these disciplines already exist at RUC because they are part of the same concentrated campus university, furthermore, most of disciplines can be found at the CBIT-institute, which enables researchers to work together on practice-oriented research. This construction is characteristic of RUC. The institute spans from the Humanities over Social Sciences to Natural Sciences (the three classic disciplines) with depth and practical skills ranging from polyhistorians to professional educators. The research staff will therefore be able to establish competent research teams in all of the sub-themes presented earlier. Research at RUC is cross-disciplinary and therefore often organised across departments. E.g. PODES will influence the scientific approach to planning, tourism, transport, regional development etc. in the Department of Environmental, Social and Spatial Change where Geography is placed. PODES will therefore impact all the high priority research fields at RUC: Innovation and entrepreneurship, User-based IT, Performance and experience design, Regional and national planning.

Relevance to education:

PODES will produce a new fundamental theory for a new type of students who will leave the university with methodological as well as practical applicable skills. Their profession will be that of entrepreneurs, experimenters and innovators. They will be able to transform research-based methods, theories and results into concrete and applicable assets while solving unforeseen and unpredictable assignments. Practice-Oriented design science has perspectives for all educations – at universities as well as in all other educations from pre-school to high-school. The new fundamental theory will be connected with aspects of entrepreneurship that the university according to a contract with the Ministry for Research is obliged to introduce in all studies. Further PODES will be a core element in a new Bachelor education in humanistic-technological fields.

E. Researcher excellence and past performance

In this section we will demonstrate the excellence of each of the research groups, their engagement with national and international research partners and present a list of selected publications.

The PODES researchers will partly be recruited (PhD scholars) and partly come from existing research groups at RUC. The relevant existing research groups and their past performance are described below.

E.1. Innovation in firms and industries

The research fields are innovation and entrepreneurship.

Co-ordinator: Jon Sundbo.

Past performance and synergy between past/current research and PODES

The research group has existed since 1993. The research has focused on innovation and entrepreneurship, and especially on the organisation and management of innovation, and, to a lesser extent regional, network and national innovation policy perspectives. Other research themes have been organisational theory, management and marketing, industrial policy and economic macro trends in the society seen from a sociological and economic perspective (for example the information society, the knowledge economy, the service society, the experience economy). The group is cross-disciplinary representing sociology, economics, political science and business administration.

The group is outstanding for its theoretical focus being the only research group in Denmark that concentrates on service management and marketing. Further, the group has contributed substantially to a new, international understanding of innovation as being market based, but this is given an internal managerial interpretation and the involvement of employees is seen as a core element of this approach. The group has published international articles and books about this topic of “strategic innovation” or “strategic reflexivity”. Members of the group have a strong record of international publications.

The group has been a major partner in two research initiatives across the departments at RUC. One is the Centre of Service Studies. The Centre was established in 1993 and comprises a number of senior scholars at the university. This group of researchers has substantial experience in service research and has participated in several international research projects including two financed by the EU-framework programmes. Members of the centre have done resource analyses for government departments, have been advisors to Danish trade associations and service firms, have regular contacts with a number of leading foreign research institutions and regularly arrange international conferences. The other initiative is the Centre for Experience Research, which undertakes cross-disciplinary research on culture, experience industries and the experience economy. This centre has focused on experience design and the economy. International research seminars have been organised, and books and articles have been published.

Several large research projects have been carried out by the research group. The major projects are the following: (1) *Service Innovation – Innovation in Services (SI4S)*: An international project within the EU 5th framework, which was a pioneer project in investigating innovation in services. The project performed case studies in service firms using statistical analysis and produced the first survey on how to measure innovation activities in service firms. (2) *Services, internationalisation and competition*: A cooperative project with other Danish research groups. The project analysed the relation between innovation, internationalisation and competencies in service firms with particular focus on the use of IT in service production. Internationalisation and competence requirements were analysed at a macro level. (3) *E-services*: Investigation of entrepreneurship and innovation processes when knowledge service firms start using IT as a production and delivery instrument. This leads to self-services. Through case studies, the relation between the service provider and the users in e-services were analysed. (4) *Management and innovation in the experience economy*: An EU-financed study of the experience economy. The focus has been on the management of experience firms and how innovation is organised in such firms. The project has used case

studies, surveys and action research (innovation development workshops for experience firms) as methods. (5) *Innovation laboratory*: Part of a Danish knowledge centre about the experience economy. Experiments in experience firms and desk studies will lead to a tool for innovation work in experience firms.

In 2008 two large research projects start. (1) *When the customer encounters the employee*: Investigation of how this encounter – whether based on person-to-person encounter or communication via IT – can lead to innovation. (2) *Public-private innovation networks in services (PPIN)*: Investigation of how such partnerships can lead to innovation in service firms and the public sector. EU-project in the 7th framework.

Engagement with national and international research partners

The research group has several international research-network relations. Of course networks are loosely composed and overlapping. However, four main network relations can be identified for the research group.

One is a network of *innovation researchers*. The research group has attempted to support the particular strategic theoretical view on innovation by organising seminars and publishing books on innovation. The impact of this network is demonstrated by the books that members of the research group have edited. These books are Sundbo & Fuglsang 2002 (including chapters by Professor Harry Nyström, Uppsala, Sweden, Professor John Bessant, Warwick, UK, and Professor Marius Meeus, the Netherlands) and Sundbo et al. 2006 (including chapters by Professor C. Antonelli, University of Torino, Italy, Professor Phil Cooke, University of Cardiff, UK, Associate Professor Jaume Guia, University of Girona, Spain, and Professor Jeremy Howells, University of Manchester, UK) (see the publication list of Jon Sundbo).

Another network is more specific on *innovation in services*. This may be considered the core network since this is the field where the research group has made its main contribution to the international research front. The impact of this network is demonstrated by the participation in international research projects, mainly the two EU projects and the publications the first project has resulted in. The partners in the SI4S project were PREST, Manchester University (including Professor Ian Miles), STEP group Oslo (including Johan Hauknes), IFRESI, Université de Lille (including Professor Faïz Gallouj). The PPIN project includes Université de Lille (including Professor Faïz Gallouj, and Professor Faridah Djellal), University of Alcalá, Spain (Professor Luis Rubalcaba, University of Bremen (Professor Andreas Pyka), University of Utrecht, the Netherlands (Professor R.A. Boschma), and the University of Lillehammer, Norway (Professor Rolf Rønning).

A third network concerns *service management and marketing*. Members of the research group participate in three networks: The European association of service researchers, RESER, a network of researchers within service marketing and management (conferences organised by Université de Aix-en-Provence every second year) and a network of service quality research (annual SERVQUAL conferences in Karlstad, Sweden and Arizona, USA). The network relations are demonstrated by co-authorship of articles and membership of assessment committees. Among the first are the titles of the publication lists for Jon Sundbo and Jan Mattsson. It includes that Jon Sundbo has assessed the research institute CRIC at Manchester University and the Service Research Centre at Karlstad University, Sweden. Jon Sundbo and Jan Mattsson have been members of several doctoral committees in service research institutions in Finland, the Netherlands, the UK, Sweden and other countries.

A fourth network is a newer one on *experience research*. The activities have been participation in seminars and organisation of a Scandinavian research seminar on experience in 2006, which resulted in a book in Danish, but with several Scandinavian authors (including Reidar Mykletun from University of Stavanger, Norway, Professor Lars Lindkvist from University of Kalmar, Sweden, Professor Lena Mossberg, BI, Norway).

List of selected publications (apart from those mentioned previously for Jon Sundbo and Jan Mattsson)

Fuglsang, L. (2005). IT and senior citizens: using the internet for empowering active citizenship. *Science, Technology, & Human Values*. 30 (4), pp 468-495.

- Fuglsang, L. (2005). The image of senior citizens, elderly care and IT in newspapers. In: B. Jæger (eds.). *Young technologies in old hands - an international view of senior citizens*. Copenhagen: DJØF forlaget.
- Fuglsang, L. & P.B. Olsen (red). (2004). *Videnskabsteori i samfundsvidenskaberne. På tværs af fagkulturer og paradigmer*. Frederiksberg. Roskilde Universitetsforlag. (Lars Fuglsang has written the chapters: "Indledning", "Aktør-netværksteori eller tingenes sociologi" and "Systemteori og funktionalisme")
- Fuglsang, L. (2001). Management problems in welfare services: the role of the "social entrepreneur" in home-help for the elderly, the Valby case. *Scandinavian Journal of Management*. 17, pp. 437-455.
- Fuglsang, L. (2001). Three Perspectives in STS in the Policy Context. In: Cutcliffe S. & C. Mitcham (eds.). *Visions in STS: Counterpoints in science, technology and society studies*. Albany: State University of New York Press, pp. 35-50.
- Fuglsang, L. (1996). Information and Credibility Problems of STS and Technology Assessment. *Bulletin of Science, Technology and Society*. Refereed papers section. Vol 15, No 5/6, pp. 293-301.
- Scupola, A. (eds.) (2008). *Cases on Managing E-Services*. IGI Global Publishers, New York.
- Scupola A. (2008). E-Services in Danish Research Libraries: Issues and Challenges at Roskilde University Library. In: Scupola, A. (eds.). *Cases on Managing E-Services*. IGI Global Publishers. New York.
- Scupola A. & C. Steinfield (2007). The Role of IT in Industrial Clusters-The Case of Medicon Valley. In: Fuglsang L. (eds.). *Innovation and the Creative Process*. Edward Elgar.
- Bjørn, P., A. Scupola & B. Fitzgerald (2006). Expanding Technological Frames Towards Mediated Collaboration-Groupware Adoption in Virtual Learning Teams. *Scandinavian Journal of Information Systems*. Vol. 18, No. 2.
- Scupola A. (2002). The Impact of Electronic Commerce on Industry Structure – The Case of Scientific, Technical and Medical Publishing. *Journal of Information Science*, Vol. 28, No. 3.
- Scupola A. (2003) The Adoption of Internet Commerce by SMEs in the South of Italy: An Environmental, Technological and Organizational Perspective. *Journal of Global Information Technology Management*. No. 6, Vol. 1

E.2. IT development, management and user driven IT innovation

The research fields are IT development, IT design, IT innovation, user involvement, and IT (project) management.

Co-ordinator: Jan Pries-Heje.

Past performance and synergies between past/current research and PODES

The research was, until 2006, a part of the computer science group. In 2006 the group was founded under the name of "User Driven IT Innovation" (UDI). Understanding user needs and requirements starts with understanding people in a context. These discoveries can then be translated into visions of user experiences and used for driving the design of innovative IT solutions. The starting point of user-driven IT innovation is analyses of the needs of users, customers, teams of professionals, organisational units, and businesses. The scope of the research is to achieve more successful IT projects and greater benefits from using using IT. The group focuses on how organisations manage, design, implement, and use IT to support users' needs and business strategies. Internationally this research is related to the widely established research community called Information Systems (IS).

There is a considerable synergy between PODES and past and existing UDI research. One example is *Effects-Driven IT Development* (2005-2009) funded by CSC Scandihealth A/S, Ministry of Science, Technology and Innovation, and Region Zealand. The aim of this project is to investigate how the effects of the use of a system could play a prominent role in the contractual definition of IT projects and how contract fulfilment could be determined on the basis of proven utility value and measured effects. The idea of effects-driven IT development is generally applicable to all large-scale IT designs. Thus the whole idea of "effects-driven" can be used in PODES. Another example is *Usability evaluation research* (2006-2009) funded by the Danish Research Agency. The usability evaluation research (USER) project aims to investigate evaluation methods, such as thinking aloud, to understand the use of the methods, scrutinise their reliability,

and suggest improvements of the methods. As evaluation is a core part of a design process results from USER will be of significant relevance to PODES. A third example of relevant past research is *Healthcare IT* (2004-2009) funded by the Danish Research Council's Program on Information Technology. The topic of the Healthcare IT (HIT) project is IT-supported communication and coordination in the healthcare domain. The purpose of the project is to develop conceptual frameworks, design principles, prototypes, and methods to support the design, implementation, and use of collaborative healthcare information systems based on analyses of existing systems and empirical studies of development practices. All the findings on design, iteration, participation and so on will have considerable synergy with PODES. Finally, the UDI group has recently obtained funding for an innovation consortia called *SourceIT* (2008-11). The aim of SourceIT is to answer questions like: (1) How can a company be innovative while at the same time optimising sourcing? (2) What are the pre-conditions for optimal sourcing in relation to innovative capability? Sourcing is defined as both in- and out-sourcing, as well as decision about letting customer or client organisations design part of the IT product. For example, one of the participating companies develops an electronic patient journal system. One sourcing decision is how much of the system should be designed or adapted locally in the specific department at a hospital. The SourceIT project is using a design science research approach to develop a method for sourcing decisions. The approach to be used is a so-called design nexus (Pries-Heje & Baskerville 2008).

Engagement with national and international research partners

The following list includes institutions with which members of UDI have collaborated in the past three years, either in joint funded projects or in joint refereed publications.

Academic collaborators: Carnegie Mellon University, USA; Chinese Academy of Science, China; Curtin University of Technology, Western Australia; Georgia State University, USA; Indian Institute of Technology Guwahati, India; International Institute of Socio Informatics, Germany; Software Engineering Institute, Pittsburgh USA, Simon Fraser University, Canada; University of Strathclyde, Scotland; Aalborg University; Alexandra Institute; Copenhagen Business School; IT University of Copenhagen; Risø National Laboratory; Technical University of Denmark; University of Copenhagen; Århus School of Business; Århus University.

Industrial and non-academic collaborators: Amagerværket; Atp-huset; CSC Scandihealth; Danish Biometrics; Danske Bank; DELIA; Greater Copenhagen diabetes outpatient clinics (Amager, Hvidovre, Bispebjerg, Frederiksberg, and Rigshospitalet); Honeywell (USA); hospitals and EPR units in the Zealand Region (Vestsjælland, Storstrøm, and Roskilde Counties); Jyske Bank; LifeScan Denmark; Danish Ministry of Finance – The Digital Task Force; Municipality of Copenhagen (Københavns Kommune Omsorgssystem); Nokia Mobile Phones; PBS; Rovsing Space; SimCorp; Snitker & Co; sundhed.dk; Systematic Software Engineering.

List of selected publications (apart from those mentioned previously for Jan Pries-Heje and Jesper Simonsen)

Hertzum, M. (2006). Problem Prioritization in Usability Evaluation: From Severity Assessments Toward Impact on Design. *International Journal of Human-Computer Interaction*, 21(2), 125-146.

Hertzum, M. (2006). Minimal-Feedback Hints for Remembering Passwords. *ACM Interactions*, 13(3).

Bødker, K. & Carstensen, P. (2004). Development and use of web-based information systems. Special Issue Editorial. *Scandinavian Journal of Information Systems*, 16, 5-12.

Kensing, F., J. Simonsen & K. Bødker (2004). Participatory IT Design – an exemplary case. *Journal of the Center for Information Studies*, Vol. 5, Issue 3, pp. 58-68.

Hertzum, M. (2003). Making Use of Scenarios: A Field Study of Conceptual Design. *International Journal of Human-Computer Studies*, 58(2), 215-239.

Hertzum, M. & Pejtersen, A. M. (2000). The Information-Seeking Practices of Engineers: Searching for Documents as well as for People. *Information Processing & Management*, 36(5), 761-778.

Kensing, F., J. Simonsen & K. Bødker (1998). Participatory Design at a Radio Station. *Computer Supported Cooperative Work*, Vol. 7, No. 3-4. Kluwer Academic Publishers, pp. 243-271.

Hertzum, M. (1998). A Review of Museum Web Sites: In Search of User-Centred Design. *Archives and Museum Informatics*, 12(2), 127-138.

Bansler, J. & Bødker, K. (1993). A Reappraisal of Structured Analysis: Design in an Organizational Context. *ACM Transactions on Information Systems*, 11(2), 165-193.

E.3. Theatre, music, visual culture, performance design and new media

The research fields are: Cultural convergence in new media; Music, food and space; The Art Museum of the future; Multi-sensoric perception via multi-medial design; Experience based communication in web design

Co-ordinator: Olav Harsløf.

Past performance and synergy between past/current research and PODES

The research group Visual Culture had been researching museums, architecture of museums and exhibition concepts for more than ten years. The research group has arranged conferences, seminars and published several articles about these matters. When the new programme of Performance Design was established in 2003, the researchers from this group in collaboration with the programme of Performance Design at Massey University, Wellington, New Zealand, planned and held an international symposium at the Danish Academy in Rome with artists and researchers participating from the US, New Zealand, Italy, the UK, Estonia, Greece and Denmark. A book on *Performance Design* with contributions from the participants and other performance studies and performance design researchers will be published just before the Performance Studies International Conference in Copenhagen in August 2008. In 2005 the two research groups together formed the larger research group of Visual Culture and Performance Design. This group has done major research within these projects:

- Interactive structures in architecture and music
- Concepts of museum exhibition
- Location-based video games – theory and design
- Genre in popular music
- Rock lyrics and jazz history
- Different systems of drawings
- Space and interaction
- Food as an art form
- Web and media design
- Film and documentaries

Engagement with national and international research partners

The group has been engaged with other research partners on projects in four different areas.

Performance Design: an international project, conference and book together with Tisch School, Department of Performing Studies, New York University, and Department of Performance Design Massey University, Wellington, New Zealand.

Cultural convergence in new media: The case studies are mainly from Denmark and explore a wide array of sites, including the leisure section of a major newspaper, a telecommunications company, designers of web sites and computer games.

Music, food and space. House of the Meal/Experimentarium of the Meal: Creating a concept of a House of the Meal as an Experimentarium together with international partners and building it together with national and local partners. The “House/Centre-project” will provide knowledge about practical as well as theoretical perspectives of the meal e.g. knowledge about taste, cultural and natural history, performativity, aesthetics, other aspects of the meal (colour, sound, music, acoustics, space and design) and all practical facts in relation to catering.

The Art Museum of the Future: This project is a common research project – 2007-2010 – between Roskilde University and ARKEN Museum of Modern Art. It is the fundamental hypothesis of the project that the art museum of the future must fulfil its task in two ways: one is to reach and communicate with new generations and other social groups of visitors within the space of the museum by offering new adequate and qualitative

forms of experiences in the meeting with the original works of art. The other is to make the art museum exceed the limits laid down, find its audience outside the walls of the buildings by making its works of arts accessible wherever the audience might be e.g. via media to which the audience has access.

From the selected list of publications below, two examples should be highlighted in the context of PODES for their innovations in design and redesign of art and culture, and innovations in the experience economy: Hannah & Harsløf (2008), Bærenholdt & Sundbo (2007).

List of selected publications (apart from those mentioned previously for Olav Hartløf)

- Christrup, H. (2006). Space Spirit Interaction – A Performance Design Perspective. Submitted to the anthology: Experience Production
- Hannah, D. & O. Harsløf (in press, June 2008). Performance Design. Museum Tusulanum Press. Copenhagen.
- Holt, F. (2007). Genre in Popular Music. Chicago: University of Chicago Press.
- Holt, F. (in press). A View from Popular Music Studies. In: Stobart, H. (eds.) The New (Ethno)musicologies. Scarecrow Press.
- Laursen, B. (in press). Two different systems of drawing – outline and shading. Roskilde Universitetsforlag. http://www.ruc.dk/performance-design/ansatte/Bjoern_Laursen/bjornpublikationsliste/
- Laursen, B. (in press). Aspects of the Genesis of Linear Perspective. Pedagogical and theoretical comments on how sighted people and one blind girl perceive and draw a cube. Roskilde Universitetsforlag. <http://www.utsc.utoronto.ca/~psyc54/articles/laursen.html>
- Wille, N. E. (2007). Fra Tegn til Tekst. En indføring i teorier om sproglig kommunikation (From sign to text. An introduction to the theories of verbal communication). København: Samfundslitteratur.
- Wille, N. E. (2003). Legibility of text meant to be read from a computer screen – a key factor in e-publishing. In: Hertzum, M. & S. Heilesen (eds.). Proceedings of the Third Danish Human-Computer Interaction Research Symposium. Datalogiske Skrifter. Roskilde: Roskilde Universitetscenter.

E.4. Tourism group

The research fields are Culture, Tourism and Regional Development, with special emphasis on performance of tourists and employees and the role of tourism in urban and regional planning.

Co-ordinator: Jørgen Ole Bærenholdt

Past performance and synergy between past/current research and PODES

Three tourism researchers, Jørgen Ole Bærenholdt, Michael Haldrup and Jonas Larsen, in geography and sociology, along with PhD students, form a subgroup of the much larger Space, Place, Mobility and Urban Studies (MOSPUS) research unit in the Department of Environmental, Social and Spatial Change (ENSPAC). The total research unit is headed by Dr. Scient. Soc. Jørgen Ole Bærenholdt and also includes urban planner John Pløger among totally 13 permanent positions and 30 members including PhDs, temporary project staff, affiliates etc. The tourism group is only a subgroup.

The tourism group emerged as an excellent, dynamic and productive when brought together in the Tourism Research Centre of Denmark (Roskilde University in cooperation with the Copenhagen Business School and the Research Centre of Bornholm, from 1999 to 2003, supported by the Danish Social Science Research Council). Bærenholdt headed the project “Destination development and construction – Representations, Networks and Strategies” (funding 2.9 million DKK). The project and especially the resulting book *Performing Tourist Places* (2004, re-printed 2007) were important in launching Danish tourism research internationally. While building on studies in Denmark, it was very well received internationally, because of its new theoretical ‘performance’ approach, methodological innovations and rich empirical material.

As part of the project Bærenholdt supervised Jonas Larsen’s PhD thesis *Performing Tourist Photography* and following the defence in 2000, Larsen was employed at Lancaster University. Larsen was appointed

assistant professor co-financed by the project and Geography at RUC in 2005, and became an associate professor in the Department of Sociology, Social Work and Organisations, Aalborg University in 2007.

Haldrup was appointed associate professor in 2003. Bærenholdt was appointed full professor in planning at the University of Tromsø in the spring term of 2006. In spring 2007, Haldrup was a visiting research fellow at Lancaster University.

In 2005 Michael Haldrup and Jonas Larsen together with international partners were granted funds for a new project from 2005 to 2008 "Tourism Performance and the Orient" from the Danish Social Science Research Council (funding 1.5 million DKK). The project, which studies the performance of Danish tourists going abroad, is led by Michael Haldrup. Haldrup and Larsen now finalise the project with the book *Tourism, Performance and the Everyday: Consuming the Orient*, contracted with Routledge.

The performance of the group also includes work by Bærenholdt and Haldrup on cultural tourism (Vikings and Rock Music), approached in several dimensions: Tourist experience, Front-stage staff performance (staff in direct face-to-face encounters with visitors), Networks and Regional development. Larsen has further developed his interest in photography and was involved in transport research at Lancaster, studying how and why people sustain their networks through both electronic communication and travelling.

Bærenholdt (together with Sundbo) edited a book on the experience economy and just finished another project on "Experience Economy and Regional Development on Lolland" focusing on the performance of front-stage employees as a regional resource, both central activities of the Centre of Experience Research at RUC.

The group has published widely also in related topics, such as material culture and the material construction of societies, relevant to practice-oriented design science research, and new publications and conferences are planned in the field of design science and cultural production. It is therefore well prepared to move further into Practice-Oriented Design Science Research in several dimensions, contributing to developments in theories and new practices in fields where design science is still a relative new challenge.

Engagement with national and international research partners

The group of tourism researchers is engaged in cooperation with the Department of Sociology & Centre for Mobilities Research, Lancaster University. Another central partner in the UK has been the Department of Geography, Durham University. These two departments belong to the highest ranked within their disciplines in the UK and are both internationally well known for their excellence. Other partners are the Department of Geography, University of British Columbia; the Department of Service Management, Lund University, Hålsingborg Campus; the Tourism Research Centre of Iceland (recently signed agreement on cooperation); and a number of researchers working with culture and events across several departments at Aarhus University.

Bærenholdt is co-supervisor for PhD students in tourism and events in Anthropology at Aarhus University; in Intercultural Communication and Management at CBS; and Haldrup has had a visiting PhD student from University of Malaga. Furthermore, there are strong links to the Department of Sociology, Aalborg University (where Larsen is employed) and several departments at University of Tromsø (Bærenholdt was employed there and has been suggested to be a key person in a new graduate school on tourism). We are also networking with researchers at a number of other Nordic and British universities and colleges, including those in Oulu, Joensuu, Umeå, Östersund, Kalmar, Alta, Lillehammer, Stavanger, Reykjavík, Sheffield, Manchester, Bristol etc.

List of selected publications

- Bærenholdt, J.O. (2007). *Coping with Distances*, Oxford: Berghahn (doctoral habil. dissertation)
- Bærenholdt, J.O. & B. Granås (eds.) (2008). *Mobility and Place: Enacting Northern European Peripheries*. Aldershot: Ashgate (in press).
- Bærenholdt, J.O. & M. Haldrup (2004). *On the Track of the Vikings*. In: Sheller, M. & J. Urry (eds). *Tourism Mobilities, Places to Play, Places in Play*, London. Routledge, pp. 78-89

- Bærenholdt, J.O. & M. Haldrup (2006). Mobile Networks and Place Making in Cultural Tourism. Staging Viking Ships and Rock Music in Roskilde, *European Urban and Regional Studies*, 13 (3): 209-224.
- Bærenholdt, J.O., M. Haldrup, J. Larsen & J. Urry (2004). *Performing Tourist Places*. Aldershot. Ashgate.
- Haldrup, M. (2004). Laid Back Mobilities: Second-home Holidays in Time and Space, *Tourism Geographies*, 6 (4). pp. 434-54.
- Haldrup, M. (2008). Banal Tourism? Between Cosmopolitanism and Orientalism. In: Obrador, Crang and Travlou (eds.) *Doing Tourism: Cultures of Mediterranean Mass Tourism*, Aldershot. Ashgate.
- Haldrup, M. & J. Larsen (2003). The Family Gaze, *Tourist Studies*, 3 (1), pp. 23-45.
- Haldrup, M. & J. Larsen (forthcoming). *Tourism, Performance and the Everyday: Consuming the Orient*. London. Routledge
- Larsen, J., J. Urry & K. Axhausen (2007). Networks and Tourism: Mobile Social Life. *Annals of Tourism Research* 34(1), pp. 244-262.
- Larsen, J., J. Urry & K. Axhausen (2006). Geographies of Social Networks: Meetings, Travel and Communications, *Mobilities*, 1 (2), pp. 261-283.

E.5. Knowledge production and communication

The research fields are strategic communication, dialogical knowledge production methods, research communication and net-based communication.

Co-ordinator: Bente Halkier

Past performance and synergy between past/current research and PODES

The research group has only existed for one and a half years. However in that short time, it has already attracted external funding and PhD scholarships, has published in a wide variety of academic outlets, and has organised several seminars and doctoral courses. Examples of externally funded projects within the research group are:

- "Sense-making strategies and the user-driven innovations of virtual worlds", funded by The Strategic Research Council.
- "Professionalization of school-home cooperation", funded by the EU and CVU-Lillebælt.
- "Network communication and change of food practices", funded by The Research Council for Society and Business.
- "Actors and avatars. Communication in virtual worlds", funded by The Research Council for Communication and Culture.
- "The job interview - negotiation of ethnicity, gender and professional competence", funded by The Social Scientific Research Council.

Furthermore, the research group is the driving force, and the head of the research group is principal investigator, in a major application for The Danish National Research Foundation on a "Centre for Qualitative Methods Research".

From the selected list of publications below, two examples should be highlighted in the context of PODES for their methodological relevance: Siggaard Jensen, S. (2008) and Phillips, L. (2006).

The doctoral course most relevant for PODES is that which the research group organised in September 2007 with the title "The analytical leap. Qualitative data analysis methods in communication research" under the National Research School for Media, Communication and Journalism.

An example of a conference organised within the research group with relevance to PODES is the "Nordic Intercultural Communication Conference" held at CBIT, RUC in November 2006.

Engagement with national and international research partners

As the research group has only existed for one and a half years our collaborations with other research partners are only just beginning to be built. It draws on past relations that each of the senior researchers has brought with them to the research group. The relationships fall into different categories.

Several of the senior members of the research group are active participants in national and international doctoral education programmes, e.g: *The Danish National Research School for Media, Communication and Journalism*, FMKJ; *European Summer School for Doctoral studies in Media and Communication*, under European Communication Research and Education Association (ECREA); and Nordic PhD courses financed by *Norfa* (Nordic research board under Nordic Council of Ministers).

Several of the senior members of the research group are convenors of research networks or organisers of workshops within the context of academic associations arranging international conferences, e.g. the European Communication Research and Education Association (ECREA); the European Sociological Association (ESA); the Nordic Intercultural Communication Association (NIC); and the International Simulation and Gaming Association (ISGA).

The senior members all have national and international relations to academic environments through past and present research projects. Examples of such relations are: the EQUEL network of researchers on networked Learning from five EU countries and 14 universities; and *Qualitative Research Methods in the Social Sciences. Innovation, Integration and Impact* (QUALITI), director professor Amanda Coffey, Cardiff University, UK.

Several of the senior members have relations at the national level with non-academic research partners in the shape of various types of social actors through past and present research projects. These are e.g. relations with firms, with public authorities, with NGOs, and with other kinds of teaching institutions.

List of selected publications (apart from those mentioned previously for Bente Halkier)

- Jensen, I. (2004). The Practice of Intercultural Communication. *Journal of Intercultural Communication*, 5(2)
- Siggaard Jensen, S. (2008). *Virtual Exploratory: A Reflective Designing Strategy for Actors and Avatars in Virtual Worlds*. Cambridge Scholars Press (in press).
- Siggaard Jensen, S. (2005) Videoviews of Knowing in Action: Analytical Views “In Situ” in an IT Firm’s Development Department. In: Buono A.F. & F. Poulfelt (eds.). *Challenges and Issues in Knowledge Management. Research in Management Consulting, Volume 5*. Greenwich, CT: Information Age Publishing.
- Hee Pedersen, C. (2008). Anchors of meaning – helpers of dialogue. The use of images in production of relations and meaning, *International journal for qualitative research in Education QSE*, 21 (1).
- Phillips, L. (2006). Communicating social scientific knowledge dialogically: Participatory approaches to communication analysis and practice. In: Carpentier, N. et al. (eds.). *Researching Media, Democracy and Participation. The Intellectual Work of the 2006 European Media and Communication Doctoral School*. Tartu University Press.