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The Effect of Reward Provision Timing in Mobile Application Platforms: A Social Exchange Theory Perspective

Emergent Research Forum (ERF) Papers

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Abstract

With the growing size of the food delivery mobile application market, reviews of restaurants are becoming more significant. As part of their marketing strategy, restaurants listed in Korean food delivery mobile applications such as Baemin and Yogiyo have come up with the Advance Review Reward Promotion (ARRP) in which rewards are given out before writing a review. Despite the perception of great loss accompanied by giving out rewards with uncertain promises from consumers, more and more restaurants are explosively expanding their ARRP, and restaurants not offering such reward promotions are considered rare. Based on extant literature, we hypothesized that the Traditional Review Reward Promotion (TRRP) in which rewards are given out after writing restaurant reviews and ARRP differ in terms of the quantity of reviews, the deviation of the quality of verbal information in reviews, and the quantity of reviews included visual information according to the timing of reward provision.

Keywords

Online Reviews, Incentivized Reviews, Timing of Reward Provision, Review Elicitation, eWOM.

Introduction

Recently, the food delivery mobile application market is growing exponentially. Frost & Sullivan, a global consulting firm estimated that the world's food delivery market, which was worth 82 billion dollars in 2018 will double in size to 200 billion dollars in 2025, with annual growth rate of 14% from 2018 to 2025(Singh 2019). With the growing size of the market, reviews and ratings of restaurants listed in delivery applications are becoming even more significant. As part of their marketing strategy, restaurants that are in the listing of Korean food delivery mobile applications such as Baemin and Yogiyo have come up with the Advance Review Reward Promotion (ARRP) in which rewards are given out before writing a review. Despite the perception of great loss accompanied by giving out rewards with uncertain promises from consumers, more and more restaurants, including bakeries, cafes are explosively expanding their ARRP, and restaurants not offering such reward promotions are considered rare (Lee 2019). In this paper, we investigate the effects of ARRP on customers' review.

Based on extant literature, we hypothesized that the Traditional Review Reward Promotion (TRRP) in which rewards are given out after writing restaurant reviews and ARRP differ in terms of the quantity of reviews, the deviation of the quality of verbal information in reviews, and the quantity of reviews included visual information according to the timing of reward provision. To the best of our knowledge, there is no existing research that investigates the phenomenon identified in this study. This research is expected to contribute to the field of IS and business practitioners.

Theoretical Background

Advance Review Reward Promotion (ARRP)

ARRP is a type of promotion in which the seller provides rewards (e.g. beverage size upgrade, free side dishes such as cheese sticks) for customers’ promise to write reviews with no guarantee. What is notable here is that there is no penalty for consumers that do not write reviews despite promises to do so in ARRP. The following table shows the steps and differences of the TRRP (e.g. bestbuy.com) and ARRP (e.g. Baemin, Yogiyo).

Traditional Review Reward Promotion	Advance Review Reward Promotion
1. Payment for product	1. Payment for product and writing the message “I would like to participate in the ARRP” in the additional request window.
2. Receiving of the product	2. Receiving the delivered food and Advance review reward
3. Writing review	3. Writing review (optional)
4. Receiving traditional review reward (e.g. 25-points)	

Table 1. Steps of the TRRP and ARRP

Reciprocity and Social Exchange Theory

When people receive help from others, they feel a sense of gratitude and indebtedness that they must return the gain they received. This is called reciprocity (Schopler 1970; Peng et al. 2018). The degree of gratitude depends on how they perceive the help or favor they receive from others (Morales 2005). Therefore, if the customers feel great gratitude for the rewards that they receive in ARRP, the likelihood of reciprocation would greatly increase (Watkins et al. 2006). Other work has shown that the customers have the tendency of making reciprocations such as purchases or reviews when they feel great gratitude for the additional help or gifts of sellers (Palmatier et al. 2009). Following the Social Exchange Theory, its gist is that people form relationships through exchanges of costs and rewards (Gouldner 1960). In Social Exchange Theory, social exchange is based on the uncertain belief that at some point, the other party on the receiving end will reciprocate the favors or gifts that were given to them. In contrast, economic exchange is based on self-interest and requires repayment in a specific period of time (Blau 1964; Cropanzano and Mitchell 2005).

Incentivized Online Review

Incentivized online reviews refer to reviews written in compensation of a specific amount of monetary reward or in promise of such rewards from manufacturers, distributors or third-party companies (Petrescu et al. 2018). This means that writing reviews is mandatory with incentivized online review promotions, while leaving online review through the ARRP is voluntary and has no penalty. Also, with incentivized online reviews, rewards are commonly awarded after reviews are posted. Incentivized rewards are therefore different from Advance Review Reward (ARR) which is a form of social exchange, and are instead in the category of Traditional Review Reward (TRR) which is a form of economic exchange. Studies have found that incentivized online reviews in B2C environments are much higher and positive in terms of the quantity, length, readability, and objectivity of reviews and lower in extremity and helpfulness of reviews compared to reviews without any rewards (Petrescu et al. 2018; Fradkin et al. 2018; Kim et al. 2019). In B2B environments, the effects of incentivized online reviews differed depending on who initiated it. If incentivized reviews are promoted by the platform, the scores of reviews became much lower, and did not impact the length of the review. Conversely, if incentivized reviews are promoted by sellers, the scores of reviews became much higher with the lengths becoming significantly shorter (Neumann and Gutt 2019).

Timing and Form of Reward Provision

Forms of customer reward programs could be categorized according to the timing and form of reward provision (Dowling and Uncles 1997). Regarding the timing of reward provision, with ‘immediate reward’

method, is that rewards are given out promptly after the point of purchase, and with 'delayed reward' method, rewards are redeemed or accumulated after purchase. The form of reward could be categorized into 'direct reward' and 'indirect reward'. Direct reward is reward directly related to the value proposition of the product such as price promotions. Indirect reward is something indirectly supports the value proposition of the product such as free gifts. The ARR on delivery platform is in the form of indirect and immediate reward (free gifts in times of purchase) which traditionally has been preferred mostly by offline stores. On the other hand, rewards given out for reviews in online shopping are usually points (virtual money). Points given in online shopping are in the form of direct and delayed reward (virtual money or points given out at the point of purchase).

There are two theories related to the timing of reward provision: prospect theory and framing effect. According to the prospect theory, humans tend to be risk-averse, which implies that people prefer alternatives with definite likelihood of happening to uncertain gains (Tversky and Kahneman 1991). Therefore, this theory asserts that people prefer ARR which has a definite likelihood of happening to TRR which is uncertain. The framing effect posits that a same circumstance can be interpreted differently by different people depending on how it is described, causing psychological illusion (Tversky and Kahneman 1981). In other words, while people consider ARR as a form of discount, people perceive TRR as a reward gained through the task of review-writing. Therefore, according to the prospect theory and the framing effect, people are likely to purchase more products sold through ARR compared to other equal products because of the illusion of price discount cast by the ARR. Also, such positive perception will have the effect of inducing more gratitude from consumers to sellers.

Hypotheses Development

The Quantity of Reviews

The quantity of reviews refers to the total number of posted reviews (Cheung and Thadani 2012). When consumers receive the benefit of ARR from sellers, they will feel both gratitude and indebtedness (Peng et al. 2018). This will lead them to write reviews as a form of reciprocation for their gratitude, or to alleviate their indebtedness. Hence, the quantity of reviews from ARR is expected to exceed the quantity of reviews from TRR.

H1: The quantity of reviews from ARR will be greater than that from TRR.

The Quality of Verbal Information in Reviews

Verbal information means textual information and the quality of reviews refers to how persuasive a review is (Bhattacharjee and Sanford 2006; Kim and Lennon 2008). The length of reviews is often utilized to measure the quality of reviews in incentivized review study (Yu et al. 2018; Kim et al. 2019). We expect that consumers will be sincerer in writing reviews to reciprocate the rewards received from sellers. However, some consumers will choose to write a short review since they feel that they have done their part by writing the review, regardless of the length. Thus, the deviation of the quality of reviews from ARR will be greater than that from TRR. Our hypothesis differs from the results of prior studies on incentivized reviews, which showed that incentivized reviews increased the length of reviews (Kim et al. 2019).

H2: The deviation of the quality (length) of verbal information in reviews from ARR will be greater than that from TRR.

The Deviation of Quantity of Reviews Included Visual Information

Visual information is the pictorial representation of a product (Kim and Lennon 2008). Past research of eWOM shows that pictures (visual information in this study) increase not only the credibility and quality of eWOM message, but also consumers' product interest and purchase intention (Lin et al. 2012). We hypothesize that the timing of reward provision has a significant effect on the quantity of reviews contained pictures because of the reciprocity. Our study will measure the quantity of reviews included visual information by the total number of reviews presented both texts and pictures.

H3: The quantity of reviews included visual information from ARR will be greater than that from TRR.

The Amount of Rewards

Previous study argues that pursuance of economic reward is a great factor in writing online reviews (Hennig-Thurau et al. 2004). Thus, if consumers were to be rewarded with greater ARR, they will be more thankful and would be more willing to reciprocate according to Social Exchange Theory. Hence, we expect that amount of reward will moderate the three relationships depicted in H1 (between the timing of reward provision and the quantity of reviews), H2 (between the timing of reward provision and the quality deviation of verbal information in rewards), and H3 (between the timing of reward provision and the quantity of reviews included visual information).

H4a: The amount of rewards will positively moderate the relationships between the timing of reward provision and the quantity of reviews.

H4b: The amount of rewards will positively moderate the relationships between the timing of reward provision and the deviation of the quality of verbal information in reviews.

H4c: The amount of rewards will positively moderate the relationships between the timing of reward provision and the quantity of reviews included visual information.

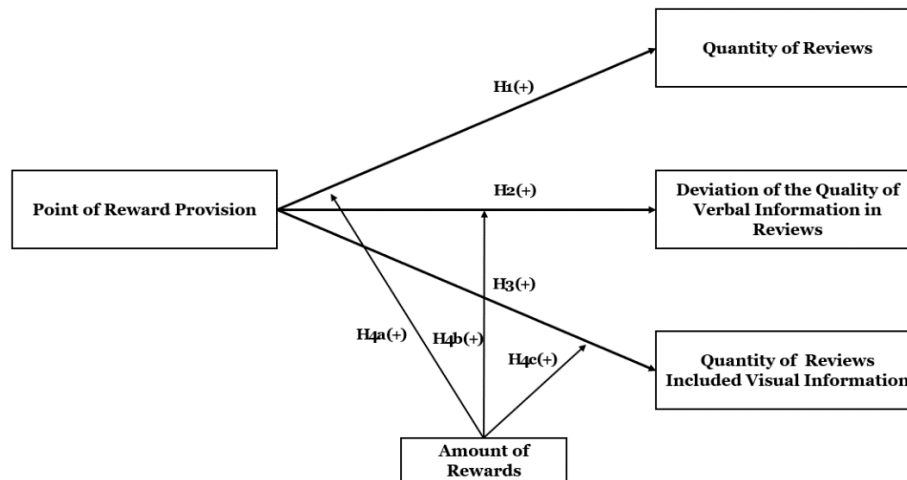


Figure 1. Research Model

Research Methodology

We will cooperate with a food delivery application company in Korea and conduct field experiments to verify whether the timing of reward provision would impact the quantity of reviews, the deviations of the quality of verbal information in reviews, and the quantity of visual information in reviews. In our experiment, we need to identify the pure effect of timing of reward provision in same circumstances because each restaurant might offer different kind of rewards. Hence, we plan to replace indirect and immediate rewards (e.g. beverage size upgrade, free side dishes such as cheese sticks) with direct and delayed rewards (e.g. points) to control the reward type bias and show the main effect clearly. Furthermore, the difference between reviews with TRR and reviews with no reward at all will be additionally verified.

Conclusion

This study is, to the best of our knowledge, the first work to examine the effect of reward provision timing from a social exchange perspective. Moreover, there is no existing study of ARR as it is a new marketing method. Therefore, by explaining social exchange in mobile application platform, we would contribute to the field of IS, marketing, and others. The managerial implication is that by carrying out ARR, the quantity and quality of reviews could be enhanced. Such enhanced quality and quantity of reviews would contribute to increase of sales (Chevalier and Mayzlin 2006; Chen et al. 2008). If future research could verify whether ARR could be applied to broader online shopping environments, this method may be able to be utilized to increase the sales and awareness of products and brands.

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