
A socio-technical analysis of innovation in the outdoor sporting goods market: the case of the R-light shoe

Abstract ID: EASM-2015-96/R1 - (608)

All authors:

Eric Boutroy (corresp), Guillaume Bodet

Date submitted: 2015-03-19

Date accepted: 2015-03-31

Type: Scientific

Keywords: Innovation, sporting goods, co-creation, socio-technical analysis, consumer, outdoor

Category: 14: Other sport management related issues

Synopsis:

Abstract:

Aims

This study aims to enrich our understanding of innovation processes in the outdoor sporting goods market based on a socio-technical analysis (Akrich et al., 2002).

Theoretical background

To date, few studies of innovation processes in the outdoor sporting goods industry have been carried out (Boutroy et al., in press). The literature has mainly focused on top down analyses (company to product to user) emphasizing the role of visionary leaders, top-level executives and rational management (Desbordes, 2001). By doing so, many factors and actors, that actually partake in innovation processes, have been underestimated. On the opposite, Von Hippel (2005) has given to (expert) users a leading role in innovation processes, making these pioneers genuine innovation engines in a new economic model centred on creativity and generalized contribution. In emphasizing the paramount role of lead users, he and the researchers from this stream have indirectly diminished the structuring role of traditional players (companies, R&D units) or eclipsed other key innovation intermediaries (e.g. distributors). However, innovation is never a solitary process (be it radical or incremental) but a collective processes since, to succeed, the invention must be progressively socialized and adopted by wider and heterogeneous groups. According to the socio-technical approach (Akrich et al., 2002), the success or failure of an innovation is the result of the progressive construction of a network of stakeholders whose interests in the project should be secured by anticipating their expectations. The socio-technical analysis defines innovation itself as a complex network. It is not therefore an object that circulates between

successive players who adopt, modify, promote and divert from it, but the complex association of an object, its material environment and its stakeholders. Thus, the success of an innovation owes as much to the intrinsic qualities of the idea or object as it does to the solidity and scope of the network supporting them. Thanks to this framework, it is therefore possible to take into account the diversity and density of stakeholders and better understand the complexity of innovation processes.

Methodology research and data analysis

This study is based on the case study of an innovation process at work up to the commercial launch of innovative trail shoes (R-Light 001) from a French manufacturer (Raidlight). The originality of this innovation is that users and the brand community have played a very important role from the idea generation and design stages (via the use of an open innovation online platform) to the test of the products. The research methodology combines 6 in-depth interviews with stakeholders of the innovation process (CEO, engineers, prototype designer, commercial, consultant), observation (laboratory, store) and secondary data analysis (website, R&D document, prototypes, etc.). At this stage, the consumers' perspective is considered through the lens of the other stakeholders and the evidences of their participation (e.g. ideas, drawings,...). Their perceptions will be added in a second stage of the research.

Results, discussion

After two years of development, the R-light 001 shoe was commercialized in 2013 and relied upon a radical innovation, which made it customizable according to users' needs (e.g. changeable sole pads according to terrains; integrated gaiters; etc.) and sustainable as parts of the shoe can be replaced when too old or damaged. Results reveal that this innovation process is not linear (doubts, failure, contingency are common) and is influenced by all the stakeholders, even ordinary users or sellers. These results challenge existing frameworks for instance theories that emphasize the role of expert/lead user and then underestimate the role of ordinary ones. In the same vein, it questions Rogers' (1962; 1995) perspective (linear diffusion and passive adoption), as innovation constantly evolves due to the active role of each stakeholders and adopters. Such findings are usually put aside in management and marketing studies of innovation, prioritizing "success stories", rationality and planning. Through this analysis, the study identified and illustrated the benefits, challenges and the limitations associated with co-creative processes that strongly involve customers. Although this process generated innovative ideas that truly correspond to users' needs, and developed alleged proximity and attachment between the participating users and the brand, this also generated excessive innovation that could not match production or market capacities, never-ending discussions and development, and even destruction of value for intermediaries (e.g. products not designed for retail spaces, imposed development of customer service, etc.). From a theoretical perspective, the socio-technical (Akrich et al., 2002) and the co-creation of value (Vargo & Lusch, 2004) frameworks are analyzed to identify their respective theoretical value, their differences and complementarities. Beyond this theoretical crossover, this study also generated several research questions and hypotheses to be investigated. For instance, the specific role of employees who are very often active and expert trail runners will be further looked at to

understand whether it could possibly explain technological overshooting. In the same vein, the motivations, perceptions and satisfaction of users involved in the co-creation process will be looked at, first to determine whether their contribution was real and not simply a brand communication tactic, and second to assess the impact of this involvement on brand loyalty.

Keywords: Co-creation ; Consumer ; Innovation ; Outdoor ; Socio-technical analysis; sporting goods

References:

Akrich, M., Callon, M., Latour, B. (2002). The Key to Success in Innovation Part I: The Art of Interessement & Part II: The Art of Choosing Good Spokespersons. *International Journal of Innovation Management*, 6(2), 187-225.

Boutroy, E., Vignal B., & Soulé, B. (in press). Innovation theories applied to the outdoor sports sector: Panorama and perspectives, *Leisure and Society*.

Desbordes, M. (2001). Innovation management in the sports industry: Lessons from the Salomon case. *European Sport Management Quarterly*, 1(2). 124-149.

Vargo, S.L, & Lusch, R.F. (2004), Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), 1−17.

Von Hippel, E. (2005). *Democratizing innovation*. Cambridge: M.I.T. Press.