Online consumer behaviour and its relationship to website atmospheric induced flow: Insights into online travel agencies in Indonesia

M Fahlevi*

Management Department, BINUS Online Learning, Bina Nusantara University, Jakarta, Indonesia, 11480

E-mail: mochammad.fahlevi@binus.ac.id

Abstract. The emergence of online travel agents is a phenomenon that affects the traditional travel agents. Competition among online travel agents is an exciting area to study. This research aims to examine factors that have impacts on flow experience and how the flow experience along with shopping enjoyment and online store intimacy can influence consumers’ purchase intention in the context of online travel agents in Indonesia. This research is conducted using survey research with adequate research interference where the researcher uses controlled participant that meet with specific criteria such as a specific age band. The findings of this study show that design atmospherics have the positive impact in increasing purchase intention for online travel agents in Indonesia.

Keywords: online travel agents, consumer behaviour, purchase intention

1. Introduction

The emerging of B2C e-commerce transactions in Indonesia has experienced positive growth over the years, triggering online tourism sector to gain the ultimate benefit and to become one of the leading drivers of B2C e-commerce in Indonesia [1]. With the development of the current technology, competitions among producers to win the competition have been getting more intense significantly. Therefore, understanding customer purchase intention has become a crucial factor in creating competitive advantages of the product to stay competitive and to survive in the midst of the fierce competition. The organization tries to offer the best service for their customers to keep them and creating the positive purchase intention in the future [2]. By focusing on the factors that determined in affecting the purchase intention, the result of this study can be used as an input for the organization in identifying the areas that need to be enhanced. Recent studies show that Purchase intention has the positive impact for organization performances by delivering competitive advantages [3], [4], [5] and creating loyal customers [6], [7].

The study of factors that determine the purchase intention is a crucial factor that differentiates the winning sites among its competitors. The need of creating online websites that can deliver remarkable online experiences has become the main challenges for online travel agents in Indonesia, mainly to attract more visitor visiting their website, to win the competitions and creating more revenues. The primary factor that affects customer purchase intention, online shopping enjoyment and online shopping...
Intimacy is the importance of flow experience. Lack of studies that have been conducted to understand how to create or to improve the user flow experiences.

The existing research used as a reference explained the impact of the design atmospheric in inducing the flow experiences and finally affecting the satisfaction and the purchase intention of the online travel agent in China [8]. This paper tries to expand the previous research by investigating not only the impact of the design atmospheric in increasing purchase intention, but also tries to seek the relationship of the design atmospheric in inducing positive impact of online shopping enjoyment [9] and online store intimacy [10]. In the end, strengthens the impact of increasing purchase intention. Furthermore, the next differentiating features that differentiate from previous research is the research in this paper conducted in Indonesia wherein there have not been any previous similar researches conducted in this area.

Finally, this paper tries to answer several research questions such as: Is design atmospheric related to flow? Is flow related to shopping enjoyment and online store intimacy? Are flow, shopping enjoyment, and online store intimacy related to purchase intentions? These questions will be addressed through this paper and provide inputs that can be utilized as a guide for online travel in Indonesia to increase their competitive advantages. By studying the importance of flow, the result of this study can be implemented as an input to enhance the performance of online travel websites and apps in Indonesia, to trigger higher impact to support tourism sectors in Indonesia. The model used for this research is using S-O-R Frameworks [11] that connected between the stimuli (design atmospheric) in impacting the organism (flow experiences) and finally affecting the response (online store satisfaction, Purchase intention and online store intimacy).

2. Literature review

The model proposed for this study based on the S-O-R Model [11]. As an input for the model or the stimuli, there are three selected main motives: informativeness, effectiveness and entertainment. Every topic in the stimuli section is studied to visualize the impact of those topics in affecting the middle section or organism section.

S-O-R frameworks or Stimuli – Organism – Response Model was introduced by Mehrabian and Russell in their book, An Approach to Environmental Psychology, published by MIT Press in 1994. They suggest that there are two main concerns in environmental psychology. Environmental impact of physical stimuli (S) and the effect of stimuli in creating specific response (R). Later, this model enhanced by questioning what is located and happened between S and R. Further research conducted by Mehrabian (1976) and Russell and Pratt (1980), introduces Organisms (O) as the bridge between Stimuli (S) and Response (R). This model tried to explain that the effect of stimulation received can lead to two possible behavior results: Acceptance and Avoidance. The process to analyze all the incoming stimulation is conducted by the organism (O) that analyze all possible outcomes based on available input or stimulation that lead to decision-making or behavior. In general, this model represented in Figure 1.

![Figure 1. S-O-R Framework](image-url)
The received stimuli from environment lead into three types of emotional states: Pleasure or displeasure, arousal or avoidance, dominance or submissiveness. Pleasure defined when someone is feeling happy or satisfied. Arousal defined when someone feeling alerted, stimulated, energized. Dominance defined when someone gained control in facing certain situations. In overall, the S-O-R Framework used to explain the connection between the stimulation exist in the environment, how individual process the stimuli from environment reflected in three types of emotional states, pleasure, arousal and dominance. Moreover, the decision, response or behavior resulted from the process in previous stages that lead to two behavior possibility, approach (acceptance) or avoidance. Two simple relations created from the S-O-R Framework.

The first relation explained the relationship between organism as a dependent variable and environmental stimuli as an independent variable. In this case, Environmental stimuli identified from website attractiveness, easiness to use, the information offered, processing time, and feature. The second relation explained the relationship between response as the dependent variable and organism as independent variables. Organism data gathered from the previous model used as an input for the next model.

This concept implemented widely used to explain the phenomena of a successful marketing strategy, especially in explaining why some marketing strategies succeed but some failed. Later, by the development of e-commerce technology, the model as seen in Figure 2 is used to explain phenomena in the successful e-commerce platform. [12], stated that the stimuli, the hedonic shopping value and utilitarian shopping value influenced the organism process that affects repurchase intention in the specific online retailer. [13] used S-O-R frameworks to compare international coffee retailer and local coffee retailer in Malaysia. They found that international coffee house has better stimulus, organism, and response from a local coffee house. [13] used S-O-R frameworks to identify the impact of the consumer perceptions of website atmospheric on the flow and impact on the purchasing decision.

![Figure 2. Research Framework](image)

3. Methodology
This research is using survey research with adequate research interference where the researchers are using controlled participant that meet with specific criteria such as a specific age band, and most of the survey participants are working professional. Therefore, the reason why we choose working professional is that they already have a regular income and have flexibility in arranging their vacation time. The researchers do not control the study setting that the researchers used is Non-Contrived study due to the environment for the study, and this is purely a field study. The unit of analysis used in this study is a group because the researchers use a specific age band from the participant that take part in this study. In this research, the time horizon for this study is categorized as cross-sectional where all data is measured relatively by using the same time point.
The measurement used in this study was developed based on previous research. Previous experience is measured by asking the respondent to respond to 7-variables with statement items that have been adjusted. It intends to improve our understanding of the determinants of online purchase intentions and satisfaction as the right web atmosphere design changes the consumer shopping experience that attracts buying intentions that are profitable and general satisfaction. For example, a statement about Website Informativeness where there are four question items (for example "This site is complete with information that is useful to me"). The focus of this research was developed by adding two new variables namely shopping enjoyment and Online store intimacy, each with five statements. The steps were adapted use a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree).

Website informativeness is measured using a 4-item statement adapted from [14] with examples of questions such as: "This site is useful to me" (1 = strongly disagree; 5 = strongly agree). The effectiveness of information content uses a 5-item statement adapted from [15] with examples of questions such as: "Information on this site is easy to digest?" (1 = strongly disagree; 5 = strongly agree). Website Entertainment uses a 5-item statement adapted from [14] with examples of questions such as: "Browsing on this site is fun for me" (1 = strongly disagree; 5 = strongly agree). Flow uses a 3-item statement adapted from [16] with examples of questions such as: "When using this site, my attention is fully focused on this browsing activity" (1 = strongly disagree; 5 = very agree). Shopping Enjoyment uses a 5-item statement adapted from [9], with examples of questions such as: "If I am shopping online, in my opinion, this site can create an entertaining shopping experience" (1 = strongly disagree; 5 = strongly agree). The Online Store Intimacy uses a 5-item statement in which 2-items adapted from [10], with examples of questions like: "This online site feels familiar to me" (1 = not very agree; 5 = strongly agree) then the 3-item statement adapted from [17] with examples of questions such as: "I enjoyed my experience browsing this site" (1 = strongly disagree; 5 = strongly agree). Finally, the Purchase intention measure was adapted from [8] and using 4-items, a 5-point Likert scale (for example "The possibility of me buying a product from this site is high") (1 = strongly disagree; 5 = strongly agree).

4. Results and discussions

The results of the structural model testing are shown in Table 1. Not all pathways are significant at the level of p <0.05 or t > 1.96. Website Informativeness was found to not significantly affect Flow (b = -0.064, t = 0.677 <1.96, p = 0.499> 0.01), looking for support for H1. Effectiveness of information content was also found to not significantly affect Flow intention (b = 0.149, p = 0.071> 0.05). As a result, we do not find support for H2. Website Entertainment was found to significantly affect Flow (b = 0.692, t = 8.246> 1.96, p = 0.000 <0.05), so H3 is supported. Flow was found to significantly affect Shopping Enjoyment (b = 0.674, t = 10.806> 1.96, p = 0.000 <0.05), indicating support for H4.

Next Flow was found to not significantly influence Purchase Intention (b = 0.165, t = 1.129 <1.96, p = 0.259> 0.05), so H5 is not supported. Simultaneously it was found that the significant flow affected the Online Store Intimacy (b = 0.671, t = 9.137> 1.96, p = 0.000 <0.05), so H6 was supported. Shopping Enjoyment was found to not significantly influence Purchase Intention (b = 0.147, t = 1.241 <1.96, p = 0.215> 0.005), so H7 is not supported. Finally, Online Store Intimacy significant influences Purchase Intention (b = 0.474, t = 3.234> 1.96, p = 0.001<0.05); thus, H8 is supported.

| Hypothesis | Path | Coefficient | T-stat | P-value | Standard | Decision |
|------------|------|-------------|--------|---------|----------|----------|
| H1         | Informativeness → Flow | -0.064 | 0.677 | 0.499 | 0.05 | Rejected |
| H2         | Effectiveness → Flow | 0.149 | 1.807 | 0.071 | 0.05 | Rejected |
| H3         | Entertainment → Flow | 0.692 | 8.246 | 0.000 | 0.05 | Accepted |
| H4         | Flow → Shopping Enjoyment | 0.674 | 10.806 | 0.000 | 0.05 | Accepted |
| H5 | Flow → Purchase Intention | 0.165 | 1.129 | 0.259 | 0.05 | Rejected |
|---|---------------------------|-------|-------|-------|------|----------|
| H6 | Flow → Online Store Intimacy | 0.671 | 9.137 | 0.000 | 0.05 | Accepted |
| H7 | Shopping Enjoyment → Purchase Intention | 0.147 | 1.241 | 0.251 | 0.05 | Rejected |
| H8 | Online Store Intimacy → Purchase Intention | 0.474 | 3.234 | 0.001 | 0.05 | Accepted |

This research focuses to examine whether website informativeness, information effectiveness, and entertainment affect consumers’ flow, shopping enjoyment, and online store intimacy. In the end, this paper examines whether these relationships would trigger purchase intention. SEM-PLS path analysis shows that all variables show a significant and insignificant influence on purchase intention of online travel agents in Indonesia, where four hypotheses are supported, and four hypotheses are not supported or rejected.

From the results obtained, on the part of stimuli, it turns out that entertainment only affects the flow experience, while the other two variables, namely informativeness and effectiveness, do not affect flow experiences. The hypothesis that entertainment influences flow is consistent with research from [8]. However, this research shows a different result from those of Gao and Bai research on how informativeness and effectiveness affect flow experiences. In this research, it is believed that respondents who participate in the survey priorities entertainment aspects have more influence on flow experience rather than informativeness and information.

The meaning from this finding is that an online travel agent website that attracts attention, entertains, pleases browsing and imaginative, has a significant influence on online travel agents in Indonesia. This new understanding implies that travel agents must pay attention to attractive, entertaining websites in online travel agents and contribute to flowing information. That way will attract much buying interest.

Flow also influences shopping enjoyment. Where someone in conducting travel agent online transactions or browsing feels enjoying the website, feeling in control of the website used and can create a shopping experience that is fun, interesting, entertaining, exciting and able to enjoy the website.

Furthermore, flow also affects online store intimacy. When someone is browsing the online travel agent's website in addition to enjoy the website, taking control of the website allows them to feels comfortable, happy, able to enjoy the experience of browsing the website since they feel close to the online travel agents.

In this study, flow does not significantly influence purchase intention. This result is contrary to research from [8] where the flow has a significant effect on purchase intention. In this study, only online store intimacy has a significant influence on purchase intention, so this indicates that the experience of browsing a comfortable, happy and enjoying online travel shopping agent affecting the customer behaviour. The customer does not want to move to another agency since they have built close relationship and familiarity. This situation leads to high intention to buy and to come back again.

5. Conclusion
The result of this study show that design atmospherics have the positive impact in increasing purchase intention for online travel agents in Indonesia, provides several implications for online travel agent users in Indonesia. Exciting, fun, entertaining, comfortable online travel agent site can be enjoyed and can create a pleasant shopping experience, especially can cause familiarity will be more usable by someone in conducting agent travel online transactions. This situation can also result in high intention and purchase interest because it will return to the same website.
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