Response to the Editor and Reviewer #1's Comments

Firstly, we'd like to express our heartfelt thanks to the editor and all reviewers for their constructive and insightful comments.

During the past several days, we have carefully modified our manuscript several times according to the editor's and two reviewers' valuable comments. What follows are our detailed responses and revisions to the reviewers' comments. To distinguish, we put each original comment in *italic* and our responses in **blue font** in the following.

Reviewer #1's Comments:

(1) Within the Abstract there is a specification regarding the analysis of the implications of adopting LBMC promotion for the superior-quality and inferior-quality firms, but it is necessary to clarify what the inferior and superior quality of a company represents, to what exactly you refer.

Response and revision: Thanks for your valuable suggestions. In Section 5, we clarify that the competing firms may differ in the quality of their products. Specifically, consumers are heterogeneous in their willingness to pay for the goods of different quality. Therefore, we let firm 1 be the superior-quality firm with higer product quality (as revised in Abstract "with higher product valuation"). And we let firm 2 be the inferior-quality firm with lower product quality (as revised in Abstract "with lower product valuation").

(2) The Introduction section is much too extensive and part of it can rather be considered a review of the literature.

Response and revision: Thanks for your constructive and insightful comments. First, we deleted some details in the sixth paragraph of the Introduction. Second, we deleted the review in seventh paragraph of the Introduction and rewrote it at the second paragraph of Section 2.2.

(3) A Discussions section is required, and this part should focus on presenting implication and correlating the research results with other studies.

Response and revision: Thanks for your constructive and insightful comments.

(a) We changed the Section “6. Conclusion” into two parts, “6.1. Discussion of the main findings” and “6.2. Limitations and opportunities for future research”.

(b) In Section “6.1. Discussion of the main findings”, we enhanced the three contributions in second paragraph by comparing with previous studies.

(c) In Section “6.1. Discussion of the main findings”, we also enhanced the managerial insights in the last two paragraph.

(4) Bibliography contains many obsolete sources of documentation and relates very little to new, current bibliographic resources, necessary when discussing such a current topic.

Response and revision: Thanks for your kind comments.

First, we updated some literatures relative to mobile promotion and target martketing in recent three years, such as:

(a) Baardman et al. 2020 in the second paragraph of Section 2.1. They developed a ***new personalized demand model with customer trend for targeted promotions*** to the right customers, which helps to find important customers and target them to generate additional sales.

(b) Fong et al. 2019 and Luo et.al 2020 in the first paragraph of Section 2.2. Their findings alert managers to the dangers of ***improper targeting*** and investment in information technology. For example, targeted promotions increase promoted product sales and purchases of similar products, they can crowd out purchases of dissimilar products.

(c) Zhang et al. 2020 and Wang and Li 2021 in the second paragraph of Section 2.2. Zhang et al. 2020 is another research ***similar to Fong et al. 2015*** that quantified the effectiveness of competitive locational targeting based on a randomized field experiment, which merely focuses on the effects of *unilateral* promotions. Wang and Li 2021 examined the economic effects of a peculiar targeting mode. They incorporated consumers’ Lévy-walking behavior into target advertising economics models.

Second, we also updated some news and data in recent three years, such as:

(a) eMarketer 2019 in in the second paragraph of Introduction,

(b) eMarketer 2020 in in the fourth paragraph of Introduction.

Correspondingly, we deleted some outdated news and data, such as:

(a) eMarketer 2015a and eMarketer 2015b in the second paragraph of Introduction,

(b) Walsh 2013 in the fourth paragraph of Introduction,

(c) xAd 2013 in the fifth paragraph of Introduction,

(d) The Wire 2015 in the second paragraph of Section 3.1.1,

(e) Kawakami 2015 and Russell 2014 in the endnotes of Section 3.1.1.

In addition to the above modifications, we also modified our manuscript several times to correct all the grammar errors and to improve its English writing. We do hope that our thorough modifications and the above-detailed illustrations are good enough to satisfy the editor's and reviewer's requirements fully. Thank you!

We are looking forward to your positive response!