## Another "Innovator's Dilemma" in the Demand Side: An Experimental Idea Generation Study in a consumer network

## Washida. Yuichi<sup>a</sup> and Ueda. Kazuhiro<sup>b</sup>

<sup>a</sup>Innovation Laboratory, Hakuhodo Inc. Comparative Media Studies, Massachusetts Institute of Technology 1-28-29 Hongo, #201, Bunkyo-Ku, Tokyo, 113-0033, Japan. kym06001@nifty.com

<sup>b</sup>Department of System Sciences, The University of Tokyo, 3-8-1 Komaba, Meguro-ku, Tokyo 153-8902, Japan ueda@gregorio.c.u-tokyo.ac.jp

This study focused on the structure of information networks of consumers linked through association, and conducted an experiment on the diffusion of information on new technology to examine how "new ideas" are generated on the demand side to trigger innovation. The results of the study strongly indicated that "new ideas" that would lead to innovation are generated in the process of information diffusion through consumers' information networks, and such "new ideas" are more frequently generated by the early adopter group, the second group in the diffusion process, which adopts of a new technology or service at the penetration rate of around 10%, rather than the initial innovator group that adopted the new technology or service ahead of others.

In the former studies in the area of innovation diffusion, the innovators seemed to play the main role in introducing innovations to wider consumers by spreading technology-related information. However, the result of this study enable the authors hypothesize that the trajectory of the innovation can be modified by such "new ideas" after a new product or technology is launched in the market. When this hypothesis is supported, the main role of the innovation diffusion is played by the early adopters, instead of the innovators. The authors examined this hypothesis by referring case studies of Japan's pager and mobile phone service development, and found that Japanese young users generated a new usage of pagers: sending short contextual messages via one-line number display functionality on a small pager handset by devising a general code that translate Japanese language into numbers. This "new idea" of pager usages transformed the original value of pager products, simple calling, into a new one, contextual communication method, and this value transformation phenomenon triggered following development in the field of e-mailing services via mobile phones, which led Japan's mobile internet technology to one of the most successful innovation in recent Japanese society.

The view of this study explored the possibility of the demand side innovation, and implied that the innovator consumers are not always innovative in the demand side diffusion process. The authors pointed out the emergence of another "innovator's dilemma" in the demand side, while Christensen explained the innovator's dilemma from the viewpoint of the corporate behavior analyses in the supply side. There is a significant contrast between supply-side dilemma and demand-side one: while Christensen illustrated that supply-side innovator's dilemma is caused by the emergence of "a disruptive technology," this study implied that demand-side innovator's dilemma is caused by modification of initial technology led by the following user ideas, which is seen as "continuous product improvement" from the supply-side viewpoint.

## Keywords

Demand-side innovation, consumer network, new idea generation, innovator's dilemma

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