

Exploring Management of the Fuzzy Front End of Innovation in a Product Driven Startup Company

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Abstract : In our research we aimed to test a managerial approach for the fuzzy front end (FFE) of innovation by creating controlled experiment/ business case in a breakthrough innovation development. The experiment was in the sport industry and covered all aspects of the customer discovery stage from ideation to prototyping followed by patent application. In the paper we describe and analyze mile stones, tasks, management challenges, decisions made to create the break through innovation, evaluate overall managerial efficiency that was at the considered FFE stage. We set managerial outcome of the FFE stage as a valid product concept in hand. In our paper we introduce hypothetical construct "Q-factor" that helps us in the experiment to distinguish quality of FFE outcomes. The experiment simulated for entrepreneur the FFE of innovation and put on his shoulders responsibility for the outcome of valid product concept. While developing managerial approach to reach the outcome there was a decision to look on product concept from the cognitive psychology and cognitive science point of view. This view helped us to develop the profile of a person whose projection (mental representation) of a new product could optimize for a manager or entrepreneur FFE activities. In the experiment this profile was tested to develop breakthrough innovation for swimmers. Following the managerial approach the product concept was created to help swimmers to feel/sense water. The working prototype was developed to estimate the product concept validity and value added effect for customers. Based on feedback from coaches and swimmers there were strong positive effect that gave high value for customers, and for the experiment - the valid product concept being developed by proposed managerial approach for the FFE. In conclusions there is a suggestion of managerial approach that was derived from experiment.

Keywords : concept development, concept testing, customer discovery, entrepreneurship, entrepreneurial management, idea generation, idea screening, startup management

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