The Role of Devices in Staging Front End Innovation

This paper addresses Front End Innovation as an object for the management and staging of innovation processes. We examine the role which devices play in the managing of Front End Innovation, with inspiration from Science and Technology Studies (STS). The paper contributes to a new understanding of the staging of innovation processes, which focuses on the content and framing of ideas at the front end. The understanding sensitises hereby towards concerns of path-dependency and translations, including trade-offs and potentialities involved in sustaining or reframing matters of significance as part and parcel of the innovative process. The paper is grounded empirically in insight derived from industry practices and compares practices to current literature on the management of innovation, which portray Front End Innovation as a mere process of search and selection of product ideas. The paper examines a range of such front end devices such as the ‘idea-bank’ and ‘front-end champions’, discussing how particular devices serve to configure heterogeneous networks to in some respects facilitate, while in others, hamper, the productive engagement of the networks in the mobilisation of ideas and visions into realisations. Inputs from different knowledge domains must be grappled with, both in terms of needing to be elucidated as well as synthesized, in the engineering design process. The paper argues that the existing research may be seen as a response to perceived difficulties in dealing with uncertain conditions in the innovative process of product development. The sole reliance on formalised models of planning, and rigid Stage-Gate models for product-based innovations in industry is seen to be wanting in this pursuit. What remains unaddressed is the role of models and other devices such as representations of users or market and technological opportunities in the innovative process. In this respect, models are not neutral but offer certain framings, contribute translations and act as sensemaking devices.