

The Effects of Review Presentation Formats on Purchase Intention Across Time Pressure

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Abstract: *Pervious researchers have discovered that the important influences of online reviews on consumers' valuation and vendors' sales, but hitherto have no clearly studied to the review presentation formats. This research used the trust and time pressure theory to analyze the impact of text reviews, image reviews, video reviews across time pressure. The 3×2 between-subject design was implemented to test the hypotheses. The results showed the three kinds of formats exactly could have different effects on purchase decisions, and time pressure had the moderation effect. Then the study discussed conclusion and future scope of the results.*

Keywords: presentation formats, purchase decisions, time pressure

1. Introduction

As the major pattern for consumers to get information when shopping online, online reviews published by previous buyers could provide more authentic and reliable information for potential consumers. In addition, online reviews can provide more improvement opinions for online businesses, and continuously improve their competitive strength. Therefore, online reviews, as a way of information to exchange, are becoming more significant for both consumers and vendors [1]. Compared with the traditional mode of consumer behavior, consumers are more willing to actively search for the information they need in the case of online shopping, and share the experience with others. With the popularity of mobile phones and other intelligent terminals, new review presentation formats, such as pictures and videos, are gradually emerging in the review systems, no longer limited to text. Contrast to simple text reviews, pictures and videos can show product information more intuitively and comprehensively. Due to previous scholars mainly focused on the impact of text reviews on consumer decision-making, there are few researches about image reviews and video reviews. The impact of text reviews, image reviews and video reviews on consumers' decision-making has not been widely concerned by scholars. Consequently, it is very important to study the influence of review presentation format on consumers' purchase intention for scholars and practitioners.

Previous scholars considered that consumers' purchase intention is the possibility of consumers to purchase a certain product, which is a subjective psychological state of consumers [2] [3]. Later, researchers found that the purchase intention is not only the subjective preference, but also could be used to predict consumer behavior [4]. Scholars pointed out shopping online will make consumers perceive more risks, and perceived risk will become an obstacle to online shopping [5]. Besides, previous researchers have examined the characteristics of online reviews, such as the star rating, and the characteristics of the reviewers publishers, such as the activity of the review publishers, will affect consumers' purchase decision [6]. A lot of researches have concentrated on text reviews, which is the main review presentation formats over the past few years. Involving to image reviews and video reviews, the researches, for one thing, only related

to the influence of image reviews [7], for another, the impact of the three review presentation formats are not distinguished with each other on consumers' purchase decision. Thus, the study devoted to examine the effect of text reviews, image reviews and video reviews on purchase intention across time pressure.

Consumers could not contact with products closely when online shopping, so perception of products have got extremely important to influence purchase intention [8]. The first question paid attention to seemed very necessary: (1) Which of text reviews, image reviews and video reviews have greater effect on consumers' purchase intention. In addition, nowadays, consumers are facing more and more time pressure, even the fragmented time is occupied by mobile phones. Consumers with different time pressures might make different decisions, so the second question to research: under the comparison of with or without time pressure, which of text reviews, image reviews and video reviews could provide higher influence on purchase intention for different time pressure.

2. Literature Survey

2.1 Trust theory

Trust is an important factor for people to make decisions, which connects unfamiliar parties. Former studies believed that trust is an important prerequisite for the success of business transactions, because trust makes consumers have a high degree of confidence and satisfaction on the seller and products. Especially facing most uncertain factors online shopping, there is information asymmetry between buyers and sellers. Consumers were faced with the risk of privacy leakage or property loss, so trust would help to promote the success of transactions and help consumers make purchase decisions. In the field of e-commerce, the definition of trust is most widely accepted by scholars, which emphasizes that trust is the will of the subject of trust based on certain expectations, and is influenced by the goodwill, ability and honesty of the object of trust. Among goodwill, ability and honesty, the scholars believed goodwill is basis of trust, which means that the trustee did something beneficial to the trustor from the perspective of altruism, rather than out of

egoistic motivation. For example, the trustee hopes to give the truster other help or services, but does not ask for additional rewards. When felt that the trustee paid priority to their own interests, the truster can increase the trust perception.

2.2 Time pressure

Early scholars believed that time pressure referred to the anxiety of decision-makers to complete a task within a limited time when the time to complete a task was less than the available time [9], which could conclude that early scholars linked time pressure with time limit, and believed that time pressure came from time limit. Later, the studies distinguished time pressure from time limit, and considered that time limit is an objective existence. The decision-maker's failure to complete the task within the time limit does not necessarily lead to time pressure, and the time required to complete the task is greater than the available time, the decision-maker may also produce time pressure due to his failure to complete the task as soon as possible. The scholars held time pressure referred to the subjective experience and feelings of decision-makers under time constraints. Time pressure would influence consumers' decision-making strategies [10].

3. Problem Definition

For potential consumers, the information or experience about products released by consumers was more reliable than that released by vendors [11]. When online shopping, consumers who have already purchased products were considered as trustee, and consumers going to buy the product are considered as truster. Hence, online reviews from consumers who have purchased the product were more convincing. Moreover, Compared to image reviews, video reviews took more time for consumers to upload to the Internet. And contrast to text reviews, image reviews might reveal more privacy about the consumers. Therefore, Uploading videos, pictures and text are all consumers bought the product to protect the interests of potential consumers. In addition, consumer's trust to text reviews, image reviews, video reviews enhanced in turn. Hence, this study hypothesizes:

H1: The review presentation formats have different impact on purchase intention for consumers.

H1a: Image-based reviews provide more positive effect on purchase intention for consumers than text-based reviews.

H1b: Video-based reviews provide more positive effect on purchase intention for consumers than text-based reviews.

H1c: video-based reviews provide more positive effect on purchase intention for consumers than image-based reviews.

The research studied the impact of three kinds of review presentation formats on consumers' purchase intention under the situation of with time pressure or without. Previous studies found that under the situation of time pressure, individuals might reduce the amount of information collected, speed up the process of information processing, and even speed up decision-making [12]. Therefore, with the time pressure, the presentation formats had a greater impact on purchase intention than without time pressure. Compared with text reviews, picture reviews and video reviews provide more vivid and intuitive information. Relevant research had

shown that video reviews had stronger perceived trust, perceived usefulness and perceived persuasion than text reviews [13]. Compared with text reviews, picture reviews are more helpful to attract consumers' attention [14], because pictures could provide more information, and intuitive pictures are more conducive to consumers' understanding of the products [15]. Therefore, in the situation of time pressure, consumers will be more inclined to more intuitive and visual information, which helps consumers to make purchase decisions quickly. Compared with picture reviews, video reviews are more vivid and contain more sensory information, such as hearing information. Hence, this study hypothesizes:

H2: The impact of review presentation formats on purchase intention is moderated by time pressure.

H2a: Text reviews provide more positive effect on purchase intention in the situation without time pressure than with time pressure.

H2b: Image reviews provide more positive effect on purchase intention in the situation with time pressure than without time pressure.

H2c: video reviews provide more positive effect on purchase intention in the situation with time pressure than without time pressure.

4. Methodology

The aim of the study was to research the impacts of text reviews, image reviews, video reviews on consumers' purchase intention and study the moderate factor with or without time pressure. The research used a between-subject design to validate the results that showed 3(text reviews, image reviews, and video reviews) \times 2(with or without time pressure).

4.1 Stimulus Materials and Selection of Products

To make subjects feel more immersed experience, the study chose the online reviews from the real website in China, which contained a lot of online reviews uploaded by consumers who had already bought the products. As both positive and negative reviews might produce different impacts on purchase intention, the study purely chose positive reviews to simplify. Concretely, text reviews contained three texts, which had been slightly corrected to make words clear. Image reviews had the same words of the text reviews, and then three pictures which selected neat. Video reviews as image reviews contained the same texts, and followed a video which behaved fluently. As for the product, the research selected the clothes as the experimental products.

4.2 Experimental Procedures

The subjects of the research were students from the university in Xi'an, and questionnaires were collected 181, contained invalid 6. Experimental process could be described into two stages. First, subjects were required to come to the classroom at the same time, and sit randomly. Then, the author explained the rule of experiments to receive questionnaires, and the subjects answered the questionnaires. Notably, the setting of time pressure referred to the mature practice of previous scholars, and the items of time pressure used the

Svenson [9]. The items of purchase intention from Lin & Chen, The author used a seven-point likert scale to measure.

5. Results

5.1 The Constructs Reliability and Validity

Reliability represents the reliability of measurement results, and validity is the measurement item of each variable, which can accurately measure the degree of the variables. The research used Cronbach's alphas and factor loading, respectively, to test the variables' reliability and validity, as described in Table 1. From the results in the table1, the results exceeded the established standards, so the variables have good reliability and validity.

Table 1: Margin specifications

	<i>Cronbach's alphas</i>	<i>Factor loading</i>
PI1	0.853	0.837
PI2		0.854
PI3		0.849
PI4		0.737
TP1	0.945	0.810
TP2		0.762
TP3		0.839
TP4		0.848
TP5		0.859
TP6		0.873
TP7		0.881
TP8		0.817

PI: purchase intention TP: time pressure

5.2 Test of Hypotheses

The study applied analysis of variance to test, and the results were shown in Table 2. The first hypothesis was to study the influence of text reviews, image reviews, video reviews on purchase intentions. As concluded from Table 2, the results demonstrated that the main effect of three kinds of presentation formats was significant on purchase intention ($F=36.873, p<0.001$). And then the image reviews provided more positive effect on purchase intention than text reviews ($M_{image}=4.4955$ versus $M_{text}=3.5890, t=-5.341, p<0.001$). The video reviews provided more positive effect on purchase intention than text reviews ($M_{video}=4.9667$ versus $M_{text}=3.5890, t=-7.131, p<0.001$). The video reviews provided more positive effect on purchase intention than image reviews ($M_{video}=4.9667$ versus $M_{text}=4.4955, t=-2.424, p=0.017<0.05$). In a word, the results supported H1 (H1a, H1b, H1c).

Then the second question the research studied was the moderation effect of time pressure. Shown in table 2, not only the main impacts of three kinds of presentation formats ($F=36.873, p<0.001$) and time pressure ($F=22.104, p<0.001$) were significant, but the interaction effect between both was significant ($F=14.636, p<0.001$). Moreover, text reviews provide more positive effect on purchase intention in the situation without time pressure than that with time pressure ($M_{with\ time\ pressure}=3.4483$ versus $M_{without\ time\ pressure}=3.7250, t=1.155, p=0.253>0.05$), but the result was not significant. Image reviews provide more positive effect on purchase intention in the situation with time pressure than

that without time pressure ($M_{with\ time\ pressure}=4.8276$ versus $M_{without\ time\ pressure}=4.1389, t=-3.088, p=0.003<0.01$). Video reviews provide more positive effect on purchase intention in the situation with time pressure than that without time pressure ($M_{with\ time\ pressure}=5.7083$ versus $M_{without\ time\ pressure}=4.2250, t=-6.345, p<0.001$). In brief, the results partially tested H2, and concretely H2a was not supported, H2b and H2c were supported.

Table 2: Type III test of fixed effects of the purchase intention

	Variable	F	Sig
Product presentation formats	PI	36.873	0.000
Time pressure	PI	22.104	0.000
Review presentation formats x Time pressure	PI	14.636	0.000

PI: purchase intention

6. Conclusion

The current online review system from the beginning of the text reviews to the image reviews or even video reviews, which reflected the consumers' requirements become greater of information display. Pure text reviews has been unable to meet the needs of consumers when shopping online, so the study compared which of the three kinds of presentation formats have a greater impact on purchase decision that is a problem worthy of our study. Therefore, based on the trust theory and time pressure theory, this study explored the different effects of the review presentation formats purchase intention under the moderation effect of time pressure. The conclusions are as follows:

First, H1 (H1a, H1b, H1c) was completely supported, which showed that different review presentation formats actually had different effects on purchase intention. Specifically, video reviews have the greatest impact, followed by image reviews and text reviews. The results indicated that consumers were more vulnerable to the impact of intuitive and multi sensory information. Video reviews could make consumers get more auditory and visual information, display products in a more comprehensive way. The text reviews is less vivid and interactive for consumers, so text reviews have the least impact on purchase intention.

Then, H2 (H2a, H2b, H2c) was partly tested. H1a was not supported, and with or without time pressure, the impact of text reviews on consumers' purchase intention is not significant. The impact of image reviews and video reviews on consumers' purchase intention is greater with time pressure than that without time pressure. Under the pressure of time, consumers will speed up their purchase decisions so they choose image reviews and video reviews, which were shown more intuitive and vivid.

7. Future Scope

The stimulus materials selected in the study were all positive reviews. However, in real life, online reviews hardly only had positive reviews, and negative reviews often existed. Therefore, further research can consider the impact of

negative reviews shown as different review presentation formats on purchase intention.

Second, the limitations of the selection of subjects. The subjects were all students from university, so future could expand the selection of subjects to different ages and occupations, which may be able to produce more useful conclusions.

Finally, the study only used one kind of product, which could affect the results. If the research will choose few kinds of products, the conclusion might be better.

References

- [1] You Y, Vadakkepatt G G, Joshi A M, "A Meta -Analysis of Electronic Word-of-Mouth Elasticity," *Journal of Marketing*, LXXIX(2), pp. 19-39, 2015.
- [2] Fishbein M, Ajzen I, "Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research," Addison Wesley Reading, pp. 578-592, 1975.
- [3] Dodds W B, Monroe K B, Grewal D, "Effects of Price, Brand, and Store Information on Buyers' Product Evaluations," *Journal of Marketing Research*, XXVIII, pp. 307-319, 1991.
- [4] Mullet G, "Customer attitudes about food production," *Trends in Food Science & Technology*, pp. 466-474, 2006.
- [5] Forsythe, Boshi, "Consumer patronage and risk perceptions in Internet Shopping," *Journal of Business Research*, I, pp. 867-875, 2003.
- [6] Park C, Lee T M, "Information direction, website reputation and eWOM effect: A moderating role of product type," *Journal of Business Research*, LXII(1), pp. 61-67, 2009.
- [7] Liu Y, Du R, "The effects of image-based online reviews on customers' perception across product type and gender," *Journal of Global Information Management*, XXVII(3), pp. 139-158, 2019.
- [8] Jiang Z, Benbasat I, "The effects of presentation formats and task complexity on online consumers' product understanding," *MIS Quarterly*, XXXI(3), pp. 475-500, 2007.
- [9] Svenson O, Edland A, "Change of preferences under time pressure: choices and judgements," *Scandinavian Journal of Psychology*, XXVIII(4), pp. 322-330, 1987.
- [10] Venkatraman V, Payne J W, "Huettel S A. An overall probability of winning heuristic for complex risky decisions: Choice and eye fixation evidence," *Organizational Behavior and Human Decision Processes*, CXXV(2), pp. 73-87, 2014.
- [11] Ludwig S, Deruyter K, "Friedman M. More than words: the influence of affective content and linguistic style matches in online reviews on conversion rates," *Journal of Marketing*, LXXVII(1), pp. 87-103, 2013.
- [12] Ben Z H, Breznitz S J, "The effect of time pressure on risky choice behavior," *Acta Psychologica*, XLVII(2), pp. 89-104, 1981.
- [13] Xu P, Chen L, Santhanam R, "Will video be the next generation of e-commerce product reviews? Presentation format and the role of product type," *Decision Support Systems*, LXXIII(3), pp. 85-96, 2015.
- [14] Miniard P W, Bhatla S, Lord K R, "Picture-based persuasion processes and the moderating role of involvement," *Journal of consumer research*, XVIII(1), pp. 92-107, 1991.
- [15] Coyle J R, Thorson E, "The effects of progressive levels of interactivity and vividness in web marketing sites," *Journal of advertising*, XXX(3), pp. 65-77, 2001.

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