Helping organizations in societally critical domains become more innovative

Title of the dissertation
Designing organizations for innovation in transitioning domains

Contents of the dissertation
A socio-technical transition is a major shift in the way a critical function in society is structured and performed. Think for example of the past shift from horses and carriages to vehicles that run on combustion engines. Presently, a whole wave of such (parallel) socio-technical transitions is upon us, with major change taking place in domains such as energy, mobility, food, and healthcare. And just as carriage makers were once heavily pressurized by the emergence of the car, so are organizations nowadays challenged by the major shifts in their respective industries. For them, survival and success in these transitioning domains depends now on the ability to adapt to changing conditions and to continuously innovate. That is, these organizations must renew their product and service portfolios, business models and organizational structures. Against that background, I investigate in this dissertation how to design organizations that are successful at innovating in transitioning domains.

To tackle this topic, I take use of what is called a science-based design lens, where organizations are perceived as objects of deliberate design. In particular, I have developed design knowledge with three types of organizations in mind. Towards all three, the enclosed design knowledge elaborates how these organizations could act in order to be(come) more successful at innovation. For ventures, the dissertation includes a set of principles on how to lead a network of simultaneously innovating organizations to accomplishing a complex product or service (combination). For incumbents, I have provided several hundred design principles that are structured by categories to form a toolbox for particular organizations to choose a fitting combination for implementation. For systemic intermediaries, I have presented principles for designing new services that are relevant and valuable in supporting organizations in their network to innovate. Finally, to ease orientation in one area of organization studies that is simultaneously relevant and quite confusing, I have included in this dissertation the design of a diagnostics and planning tool called Ecosystem Pie Model (EPM). This tool, equally applicable in all the aforementioned organizational profiles, helps managers and scholars to make sense of situations where innovation needs to happen simultaneously in more than one organization (i.e., in an innovation ecosystem setting).

Field of the dissertation
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A doctoral dissertation is a public document and shall be available at Aalto University, School of Science’s notice board in Konemiehentie 2, Espoo at the latest 10 days prior to public defense.