

## IRCA seminar 7/10/2016

**MCI Innovation Lab , 9:30 - 11:05**

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### **Exploring an open innovation ecosystem - SMEs' perspective** *Agnieszka Radziwon, [agra@mci.sdu.dk](mailto:agra@mci.sdu.dk)*

Small and medium sized enterprises (SMEs) face the inherent tension of being dependent on external partners to complement their internal innovation activities while having only limited resources to manage such open innovation processes. This tension is augmented in the context of the larger ecosystem of complementary partners in which the SME is active. In this paper, we present an inductive case study of a particular regional ecosystem, with six embedded SME cases. The case shows how the SMEs perceive and manage open innovation through strong collaboration ties with various stakeholders in the ecosystem, including suppliers and competitors. When managing such open innovation processes, we find a particular set of challenges for the SMEs due to the misalignment between their and the ecosystem's (implicit) business model. More specifically, key findings include the history-dependent innovation processes within the ecosystem, the diverging understanding of the notion of innovation across the ecosystem, constraints of the SMEs' internal organization, the importance of shared business objectives and leadership on different levels, and the potential of smart specialization policies. These findings highlight specific attention points for managing and developing open innovation in a regional ecosystem, where both the SME and the ecosystem levels of analysis need to be considered.

### **Reveal or Conceal? Signaling strategies to build legitimacy in clean-tech new ventures**

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Building legitimacy is an ineluctable step in a new venture development. Prior research has observed that legitimacy has significant impact on new venture's survival and growth. Nevertheless, we know little on how new entrants in an industry manage to build legitimacy with limited resources, in particular in competitive technology-intensive industries.

In this research we study five cases of new entrants in the Norwegian clean-tech industry to explore how they use resources and strategic actions to build legitimacy. We use a multiple-case study to describe these actions in different phases of the venture's stage evolution.

The results suggest that contrary to signaling theory expectations, new entrants do not always build legitimacy by conveying information on their strengths or differential characteristics. Instead, we observe the use of alternative signaling strategies directed to building legitimacy through homophily and fit with the institutional logics of the industry and evolutionary stage of the new venture.

## **Bridge-builders in the peripheral region: Institutional entrepreneurs, network brokers and innovation-based business networking**

*Susanne Gretzinger, [sug@sam.sdu.dk](mailto:sug@sam.sdu.dk)*

More recently, the concept of institutional entrepreneurship that has its roots in organizational theory has entered regional entrepreneurship, because it offers persuasive answers to the question how institutionalized practices in a regional economy can be changed in a way that local-regional development is supported. It is through the actions of skilled, powerful and political actors who raise collective action and resources to achieve this change, as proponents of the concept argue. Institutional entrepreneurs have specific interests in changing the institutional setting, mobilize resources to achieve this change and possess political skills and power to enact institutional modifications.

This research project will take up the idea that “change agents” and “network brokers” who may stimulate enterprise development and, indirectly, local development of (peripheral) business networks through enhancing networking and innovativeness.

Using examples from previous fieldwork in the German-Danish borderlands, the project collects ideas from the practice of regional management and business support how these agents who work for change in the regional economy can look. Furthermore a short introduction into the InterReg project B4R (Benefits for Regions) will be given. The faculty for social science at SDU is one of the project partners and is together with the Fachhochschule Kiel in charge of scientific support of the project. The aim of B4R is to initiate cooperation and interaction among Danish and German public organizations and institutions. B4R is organized into 10 sub-parts which work on different topics like youth out-migration, recruitment and bonding of qualified employees.

## **Roll-to-Roll technology at MCI, SDU**

How do we meet the world’s energy needs? We all know that if we could harvest all the energy coming from the sun, we would have enough energy to cover the world’s energy demand in the future. At the same time, it is important to also reduce our energy consumption to minimize energy use. For these purposes, organic electronics have been extensively studied in recent years. This kind of electronics include both Organic Light Emitting Diodes (OLED), which are an interesting way of creating light with a low electricity consumption, and Organic Solar Cells (OSC), which can produce electricity with a very low payback time. Moreover, compared to the classic Silicon based electronics, these two kinds of electronics can be produced with a high speed printing method on flexible substrates.

Among these high speed printing technics, one can find the roll-to-roll (R2R) process that is now available at the new R2R facility at the Mads Clausen Institute (MCI), SDU, thanks to a donation from Danfoss PolyPower (value approx. 20 MDKK). Financed by Interreg 5A, with means from the European Regional

Development Fund, the new project RollFlex started in April 2016 with the aim to make flexible OSC and OLED on a large scale using amongst other the new R2R facility at SDU. To do so, the MCI has started several partnerships with both academic and industrial partners. Christian-Albrechts University (CAU) in Kiel will also provide knowledge about lab-scale devices, while the two companies Stensborg A/S (Roskilde) and FUMT R&D (Kiel) will contribute in the up-scaling part of the project. This way, by bridging academic and industrial forces, the Rollflex project is on its way to assist on meeting the world's energy needs in the future.

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## Persuasive robots at IDK, SDU

In an interdisciplinary cooperation, Oliver Niebuhr, Kerstin Fischer and Lars C. Jensen have designed several experiments that test to what extent speech melody makes robots more or less persuasive. Building on Oliver Niebuhr's analyses of charismatic speech, robots were employed with voices that exhibited the speech melody of either Steve Jobs or Mark Zuckerberg. The Keepon robots, the Care-O-bot, and the EZ-bot tried to persuade participants into certain behaviors, such as making healthy food choices or do voluntary health check-ups. First results show that speech melody has a considerable impact on robot persuasiveness.

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