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The Impact of Online Third-party Product Reviews on Consumer Adoption of a New Product

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Abstract: Research has discovered that the third-party product review (TPPR) can influence consumer adoption of a new product. However, the specific influence mechanism needs further deep explorations. In this study, effects of different types of TPPR on consumer adoption of different new products were tested from the perspective of consumer knowledge. Based on two experimental designs, it is reported that the TPPR in the recommendation format and comparison format influence the intentions of new consumers to use really new products mostly. The TPPR in the description format and independent format influence the intentions of expert consumers to incremental new products. Moreover, the source of TPPR is vital. Consumers trust the TPPR in professional product evaluation websites more compared with public media. In other words, TPPR in professional product evaluation websites can facilitate consumer adoption of new products. The research conclusions here further enrich researches concerning TPPR and adoption of new products.

Keywords: Third-Party Product Review, consumer knowledge, new product adoption

1. INTRODUCTION

Third-party product review (TPPR) is not a new way to help consumer making decisions. From traditional popular magazines (e.g. PC Magazine, Consumer Reports) to the growing number of Websites (e.g., CNET.com, ZDNET.com), nowadays, consumers could find almost every product information provided by TPPRs easily. Due to it generally comes from other organizations independent of sellers; TPPRs have a significant effect on the success/failure of products^[1]. During the last two decades, TPPRs have attracted attention by a certain number of researches, among them, most from companies' perspectives^[2], consumer-relevant topics were sparse and mainly focused on third-party endorsement or certification in advertisement^[3] and third-party product quality ratings^[4]. However, online TPPRs are much complicated because it include different formats, such as a general description or description with recommendation^[1]; different information like category information or product information^[5]; different providers such as professionals or media^[2] and different time like before or after product introduction^[2] and so on. Obviously, as a popular and useful marketing tool, consumers' response toward TPPRs is serious but significantly under-researched, specifically, what are the roles of consumer personal characteristics (e.g., consumer knowledge) in the effect of TPPRs on consumers' responses; what are the influences of contextual factors (e.g., the provider of TPPRs, the forms of TPPRs) on consumers' judgements. Thus, to fill these gaps, the present study aims to develop and empirically test a conceptual framework to understand the impact of different kinds of TPPRs on consumer adoption of a new product, we choose new product as our objective because the introduction of new products have been wildly documented as a critical factor to the firm as it could improve the chances of success^[6], but unfortunately, high new product failure rates still remains one of the greatest challenges of new product research^[7], one important reason is consumers concern with the uncertainties of using a new product^[8], while TPPRs might be helpful to decrease thus uncertainties.

We use two studies to achieve the above objective; study 1 examines the different influences of two types of TPPRs (i.e., Comparative review or separate review, description or recommendation) on the adoption intention of a really new product/incremental new product of consumers with a different level of knowledge.

Study 2 examines the effects of TPPRs sources (i.e., public media, professional review website) on consumers' trust and willing to adopt a new product. The rest parts of this paper will start with the review of relevant researches which constitute the theoretical foundations and hypotheses generation, then research methodology and results of the two studies were followed. Finally, the paper concludes with a discussion of the findings and their managerial implications, along with limitation and future research avenues.

2. THEORETICAL BACKGROUNDS

2.1 TPPRs

To reduce consumer uncertainty about the products' quality, especially new products, Third-party product reviews as a new online industry has grown increasingly popular in recent years^[1]. As the name implies, TPPRs neither come from marketers nor consumers, lots of them generated by totally independent laboratory tests or expert evaluations^[1]. It is worth noting that TPPRs also different from third-party certification programs (e.g., TRUSTe) which means a third-party organization offers assurances towards a specific product to enhance the trustworthiness^[9], or third-party endorsement in advertising which defined as "a product advertising that incorporates the name of a third-party organization and a positive evaluation of the advertised product that is attributed to the third-party organization"^[10], TPPRs usually presented with no any marketing cues, that might be the reason why TPPRs becoming a more valuable source of information for consumers and firms in assessing product quality^[2]. Nowadays, consumers could easily access TPPRs in a wild range of media like professional Websites (e.g., ConsumerSearch.com, CNET.com), professional publications (e.g., PC Magazine) and even popular magazines (e.g., Wall Street Journal).

Due to online TPPRs provided by many different organizations, consumers could find TPPRs with different kinds of formats. Among them, two types of TPPRs are most common to be used, namely "description format" and "recommendation format", the first one means that the TPPR only provides detailed attribute facts about a product, while the other one also plus the recommendation based on overall evaluation^[11]. On the other hand, Shaffer and Zettelmeyer^[5] argued that the essential components of a TPPR typically have three aspects, includes (1) information types (category information or product information), (2) information diversity (positive or negative information), and (3) the target audience (core consumers or noncore consumers), the first aspect leads to another format of TPPR, i.e., comparative review and separate review.

As for the effect of TPPRs, relevant researches come from two perspectives. Several marketing scholars focused on the direct impact of third-party information and demonstrated that third-party critics could predict a product success effectively, such as a film^[11] and Broadway shows^[12]. In a similar vein, Shaffer and Zettelmeyer^[5] found that different third-party information could influence the division of profits in a multiproduct distribution channel. While on the other hand, some researchers focused on third-party certification programs or endorsement in advertising, Miyazaki and Krishnamurthy^[13] argued that third-party certification programs could increase sales by boost consumer confidence, and positive influence consumers' purchase intentions^[14], while on the contrary, Yousafzai, Pallister, and Foxall's^[15] findings cannot support the direct influence of display of third-party logos on trust. When referenced in the advertising field, third-party organization endorsement information was found to enhancing consumers' perceptions of product quality^[3]. No doubt, these above studies have advanced the knowledge of the influence of third-party information or endorsement on consumers' responses, while surprisingly, the interaction effects between consumers' personal traits and different types of TPPRs on consumers' responses, particularly the adoption of a new product, still remains unexploited.

2.2 Consumer knowledge

Consumer knowledge is the knowledge necessary to select a product for a particular usage situation^[16]. It's an important consumers' construct which could influence consumers' information search and processing and eventually influence their purchase and usage behavior^[17]. Brucks^[16] divided consumer knowledge into three categories, i.e., subjective knowledge, which means that what the consumer thinks he/she knows; objective knowledge, which refers to an actual knowledge that the consumer has; and experience-based knowledge relevant to the consumer's prior experience with the product. This schema has been followed by some researchers^[18]. While in a similar vein, Alba and Hutchinson^[17] argued that product knowledge should contain two parts: experience and expertise, experiences refers to individual got skill or wise by observation or participation in some particular activities, while expertise means skillful in a particular field which reflects qualitatively higher levels of knowledge about product's performance attributes, physical components and any attribute–performance relationships^[19]. Obviously, the "expertise" in Alba and Hutchinson^[17] is similar to "subjective and objective knowledge" in Brucks's^[16] categorization, both of the two categorizations have been used by subsequent studies. Interestingly, subjective knowledge could be a self-concept, and when compared with object knowledge, consumers' subject knowledge or self-assessed knowledge seems has a strong influence on their consumption behavior. Moreover, Clarkson et al. discovered that professional knowledge perceived by consumers might influence the new experience types that they were interested in. In a word, it is speculated that existing perceptions of consumers influence the information acquisition of consumers during product selection and finally affect their purchase and usage of new products.

Consumers with low knowledge behave significantly differently in using new products from consumers with high knowledge behavior. This is attributed to their differences in product information, information contents, and structure. Novices seek information because they lack product experience^[20]. Experts seek information about specific product features because they are more exposed to the attribute's existence^[16]. Expertise individuals tend to be less dependent on others and are less influenced by the behavior of others.

2.3 TPPRs and new product adoption

The innovation of products is viewed as one of the important product attributes and it refers to the degree of discontinuity about product functions and technological innovation which is perceived by consumers. Due to differences between different new products on innovation, new products can be divided into really new innovations and incremental new innovations. The former one refers to innovations that create new product categories or sub-categories, rather than re-distribute market shares of existing products. On the contrary, the latter one refers to the improvement of existing popular products. The really new innovations provide new benefits beyond the ability to existing products, whereas the incremental new innovations generally offer incremental benefits. Besides, some scholars divided new products into core innovations and peripheral innovations according to innovation routes. In this study, new products were divided into really new innovations and incremental new innovation. This division method is extensively applied and it is easy to be recognized by consumers.

Castaño et al.^[8] discovered that functions and symbolic value were the major reason for consumers to adopt new products, but consumers were faced with uncertain product value at prediction. Consumers often hate such uncertainty. Ram and Sheth determined four types of perceived innovation risks, namely economic risks, physical risk, social consequence, and functional risk. With the increase in risks, the diffusion rate and adoption level declined. Therefore, such risks and uncertainty are barriers to the adoption of innovative products.

Consumers reduce such risks and uncertainty by seeking and searching information positively. Therefore, consumers often depend on the third party for accurate product quality information, rather than perceive and

experience products or services by touching. Based on depth and width of product information, Clarkson et al. discovered that novice consumers lack basic knowledge on a type of products and pay more attention to widths of product information, such as simple classification of products, basic functional differences among different brands or functional difference among different generations of products. Expert consumers who have certain professional knowledge pay more attention to the depth of product information, such as composition and elements, working principle or physical performance of products. This agrees with previous studies that consumers' ability of understanding and representing innovation is restricted by the structure of existing category knowledge. Therefore, it is speculated that TPPR in comparison format is more effective than that in independent review for novice consumers compared with expert consumers. Therefore, previous studies also demonstrate that novice consumers depend more on others, while expert consumers are more independent and difficult to be influenced by others. Therefore, TPPR in recommendation format is more effective than TPPR in description format for new consumers compared with expert consumers.

Therefore, some hypotheses were proposed:

H_{1a}: During the adoption of new products, TPPR in the recommendation format and comparison format can increase the intention of novice consumers to adopt new products.

H_{1b}: During the adoption of new products, TPPR in the description format and independent format can increase the intention of expert consumers to adopt new products.

Consumers can change their existing category structures very easy to adapt to inconsistent information brought by innovation. This depends to a large extent on how continuous innovation they perceive.. More importantly, previous studies have reported that really new innovation products give consumers perception of higher uncertainty than incremental innovation products, which is caused by the significantly inconsistent structure with the original products. It is interesting that Moreau and Lehmann discovered that novice consumers perceive less expected benefits and bigger risks to products with continuous innovation, or known as incremental innovation products because they are lack of basic knowledge. Besides, expert consumers' understanding of really new innovations is hindered by deep-rooted professional knowledge, so expert consumers perceive bigger risks and uncertainties. On this basis, it can be inferred that different formats of TPPR have different effects on the selection of innovative products. Some hypotheses are proposed:

H₂: Degree of innovation of new products moderate the effect.

H_{2a}: TPPR in the recommendation format and comparison review can influence the intention of novice consumers to use really new innovations more than incremental innovation products.

H_{2b}: TPPR in the description format and independent review can influence the intention of expert consumers to use incremental innovation products more than really new innovations.

2.4 Source of TPPRs and new product adoption

Portal websites and professional product evaluation website are important TPPRs sources of consumers. Maeyer and Estelami discovered from empirical studies that both website content and background can affect consumers' trust on information source significantly as well as their purchase decision in the intention to use product quality grading. Similarly, the reliability of information source was also discussed in this study, with attention paid on the effects of two types of source information on consumer adoption of new products. Eagly, Wood and Chaiken believed that information receiver may have two prejudices to information source: knowledge prejudice and report prejudice. The former one implies the shortage of information-related knowledge, while the latter one refers to deliberate distortion of information from the source for the private interest. The concept of credibility of information source was proposed by Hovland and it was used as an important factor that influenced information validity. With the deepening of researches, measurement standard

of credibility of the information source is improving continuously. Hovland and Weiss proposed the trustworthiness to measure the credibility of the information source. Subsequently, Dholakia and Sternthal added the dimension of expertise and constructed a credibility model of the information source. The validity of the information is determined by the transmitter perception of professional knowledge and credibility. Kelman and Hovland discovered that benefits of transmitter influence the view of consumers on credibility of information source. If information source gains benefits in the propagation process, consumers' trust decreases. Consumers are more likely to accept information statement when they think that the information source is reliable, thus generating more beneficial attitude and behavior intention. Product review and grading on professional product evaluation websites are more concrete, standard and professional. On the contrary, portal websites cover more extensive contents, including professional reviews and review of consumers with different knowledge levels. The overall professional level of portal websites is lower than that of professional product evaluation websites. A hypothesis is proposed:

H₃: Consumers trust the TPPR on professional product evaluation website than portal websites and TPPR on professional product evaluation website can increase consumer adoption of new products.

3. METHODOLOGY AND RESULTS

All hypotheses will be examined in two studies through experimental design. We hope our findings will give a new insight to the literature regarding Third-party product review and consumer knowledge.

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