

SOCIAL ACCEPTABILITY UNDER THE BUSINESS MODEL LENS

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Overview

Although the development of clean energies, energy efficiency, and sufficiency are the main goals for a transition aiming the carbon neutrality in Europe, their implementation is facing several obstacles. Among them, low communities' acceptability can jeopardize the materialization of energy facilities or even cause them to fail (1). Understanding the root causes of low acceptability of new energy infrastructure and what can be done to improve this acceptability is key to design business models (BMs) that work and enable the energy transition (2).

Scholars have analyzed acceptability from various perspectives, such as innovation, institutional, organizational actor networking, compensation schemes, or public participation —see for instance (3) for a review. Previous work highlights that energy projects are value-composed entities and that value of customers as well as external stakeholders have to be considered when designing the BM through which the energy project will materialize. van der Waal and colleagues (4) argue that acceptability is a result of value sensitivity, in other words, the ability of energy BM designers to identify economic, social, or environmental values important to communities and incorporate them strategically throughout the life cycle of the project and in its different domains.

In this regard, a tool widely used for value analysis is the BM which is the logic of how a company proposes, creates, and captures value (5). As acceptability emerges from critically judging more than the value proposition of an energy project but its interactions, processes, and consequences, analyzing the entire BM makes sense. Successfully, the BM was used to reveal how energy communities contribute for the ongoing energy transition in France (6). Considering that both energy projects and acceptability studies are a matter of value creation and identification, we believe that the BM tool can contribute to identifying business dynamics producing value in energy projects.

We assume that to improve acceptability, energy sectors need to understand: How do their BMs reconcile the economic, social, or environmental values that stakeholders want to be fairly incorporated? To do so, we propose to articulate the acceptability analysis with the BM analysis. Therefore, the contribution of this paper is to provide a conceptual basis for suitable acceptability elements fitting with the BM tool and supplementing it.

Methods.

The identification of conceptual elements for acceptability analysis in connection with BMs in the energy sector is carried out through a literature review. We followed four usual steps to analyze scientific articles and reports (7): 1. Planning the review: Our plan considered mainly papers discussing the relationship between acceptability and BMs in the energy sector; 2. Conducting the review: We launched different search strings in two major repositories of scientific articles, Science Direct and Google Scholar. The concepts "acceptability", "acceptance", "analysis" and "business model" were used in multiple combinations; 3. Analysis: We used a conventional and inductive analysis for selected documents by reading and highlighting text defining acceptability, arguing links with the BMs, or discussing other relevant notions; and 4. Reporting.

Results.

While acceptance consists of just tolerating the insertion of new energy technology, acceptability involves a reflection that takes into account the issues and the benefits emerging from its introduction (8). Acceptability, then, is more complex and relevant because it implies external stakeholders' attitudes, which are consequences of what is proposed by an outsider. The results of this review are aligned with the notion of acceptability. Our

findings confirmed our assumption on values-based analysis through the BM tool as the key for acceptability analysis (9) is looking at relationships and opportunities with communities to identify benefits (values). Literature shows multiple indicators to explain acceptability such as personal behavior and individual cognition (10), citizens' perceptions (11), trust, fairness, or technology perception (12) although many more have been presented from different theories and models (13).

Among all of them, we found a consensus: procedural, distributional, and substantive justice often determine the energy projects' acceptability (11). Procedural justice relates to the involvement of stakeholders in decision-making processes; distributional justice entails the distribution of positive and negative impacts among actors and who is responsible for it and; substantive justice is about a proper communication of values to be trusted by the community (14,15). Concerning the BM, the literature highlights a generally accepted framework for value creation analysis made up of Value Proposition, Value Creation, and Value Capture (16). Moreover, a new trend is to examine not only a positive value perspective but a negative one as they are also important for sustainability concerns (17). All these components have been modulated to appropriately explain more than economic values (18) and design economically feasible and socially desirable solutions for social systems (19).

Therefore, what we propose in articulating the conceptual findings of this review is an analytical scheme integrating four components of SBMs (proposition, creation, capture, and value destroyed) and the three aforementioned elements of justice. The logic behind the scheme is to (i) identify fundamental actors in the energy projects, (ii) understand their exchanges and (iii) recognize the values they produce along their creation process. These BM-analysis results nurture the justice components as a way of comprehending what values are related to them and how each justice is accomplished in energy projects. Eventually, by contrasting the values produced by the model (and positioned in the types of justice) with expected values by actors, we argue that we can identify hot spots to formulate strategies to improve acceptability through this scheme.

Conclusions.

BMs are used variously to demonstrate the impact of energy projects, but so far none to explore their acceptability. We advance the discussion on this topic by recognizing in the literature that acceptability is a matter of values. We articulate our conceptual findings to formulate a stance for the analysis of acceptability through the BM. Specifically, we propose an analysis scheme that combines the BM tool and the justice that must be produced when implementing energy projects. Revealing values and interactions for acceptability is the potential of this compound scheme.

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