

Wicked Problems need Virtuous Solutions - Normative Innovation to Establish Sustainable Value Networks

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To “innovate for sustainability” we need to go beyond process, product, and organizational innovation into strategic (business model) innovation and **normative value innovation**. Value innovation builds on the introduction of new normative orientations into an existing business ecosystem. Our work delineates a new theoretical approach that is illustrated with case studies on different modes of sustainability innovation. We exemplify the approach through a case study of a stakeholder dialogue to establish a sustainable energy region in northern Germany and contrast this case against examples of innovation for sustainability on strategic and instrumental management levels.

Within the last decade, the innovation management discourse moved its attention from products and services, corporate capabilities, or revenue models as sources of innovation towards a more strategic and comprehensive view on business models that, from a conceptual perspective, comprise several of these components [2]. By centering discussion around inherent values of business, the business modeling approach may be extended to address “wicked”, i.e. seemingly insoluble problems that are poorly formulated, confusing, and involve many different actors with conflicting values [6].

We argue that in order to recognize the innovation potential contained in solutions to “**wicked**” **problems**, such as the sustainable turnaround in the energy industry, we need to take one further step from the strategic level of business model innovation into the normative core of business and the values it creates and represents. We do not define corporate normative orientation as a moral obligation of companies, but understand and analyze normativity as an **inherent und fundamental** moment of “value-creating” business and daily human performance. Referring to the St. Gallen Management Model [1], we differentiate between three levels of normative, strategic, and instrumental innovation and its management [3]. On each level innovation may promote sustainability, while an orientation towards sustainability creates opportunities for innovation. We discuss three cases, one for each level, to explore potentials and challenges for, and patterns of, innovations that address different facets of “wicked” sustainability problems (here, in an energy industry context):

- Normative: Designing a sustainable and network-based energy [3] region in Germany.
- Strategic: “Green Power Marketing” to differentiate branding and create a new business model.
- Instrumental: Carbon Footprint Calculator [7] to measure and reduce environmental impact.

Different **notions of value** apply for each level. On the instrumental level new product development or innovation in marketing instruments may create new use or experience value. On the strategic level symbolic values are created in order to establish a unique brand. On the normative level organizations and CSR cultivate ideal values that reach beyond profit-oriented economic goals and even beyond the individual company into networks of actors organized around shared values.

In one **case study** we show how normative orientation (the interest in a sustainable energy region) may be applied as a lever to foster innovation in the energy business ecosystem. The case demonstrates a synchronous shift in the business models of key actors in the energy sector (network operators, producers, storage providers and prosumers), creating a new ecosystem for virtual power plants. The process was mediated by a focus on new values of sustainability, proximity, self-sufficiency, competencies, regional identity, and trans-regional collaboration. Applying business model innovation beyond single firms on the value network level allowed finding systemic solutions to a particular “wicked” problem, i.e. the introduction of a “new energy paradigm”, and means to create shared value [5]. It also increased chances for collaboration in the realization of the potentially conflicting new business models. Complementary partnering in normatively founded value-oriented business networks is a promising avenue for “innovating for sustainability”.

References

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