The Lag-User Method: Using laggards as a source of innovative ideas

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A R T I C L E   I N F O

A B S T R A C T

The literature on user innovation has not considered laggards – the last group of users to adopt a product – as a source of new ideas for innovative products and services. In this paper, we develop the Lag-User Method to investigate laggards' role in the process of idea generation and new product development (NPD) and so enable firms to gain access to their insights. We study laggards for 4 years in three countries and apply the Lag-User Method to different technologies, products, and services, thereby generating 62 innovative ideas across a wide range of industries and sectors. These ideas are discussed with executives to obtain managerial insights. Our studies reveal that laggards who generate new ideas (i.e. lag-users) can enrich NPD. Being coached through the systematic Lag-User Method, they can come up with radical, really new, or incremental innovations. Moreover, applying the method increased laggards' perception regarding their (a) understanding of innovation, (b) perception that people can learn to innovate, (c) perception of their ability to develop new products on their own, (d) confidence about their own new ideas, and (e) perception of considering themselves capable of innovating. Thus, we propose that by involving lag-users in idea generation and NPD process, both academia and firms can improve the effectiveness of NPD, overcome barriers to adoption of innovations, cross the chasm, and accelerate the diffusion of their new products or services.

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1. Introduction

An extensive and well established body of research investigates creative consumers as a source of innovative ideas for products or product improvements (Alexy et al., 2011; Kristensson et al., 2004; Magnusson, 2009; Poetz and Schreier, 2012). This research field began with a focus on the problem-solving abilities of consumers as applied to consumption-related problems (Hirschman, 1980, 1983). This was followed by an examination of antecedents and consequences of creativity in a consumption context (Burroughs and Mick, 2004), and then describing and classifying those consumers (Kozinets et al., 2008). Researchers in this field have also investigated the factors influencing consumers' creativity, such as technology, culture, and government (Berthon et al., 2012). Moreau and Dahl (2005) explore how input and time constraints can affect

the way consumers process information during that creativity process and also how the process itself can affect creativity. Managerial implications of dealing with creative consumers and their role as a source of novel ideas have also received attention (Berthon et al., 2007; Page and Pitt, 2011).

Another stream of research on user innovation focuses on lead-users (e.g. Hienerth and Lettl, 2011; Mahr and Lievens, 2012; Marchi et al., 2011). Lead-users are those whose current needs will become common in the market place only in the future. They develop solutions to those needs and benefit considerably from the solutions (Von Hippel, 1986, 2005). Literature around this topic has focused on identifying lead-users and involving them in the NPD process (Urban and Von Hippel, 1988), investigating lead-user communities (Morrison et al., 2000), comparing the Lead-User Method with other approaches (Herstatt and Von Hippel, 1992), and also assessing the performance of the lead-user approach (Lilien et al., 2002).

Another research stream explores the role of innovators and/or early adopters on innovation (e.g. Chesbrough and Crowther, 2006; Droge et al., 2010; Engel et al., 1969; Frattini et al., 2014). Innovators and early adopters are the first two categories of adopters of an innovation. Innovators are willing to take risks to adopt innovations while early adopters have strong opinion leadership among users who follow. Both have higher social status, have sufficient financial resources, and are well educated (Rogers, 2003). Despite extensive research on these different categories of users, earlier literature on user innovation shares a key limitation: studies do not explore the role of laggards in idea generation and their possible impact on innovation. In this paper, we focus on this overlooked group of adopters and investigate their role in idea generation and NPD.

Laggards are the last group of users to adopt a product. Researchers do not agree on the total percentage of users who are laggards, as this can change from product to product. For example, while Rogers' (2003) Diffusion of Innovation Curve indicates that 16% of users are laggards, Mahajan et al. (1990) estimate laggards at 21.9%. We propose that a new challenge in research and business should be to involve laggards in the NPD process, coach them to innovate, and use them as a rich source of idea generation. Although laggards do not see themselves as innovators, they represent a significant percentage of users. As such, it is critical to find the right approach to leverage on their dormant knowledge. We believe that there is a need to look at them and develop an appropriate method through which firms and researchers can benefit from laggards' insights and understand their needs and expectations. Moreover, as laggards think differently from the rest of the consumers, they should be considered as a new source of sticky information. The unfulfilled needs of these resistant consumers might represent the amplified voice of the mainstream consumer. Seeing the reasons for their late adoption may well help firms overcome barriers to adoption of innovations (Talke and Hultink, 2010) and possibly lead to faster adoption and a shorter Diffusion of Innovation Curve. Moreover, laggards are situated at the end of Rogers' Diffusion of Innovation Curve (Rogers, 2003). As they are located after the "chasm" (Moore, 2006), laggards' insights and knowledge can help companies understand what kind of consumers they should expect behind the "chasm". Therefore, investigating laggards could enable firms to cross the "chasm" and extend the product life cycle.

2. The Lag-User Method

Inspired by the lead-user and new product development literature, we developed the Lag-User Method. This method can be used by researchers and practitioners to involve laggards in the process of idea generation and NPD. The data for our paper come from six different studies in three different countries from laggards who generate new ideas (i.e. lag-users), as well as focus groups and interviews with executives.

Users are believed to be sources of commercially successful products (Von Hippel, 1986; Morrison et al., 2000). Researchers have proposed the Lead-User Method as a tool for companies to involve lead-users, the leading edge of target markets, in NPD (Von Hippel, 1986; Urban and Von Hippel, 1988). As mentioned above, lead-users are defined as those that have needs ahead of their time, who develop solutions to those needs, and who benefit to a great extent from these solutions (Von Hippel, 1986). Laggards, on the other hand, show less interest in a product. Although laggards also have reasons for their late adoption and have certain unfulfilled needs, contrary to lead-users, they might not be conscious of those needs. Often they are not interested in emerging trends and alternative solutions, and so they would not think about developing a solution of their own. Therefore, in the case of laggards, it is not only about identifying them and profiting from the solutions they provide, but it is also about coaching and training them to become lag-users. They need an adjusted innovation method in order to be trained to start questioning the existing standards, recognize their unfulfilled needs consciously, and develop a solution-driven mindset in order to come up with new innovative ideas to fulfill their needs. Therefore, although the two methodologies might have slight similarities, they are not synonymous, as studying lead-users alone will not provide firms with a complete perspective for their innovation and NPD process.

The Lag-User Method was confirmed and validated through an exploratory study, and later tested on new samples. By applying this method, we aim to involve laggards in the NPD process, coach and encourage them to come up with new ideas and so provide firms and researchers with access to laggards' knowledge and insights. We also seek to better understand whether or not lag-users can question existing standards, what kind of problems they identify in different products, whether these problems are different from those identified by innovators, whether they can come up with new ideas, and whether those ideas would find acceptance among companies as well as in the marketplace. Moreover, we would like to explore the effects of this method on laggards' perceptions regarding their (a) understanding of innovation, (b) perception that people can learn to innovate, (c) perception of their ability to develop new products on their own, (d) confidence in their own new ideas, and (e) perception of considering themselves capable of innovating.