

Promoting Online Sales: Analysis of Consumers' Online Buying Behaviors

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Abstract: With the widespread adoption of smartphones and mobile payments, mobile commerce has become an essential part of e-commerce. An increasing number of customers are trying to purchase products online due to convenience and variety of products. However, as online shopping rapidly expands, risks and challenges emerge, waiting to be solved and mitigated. In this article, consumers' online buying behaviors will be analyzed from three aspects: perceived benefits, perceived risks and psychological factors. Relevant data and conclusions are drawn from publications in a variety of fields, including psychology, economics and business. This article applies a qualitative analysis approach, synthesizing and reflecting on conclusions from existing publications. To promote sales of online platforms, suppliers should take measures to enhance customers' perceived benefits, providing customers with positive psychological guidance and trying to reduce perceived risks. Both economic conclusions and discoveries from psychological experiments are utilized to support this research. This research is applicable to worldwide consumers, including those in developed and developing regions.

Keywords: Behavioral economics, Online shopping, E-commerce business, Psychology in online shopping

1. Introduction

In the field of analyzing consumers' online buying behaviors to promote sales of online websites, there are already some well-established research and conclusions, including both quantitative and qualitative experiments. After learning from the strengths of various perspectives and critically evaluating their weaknesses, this article integrates the author's own viewpoints and experience to provide comprehensive and feasible recommendations with practical value for online suppliers. Based on the theory of reasoned action, this article analyses perceived benefits, perceived risks and psychological factors from the perspective of online consumers, deeply researching elements that influence customers' satisfaction towards online shopping to give suppliers hints for further improvements. Different from traditional economic analysis, this article integrates psychological factors like the dual-process accounts of reasoning and the psychology behind colors and designs, with economic concepts to research consumers' online buying behaviors. From each of the three dimensions above, a variety of suggestions for online suppliers are raised to enhance consumers' trust and satisfaction. In the context of rapidly advancing IoT, online shopping is becoming increasingly prevalent. If existing problems are not addressed with sufficient attention, chances are that they may

escalate into social problems in the future. For instance, this article points to the issue of consumers' impulsive buying behaviour, which will negatively impact the healthy and long-run relationship between consumers and suppliers.

2. Theory of Reasoned Action

According to Vidya and Selvamani, the mode of online shopping allows customers to purchase products with great ease and convenience [1]. The theory of reasoned action (TRA) states that behaviour is determined by behavioral intentions. To be specific, behavioral intentions are influenced by two elements: attitude and subjective norm. This theory is broadly utilized to analyse customers' purchasing behaviour. Customers' behavioral intention is affected by both their own attitudes towards the product and social expectations from their family and friends. Customers' online shopping behaviour is determined by the customer's attitudes towards the online retailer [2]. According to Charles and Bill, e-consumers' attitude towards an e-retailer are positively related to their perceptions of the e-retailer's image, which usually consists of elements like product selection, customer service, and delivery fulfillment [2]. Usually, the combination of in-store and online modes is conducive to building a retailer's image. According to interviews and analysis, Xiaowen and Gavriel find that interview participants are more willing to trust brick-and-mortar stores than purely visual stores [3]. For instance, Tesco, one of the largest e-grocers in the world has both traditional and online shops. Based on Jusoh and Ling's research, product perception and customers' service can significantly influence customers' attitudes towards online shopping [4]. Hence, efforts should be put into improving these aspects.

3. Online Buying Behaviors

On the basis of Somdech and Watchrin's experiments, buying behaviour is affected by three factors: perceived benefits, perceived risks and psychological factors [5]. Online buying behaviour (OBB) is positively related to perceived benefits (PB) and psychological factors (PF) and negatively related to the perceived risks (PR). Somdech and Watchrin conclude the relationship function as below:

$$\text{OBB} = 4.796 + 0.163(\text{PB}) + 0.055(\text{PF}) - 0.022(\text{PR}) \quad (1)$$

3.1. Perceived Benefits

According to Matthew, perceived benefits in the field of buying constructs are specific to an individual's perception of benefits that will produce satisfaction [6]. Based on relevant research and analysis, there are four dimensions about online shopping, including shopping convenience, product selection, ease or comfort of shopping and enjoyment [7]. Moreover, Ghose and Bhatnagar think e-shop customers should be more motivated by functional benefits reasonably assuming that online customers are more likely to be convenience-oriented economic shoppers [8].

Sheth points out that customers basically have two kinds of motives in the process of shopping: functional motives and non-functional motives [9]. Functional motives are related to time, location and possession needs and Sheth concludes features like convenience of one-stop shopping, low-cost and availability of products in need to be functional motives, which are intrinsic to outlets [9]. Hence, improvement for promoting online sales should focus on enhancing customers' sense of convenience. There are several specific types of convenience, which have different levels of positive influence on customers. Paulo conducted an experiment, involving a sample group of students and made a conclusion that possession convenience, transaction convenience and evaluation convenience have the greatest influence on customers' satisfaction [10]. In contrast, post-possession convenience and attentiveness convenience were found to produce the least impact [10]. About possession convenience,

different from traditional stores, where customers can get the purchased product immediately, online customers have to wait for products to be handled, shipped and delivered [10]. Jiang identified possession convenience, namely access convenience, as time and place flexibility in arriving at online stores, accessibility of e-shop websites and other psychological aspects of accessibility [11]. Based on this definition, enhancement such as upgrading the website system to make it easier to use. To make customers more comfortable during shopping online, individualized designs of the webpage interface can be provided based on customers' preferences and styles speculated from their consumption habits. To achieve this function, AI and big data technology can be utilized to infer customers' preferences. However, consumers' privacy should be protected with great attention to prevent invasion of personal information. Moreover, according to Jiang's analysis, evaluation convenience mainly includes comprehensive product descriptions, assessable quality and easy price comparisons [11]. Hence, it is necessary for suppliers to disclose the ingredients of food products, and the material composition indexes of clothing products. The life span and manufacturing materials of furniture and electronic appliances should be transparent to customers as well. Functions like comparing prices across a variety of websites can be added to the webpage to enable consumers to easily identify the price discrepancies of the same or similar products, which is beneficial for building customers' trust in the suppliers.

3.2. Psychological Factors

According to Rungtornsupatt and Joemsittiprasert, psychological contract plays an important role in online buying behaviours [5]. Researchers emphasize that psychological contracts are not like written contracts because the psychological contract is perceived by the consumer and promised by the e-commerce website [5]. In other words, this contract is formed due to customers' expectations towards the online supplier. Hua and Lingling found that most online sellers are not capable of interacting with customers, leading to an incongruent perception of obligations [12]. This incongruence may increase the possibility of a psychological contract breach and the chance of customers losses. Hua and Lingling conducted two experiments to test the impact of psychological contract breach on consumers' emotions. Through their research, breach of psychological contract negatively influences customers' sense of satisfaction [12]. In essence, online buying behaviour is a kind of exchange activity between customers and suppliers. Hua and Lingling conclude from the social exchange theory that trust is one of the most crucial conditions for the establishment and maintenance of exchange relationships [12]. In the context of online shopping, building trust in suppliers is a long-term process for consumers, while the breach of contract can easily destroy the trust, which is extremely difficult to restore after being broken.

Moreover, Somdech also concludes that perceived value is the greatest trait of psychological factors influencing customers' decision-making of online purchases [5]. Broadly, perceived value means what customers want and believe they can get from buying and using the supplier's product [13]. To enhance customers' perceived value, Woodruff raised that suppliers should understand customers' needs and preferences and develop a customer value-oriented marketing information system (CVOMIS) to capture and deepen customers' insights and transfer learning into practice [13]. As mentioned above, trust is the backstone of long-term exchange relationships between customers and suppliers. Prioritising customers' requirements and feedback is productive to building the trust.

Dual-processing accounts of reasoning can be utilised to promote sales of online suppliers. This theory states that there are two different modes of processing, system 1 and system 2 processes [14]. In specific, system 1 is fast and unconscious, while system 2 is slow and conscious [14]. Fast system 1 process will normally wait for the slow system 2 process to be completed before the decision making [15]. To promote sales, efforts can be put on both sides to attract customers. First, experience-driven design rules can be applied to optimize the webpage design. Based on research, when time and

cognitive capacity are limited, system 1 processes will dominate the decision making [15]. Hence, to enhance customers' function of system 1, retailers can create a sense of urgency by implementing strategies like time-limited discounts, thereby stimulating their impulse to purchase the item. What's more, using colors properly on the webpage can also promote sales. As Nan and Xinyue discovered, the arrangement of colors should shine with the subject of the webpage and different colours have different symbols [16]. Take the colour blue as an example. The use of blue conveys a sense of stability, reliability and technological sophistication to customers. Therefore, retailers selling technological products can utilize blue as the theme colour of web page to leave a strong and reliable first impression on customers. Moreover, red prominent discount banners can be set on shopping websites since red colors can greatly stimulate purchasing desire and impulse in psychology. Based on Ozen's research, strategies including relaxation shopping and adventure shopping are positively related to customers' impulse buying tendency [17]. Some dynamic and interactive effects can be added to activate customers' interests in shopping and enhance their sense of satisfaction.

However, the abuse of system 1 is not beneficial for suppliers to sustain a long-run and healthy relationship with customers. Suppliers should take measures to activate the customer's system 2 at the same time. Based on Yaxing and Guofang's analysis, consumers' rational attitudes can influence their consumption satisfaction positively [18]. Based on a rational purchasing attitude, consumers can more easily build trust and satisfaction in online platforms, which can facilitate a win-win relationship between customers and suppliers [18].

3.3. Perceived Risks

Perceived risks commonly have three essential dimensions, including financial risk, product risk and time or convenience risk [7]. Trust and risk are interrelated to each other [19]. In the context of online purchasing, trust can mitigate a consumer's perception of risks, and the higher the risk involved, the more trust is needed to offset the risk [20]. According to Bhatnagar and Ghose, consumers perceive a higher risk when shopping online than in brick-and-mortar stores [8]. According to Somdech, social risk is the most significant element associated with the intention to purchase online [5]. He identified social risk as the disapproval of purchasing products online by friends, family and fear [5]. To reduce social risk, suppliers can encourage existing consumers to recommend products to their family and friends to increase the positive exposure of products. Displaying genuine photos and customers' reviews of products is conducive to building potential customers' trust in online suppliers.

4. Conclusion

The main goal of this article is to analyse elements that influence consumers' perceived benefits, perceived risks and certain psychological factors. Based on existent research, perceived benefits and certain psychological factors are positively related to online buying behaviors, while perceived risks are negatively related to online buying behaviors. About perceived benefits, functional factors including the convenience of one-stop shopping, low-cost and availability of products can significantly add to consumers' satisfaction. A variety of categories of convenience, such as possession convenience, transaction convenience and evaluation convenience, which have the greatest influence on customers and post-possession convenience and attentiveness convenience which are found to produce the least impact are listed in detail. Their benefits and improvement measures were provided accordingly. As for perceived risks, social risks are among the most significant risk elements. Measures like making information of products transparent are provided for suppliers. Moreover, it is important for suppliers to realize the relationship between risks and trusts. Because risks and trusts are closely interconnected, as higher perceived risks require more trust to mitigate, and higher trust is the key element to sustain a long-run exchange relationship between the

two parties: online buyers and sellers. As to psychological factors, the concept of psychological contract is applied to interpret the influence of psychological contract breach on destroying trust. What's more, the article points out that perceived value is a crucial part of psychological factors. Dual-process accounts of reasoning are applied to support some promotion suggestions. However, strategies about preventing the abuse of system 1 function and encouraging rational purchasing behaviors are emphasised to maintain the healthy relationship between online customers and suppliers.

References

- [1] Vidya M., Selvamani P. *Consumer behaviour towards online shopping—an analysis with product dimensions. International Journal of Innovative Technology and Exploring Engineering.* 2019 Oct;8(12S):511-4.
- [2] Dennis C., Merrilees B., Jayawardhena C., Tiu Wright L. *E-consumer behaviour. European Journal of Marketing.* 2009 Sept 18;43(9/10):1121-39. doi:10.1108/03090560910976393
- [3] Fang X., Salvendy G. *Customer-centered rules for design of e-commerce Web sites. Communications of the ACM.* 2003 Dec 1;46(12):332.
- [4] Jusoh Z.M., Ling G.H. *Factors influencing consumers' attitude towards e-commerce purchases through online shopping. International Journal of Humanities and Social Science.* 2012 Feb;2(4):223-30.
- [5] Rungsrisawat S., Joemsittiprasert W., Jermisittiparsert K. *Factors determining consumer buying behaviour in online shopping. International Journal of Innovation, Creativity and Change.* 2019;8(8):222-37.
- [6] Tingchi Liu M., Brock J.L., Cheng Shi G., Chu R., Tseng T. *Perceived benefits, perceived risk, and trust. Asia Pacific Journal of Marketing and Logistics.* 2013 Mar 29;25(2):225-48. doi:10.1108/13555851311314031
- [7] Forsythe S., Liu C., Shannon D., Gardner L.C. *Development of a scale to measure the perceived benefits and risks of online shopping. Journal of Interactive Marketing.* 2006 May;20(2):55-75. doi:10.1002/dir.20061
- [8] Bhatnagar A., Ghose S. *Segmenting consumers based on the benefits and risks of internet shopping. Journal of Business Research.* 2004 Dec;57(12):1352-60. doi:10.1016/s0148-2963(03)00067-5
- [9] Sheth J.N. *An integrative theory of patronage preference and behavior. Faculty Working Paper No. 808. University of Illinois at Urbana-Champaign, College of Commerce and Business Administration;* 1981.
- [10] Duarte P., e Silva S.C., Ferreira M.B. *How convenient is it? Delivering online shopping convenience to enhance customer satisfaction and encourage e-WOM. Journal of Retailing and Consumer Services.* 2018 Sep 1;44:161-9.
- [11] Jiang L., Jiang N., Liu S. *Consumer Perceptions of E-Service Convenience: An Exploratory Study. Procedia Environmental Sciences.* 2011;11:406-10.
- [12] Chang H., Zhang L. *Psychological Contract Breach and Customer Satisfaction: A Study of Online Shopping. Services Marketing Quarterly.* 2019 Apr 3;40(2):172-88.
- [13] Woodruff R.B. *Marketing in the 21st Century Customer Value: The Next Source for Competitive Advantage. Journal of the Academy of Marketing Science.* 1997 Jun 1;25(3):256-6.
- [14] Evans JStBT. *Dual-Processing Accounts of Reasoning, Judgment, and Social Cognition. Annual Review of Psychology.* 2008 Jan;59(1):255-78.
- [15] Samson A., Voyer B.G. *Two minds, three ways: dual system and dual process models in consumer psychology. AMS Review.* 2012 Oct 16;2(2-4):48-71.
- [16] Nan J., Feng X., Liu H., Liu J. *Emotional design of web page. Proceedings of the IEEE International Symposium on Knowledge Acquisition and Modeling;* 2008. pp. 91-95.
- [17] Ozen H., Engizek N. *Shopping online without thinking: being emotional or rational? Asia Pacific Journal of Marketing and Logistics.* 2014 Jan 7;26(1):78-93.
- [18] Lan Y., Liu G. *Consumers' rational attitudes toward online shopping improve their satisfaction through trust in online shopping platforms. Current Psychology.* 2024 Sep 2.
- [19] Mayer R.C., Davis J.H., Schoorman F.D. *An Integrative Model of Organizational Trust. The Academy of Management Review.* 1995;20(3):709-34.
- [20] Jarvenpaa S.L., Tractinsky N., Saarinen L. *Consumer Trust in an Internet Store: A Cross-Cultural Validation. Journal of Computer-Mediated Communication.* 1999 Jun 23;5(2).