Visualization and New Product Evaluation: the Role of Memory- and Imagination-Focused Visualization

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In this research, we examine the impact of imagination-focused visualization on the evaluation of really new products (RNPs). We compare imagination-focused visualization with memory-focused visualization and demonstrate that focusing on the imaginative aspects of an RNP leads to higher evaluations. Furthermore, we examine the role of perceived ease or difficulty of visualization on the efficacy of imagination-focused visualization. The results demonstrate that making the imaginative visualization more difficult or easier directly affects the evaluation of the RNP. Finally, we show that the effects of the type of visualization strategy and the difficulty of the visualization task have a limited impact on a more incremental product.

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EXTENDED ABSTRACT

Really new products (RNPs) allow consumers to do things they have never been able to do before. To help consumers learn about the new benefits associated with RNPs, mental simulation of product usage has been identified as an effective cognitive tool (Dahl, Chattopadhyay, and Gorn 1999; Dahl and Hoeffler 2004; Hoeffler 2003). For example, research has demonstrated that mentally simulating the usage of an RNP increases consumers’ ability to predict the benefits of an RNP accurately (Hoeffler 2003). However, because humans tend to be “cognitive misers” (Bettman, Luce, and Payne 1998; Fiske and Taylor 1991), they are reluctant to engage in the extensive cognitive thinking that might be required. Consequently, in the new product domain, when people are asked to visualize new product–related activities, they underestimate the usefulness of the radically new features (Dahl, Chattopadhyay, and Gorn 1999; Dahl and Hoeffler 2004). Consumers base their mental images on their memories about prior consumption routines, which are more easily accessible. Yet focusing on prior consumption patterns may highlight the requisite behavior changes and thus enhance learning-cost inferences associated with adopting an RNP (Mukherjee and Hoyer 2001). As a result, overall evaluations of an RNP are discounted (Dahl and Hoeffler 2004). In this research, we incorporate visual mental imagery with an imaginative focus into new product learning and examine the impact of the imaginative focus on the evaluation of RNPs.

Visualization and Evaluation of RNPs

In the new-product-design domain, Dahl and colleagues (1999) find that when designing a product, use of imagination-focused visual imagery (e.g., going beyond previously seen images, visualizing new and never-before-experienced events) results in more original product designs than use of visual imagery based on existing memories. These findings suggest that changing consumers’ focus of visualization from a simple prior product usage to imaginative new uses of a really new product could enhance their evaluations of an RNP. However, for an INP with a low level of complexity, when consumers focus on existing consumption patterns, less behavior changes are required and lower learning costs are involved (Mukherjee and Hoyer 2001). This implies that consumers that have the mental resources to estimate the value of the INP’s new capabilities, which they would naturally do when focusing on the potential new uses of the product. Therefore, switching the focus of visualization from existing usage situations to new usage situations will not have a large impact on evaluations of an INP. Thus:

H1: Imagination-focused visualization leads to higher evaluations of an RNP than memory-focused visualization; however, a visualization focus (memory versus imagination) does not affect evaluations of an INP.

Ease of the Visualization Task

Recent research on the accessibility of experiences hints at the potential for the difficulty of the visualization exercise to affect evaluations. Notably, Schwarz (1998, 2004; see also Sanna and Schwarz 2004) finds that people rely more on the accessibility of experiences (i.e., ease of retrieval) than the accessibility of content. In a marketing context, Wanke, Bohnen, and Jurkowitsch (1997) find further evidence of the impact of accessibility. They demonstrate that when participants named ten reasons for choosing a focal car, their evaluations were lower than when they named only one reason. This finding was primarily due to the ease of retrieval. In the new product domain, research has demonstrated that the difficulty of the visualization task can mediate the impact on evaluation (Dahl and Hoeffler 2005). Visualizing others using the new product was easier than self-visualization for RNPs, and that greater perceived ease with visualization led to higher product evaluations.

On the other hand, research has also indicated that for INPs, for which participants have some experience in the domain, preferences will be less susceptible to subtle context effects (e.g., experienced ease during the visualization exercise). In particular, recent research has shown that the level of knowledge can influence the perception of how diagnostic ease of retrieval is likely to be (Tybout et al. 2005). For example, when people were asked to generate thoughts about a focal car, those to whom the features were more familiar related more on the retrieval content. Thus:

H2: In the context of imagination-focused visualization, greater perceived ease of the visualization task leads to higher evaluations of an RNP than lower perceived ease. However, ease of visualization has no impact on the evaluation of an INP.

Results and Implications

In Experiment 1, we compared the impact of memory-focused visualization with that of imagination-focused visualization and demonstrated that imagination-focused mental imagery increases the evaluation of an RNP but has no impact on the evaluation of an INP. In Experiment 2, we manipulated the difficulty of imagination by prompting participants to come up with one or eight new activities that they could perform with the new product. The results showed that imagination lowered the evaluation of the RNP when eight activities (vs. one activity) were required but it had no effect on the INP. In Experiment 3, we manipulated the ease of imagination by providing participants with one or eight activities related to the new product. The results show that because of the greater perceived ease, participants who were given eight examples had higher evaluations of the RNP than participants who were given only one example. In both experiments 2 and 3, ease of imagination had no impact on the evaluation of INP.

Our results add significantly to recent research on mental simulation and new product learning by identifying different types of visualization focus. We emphasize the concept of “imaginative-new-usage focus” and show that only if people are explicitly instructed to rely on imaginative new uses will their visualization enhance product evaluations of an RNP.

Our research also extends the accessibility literature with a traditional retrospective view (i.e., ease of retrieval) by demonstrating the role of ease of imagination from a prospective view.
References


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