

การศึกษาปัจจัยที่ส่งผลต่อการละทิ้งตะกร้าสินค้าเมื่อซื้อผ่านตลาดออนไลน์
The Study of Factors Influencing Shopping Cart Abandonment
When Purchasing from Online Marketplace

รวีพรรณ สุภาพรณ¹

Lokweetpun Suprawan

Received: 30 April 2021; Revised: 28 May 2021; Accepted: 31 June 2021

บทคัดย่อ

เนื่องจากพฤติกรรมผู้บริโภคในการใช้อินเทอร์เน็ตและอีคอมเมิร์ซของประเทศไทยในทิศทางบวก ซึ่งการเติบโตทำให้เกิดประเด็นใหม่ คือ การละทิ้งตะกร้าสินค้าซึ่งไม่เป็นผลดีต่อเจ้าของแพลตฟอร์มออนไลน์และผู้ประกอบการ ดังนั้นการศึกษานี้จึงมีวัตถุประสงค์เพื่อทดสอบปัจจัยที่มีผลต่อการละทิ้งตะกร้าสินค้าออนไลน์เมื่อซื้อจากตลาดออนไลน์ โดยรวบรวมข้อมูลจากผู้ตอบแบบสอบถาม 150 คน ด้วยแบบสอบถามจากผู้ซื้อสินค้าออนไลน์ สำหรับการทดสอบสมมติฐานงานวิจัยนี้ใช้การวิเคราะห์การถดถอยเชิงเส้นพหุคูณเพื่อทดสอบอิทธิพลของตัวแปร คุณค่าด้านความบันเทิง เครื่องมือในการหาข้อมูล รोकการลดราคา และความกังวลเกี่ยวกับความเป็นส่วนตัวที่ส่งผลต่อการละทิ้งตะกร้าสินค้าออนไลน์ ผลการศึกษาพบว่าคุณค่าด้านความบันเทิง และรอกการลดราคา มีอิทธิพลเชิงบวกต่อการละทิ้งตะกร้าสินค้าออนไลน์ที่ระดับ .05 อย่างมีนัยสำคัญทางสถิติ และไม่พบหลักฐานว่าความต้องการใช้ตะกร้าสินค้าเป็นเครื่องมือในการหาข้อมูลและความกังวลเกี่ยวกับความเป็นส่วนตัวส่งผลต่อการละทิ้งตะกร้าสินค้าออนไลน์อย่างมีนัยสำคัญทางสถิติ

คำสำคัญ : การละทิ้งตะกร้าสินค้าออนไลน์ คุณค่าด้านความบันเทิง เครื่องมือในการหาข้อมูล รोकการลดราคา ความกังวลเกี่ยวกับความเป็นส่วนตัว

¹ ผศ., คณะบริหารธุรกิจ มหาวิทยาลัยกรุงเทพ Email: lokweetpun.s@bu.ac.th เบอร์โทรศัพท์: 0955538245

Abstract

Due to the changes in consumer behavior, Thailand is facing an increasing in the use of internet and e-commerce. The growth of e-commerce also introducing the issue of shopping cart abandonment which is not favorable by platform owners and sellers. Therefore, this study aims to investigate the factors affecting to online shopping cart abandonment when purchasing from online marketplace. The data was collected from 150 respondents by using questionnaire form those online shoppers. For the hypothesis testing, this study used multiple linear regression to investigate effects of entertainment value, research tool, waiting for sales, and privacy concerns on online shopping cart abandonment. The results of this study found that entertainment value and waiting for sales have the positive influence on online shopping cart abandonment at the significant level of .05. And there was no evidence that research tool and privacy concern were found to have the significant effect on online shopping cart abandonment.

Keywords: Online Shopping Cart Abandonment, Entertainment Value, Research Tool, Waiting for Sales, Privacy Concerns

Introduction

Due to the changes in consumer behavior, Thailand is facing an increasing in the use of internet with internet users of approximate 52 million, accounted for 75% of internet penetration. The average spending on internet is about 9 hours in a day (Zhou & Price, 2020). E-Commerce in Thailand is growing at the market value of 26.2 billion USD in 2017 and increasing thereafter (J.P. Morgan, 2019). It was reported that the penetration rate of e-commerce in Thailand is accounted for 82% which contributed the most during important holidays such as Songkran Festival, Lunar New Year and Singles Day (Zhou & Price, 2020).

However, the growth of e-commerce also introducing an issue of online shopping cart abandonment which is not favorable by platform owners (online marketplaces) and sellers (HubSpot, 2020). Among all of online shoppers, 68.63% have the tendency to abandon their shopping cart before finally making the

purchase, which accounted for approximately 4 trillion USD left unchecked out (HubSpot, 2020). Based on the study of Kukar-Kinney and Close (2010) investigated the factors influencing online shopping cart abandonment and found that entertainment value, research tool, waiting for sale, and privacy concerns are the main factors. Another study by Lee, Klimm, Palmero, and Hughes (2019) found the similar effects on all of the factors. Therefore, this study aims to investigate the factors influencing online shopping cart abandonment among Thai online shoppers.

Research Objectives

This study intended to investigate factors influencing online shopping cart abandonment among Thai online shoppers. The factors under investigation are entertainment value, research tool, waiting for sales and privacy concerns. The contribution of this study should be able to explain the reasons consumers left the product in the online shopping cart without checking them out and results of this study should guide marketers to design appropriate actions to encourage online shoppers to check out all selected products within each transaction.

Hypotheses

H1: Entertainment value has a positive influence on online shopping cart abandonment.

H2: Using online shopping cart as a research tool has a positive influence on online shopping cart abandonment.

H3: Waiting for sales has a positive influence on online shopping cart abandonment.

H4: Privacy concern has a positive influence on online shopping cart abandonment.

Scope and Conceptual Framework

Based on the hypothesis proposed in the previous section, the conceptual research framework is proposed as follows in Figure 1 to capture the relationship between entertainment value, research tool, waiting for sales, and privacy concern which influence online shopping cart abandonment (Kukar-Kinney & Close, 2010; Lee et al., 2019).

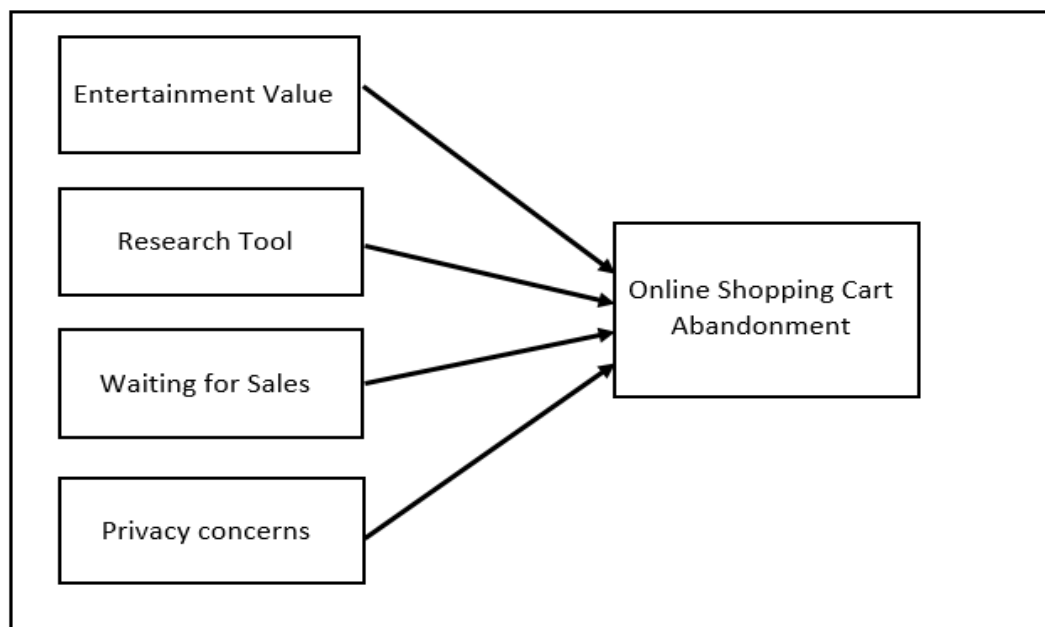


Figure 1: Research Conceptual Framework

This study is delimited to only online shopping cart from the online marketplace such as Shopee or Lazada. However, other digital platform, such as websites and social commerce is excluded from this study.

Research Methodology

This study is conducted using quantitative method to evaluate the factors influencing online shopping cart abandonment of online shopper in Bangkok area. The sample of this research must have experience purchasing via online marketplace such as Shopee or Lazada. The sample size was calculated using G*Power to conduct multiple linear regression, with 4 predictors, medium effect size (0.15), the error probability of 0.05 and power of 0.95 (1 - β err probability) (Faul, Erdfelder, Buchner, & Lang, 2009). Therefore, the calculated sample size is 129 responses and to prevent any of the error during the data collection, 150 respondents of sample size were collected. The questionnaire used for this study was developed into 3 sections including demographic profile of the respondents, consumer behavior towards online purchase, and the questions relating to independent and dependent variables including entertainment value, research tool, waiting for sales, privacy concerns and online shopping cart abandonment. The measurement scales of 5-Point Likert scales

were adapted from the study of Kukar-Kinney and Close (2010) in which all of the scales achieved the Cronbach's Alpha of above 0.7 (Nunnally & Bernstein, 1994).

For data collection, this study employed convenience sampling technique by posting the link of online questionnaire on researcher's social media platforms including Facebook, Instagram and Line. Once the data was collected, reliability test was conducted using Cronbach's Alpha coefficient and found that the values of all variables ranging from 0.735-0.918, which make them acceptable for further analysis (Nunnally & Bernstein, 1994). The statistical analysis of this study will use multiple linear regression to test all proposed hypotheses H1-H4.

Results

Based on 150 respondents from data collection, 42% of the respondents are females, aged between 18-22 years old (56.7%), followed by 23-38 years old (38.7%). Most of the respondents are students (61.3%) with the average monthly income of less than 30,000 (65.3%). The product category that most respondents purchase via online marketplace is fashion and jewelry (36.7%) and they usually purchase between 20.01-24.00 hrs. (46.7%). The average amount of spending for each transaction is 500-1,000 THB (30.7%), followed by 300-500 THB (28.0%) the payment made via credit card (49.3%). The most preferred marketplace is Shopee (82.0%). As for the hypothesis testing, multiple linear regression was conducted for all hypotheses H1-H4, the result of all the effects are shown in Table 1.

Table 1: The Relationship of Entertainment Value, Research Tool, Waiting for Sales, and Privacy Concerns on Online Shopping Cart Abandonment

Variable	R	R ²	Adj. R ²	Std. Error	Constant
	.539	.291	.271	.649	1.554**
	B	SE B	β	Tolerance	VIF
Entertainment Value	.426	.104	.401**	.515	1.943
Research Tool	-.150	.134	-.123	.402	2.490
Waiting for Sales	.388	.092	.327**	.808	1.238
Privacy Concerns	-.058	.082	-.061	.635	1.574

$p < .05$, $F = 14.877$

According to the analysis illustrated in Table 1, it was found that all of the variables underpinned in this study can explain the changes in online shopping cart abandonment 29.1% of the variance. Amongst all independent variables, entertainment value (H1) and waiting for sales (H3) positively influence online shopping cart abandonment with the beta coefficient of .401 ($\beta = .401$ $p < .001$) and .327 ($\beta = .327$ $p < .001$). However, the effects of research tool (H2) and privacy concerns (H4) were found to be insignificant to online shopping cart abandonment. In addition, to illustrate that there is no multicollinearity associated with all independent variable, the maximum variance inflation factor (VIF) and Tolerance were conducted. As a rule of thumb, VIF should have the value of no greater than 10 and Tolerance should be greater than .2. Therefore, no multicollinearity was found with acceptable values for both VIF and Tolerance for all variables (Hair, Black, Babin, & Anderson, 2010). Therefore, it can be concluded that hypotheses H1 and H3 are accepted and H2 and H4 are rejected. The predicted equation to estimate online shopping cart abandonment can be written as follows:

$$\hat{Y} = 1.554 + .401X_1 + .327X_2,$$

Where; \hat{Y} = Online shopping cart abandonment

X_1 = Entertainment value

X_2 = Waiting for sales

It can be explained that when entertainment value and waiting for sales each increase by 1 unit, the value of online shopping cart abandonment will also increase by .401 and .327 unit, respectively.

Discussion

According to the findings from this study, there are many reasons for the online shopper to leave the items of consideration in the online shopping cart without checking out. It was confirmed by the analysis of multiple linear regression that entertainment value and waiting for sales are the two factors positively influence online shopping cart abandonment. The results of this two factors are consistent with that of Kukar-Kinney and Close (2010) and Sondhi (2017). However, the evidence from this study did not find that the effects of research tool and privacy concerns on online shopping cart abandon were significant. In fact the result

of insignificant effect of privacy concern on online shopping cart abandonment is consistent with the study of Kukar-Kinney and Close (2010). It is possible that most of the respondents from this study are young and did not find privacy or security to be the issue when purchasing products online.

Recommendations

According to the results of this study, the value of R square is rather low which can only explain the changes in online shopping cart abandonment 29.1% of the variance. Therefore, the future research can consider other factors that were not included in this study such as perceived waiting time, transaction inconvenience or lack of physical examination as inspected in the study of Sondhi (2017). Additional factors should better explain the reason that items were left in the online shopping cart. Another recommendation would be the distribution of the sample. Since the majority of the respondents in the study are aged between 18-38 years old, the results from this study might not be able to explain the phenomenon of online shopping cart abandonment among the older online shoppers. Therefore, the future research should specifically focus on only generation X or baby boomers. The finding of this results can contribute to practitioners by suggesting that more promotion or attractive deals should be offered to the online shopper in order to speed up their decision.

References

- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using g*power 3.1: Tests for correlation and regression analyses. **Behavior Research Methods**, 41(4), 1149-1160. doi: 10.3758/BRM.41.4.1149
- Hair, J.F., Jr., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). **Multivariate data analysis: A global perspective** (7th ed.). Upper Saddle River: Pearson Education, Inc.

- HubSpot. (2020). **How to avoid the 15 most common reasons for shopping cart abandonment.** Retrieved April 17, 2021, from https://cdn2.hubspot.net/hubfs/53/00-OFFERS-HIDDEN/How_to_Avoid_the_15_Most_Common_Reasons_for_Shopping_Cart_Abandonment-Ecommerce.pdf?t=1478676299165&__hstc=20629287.fff71273d961dba1de5e888958a1ddad.1478679467732.1478679467732.1478679467732.1&__hssc=20629287.13.1478679467732&__hsfp=2350983302.
- Kukar-Kinney, M., & Close, A.G. (2010). The determinants of consumers' online shopping cart abandonment. **Journal of the Academy of Marketing Science**, 38(2), 240-250.
- Lee, C.C., Klimm, C., Palmero, C., & Hughes, S. (2019). **What factors influence people to abandon their online shopping carts?** Paper presented at the Northeast Decision Sciences Institute 2019 Annual Conference, Philadelphia, PA on April 4-6, 2019.
- Lian, J.-W., & Yen, D.C. (2014). Online shopping drivers and barriers for older adults: Age and gender differences. **Computers in human behavior**, 37, 133-143.
- E-commerce payments trends: Thailand thailand e-commerce insights. (2019): J.P. MORGAN
- Novak, T.P., Hoffman, D.L., & Duhachek, A. (2003). The influence of goal-directed and experiential activities on online flow experiences. **Journal of consumer psychology**, 13(1-2), 3-16.
- Nunnally, J.C., & Bernstein, I.H. (1994). **Psychometric theory** (3rd ed.). New York: McGraw-Hill.
- Rubin, D., Martins, C., Ilyuk, V., & Hildebrand, D. (2020). Online shopping cart abandonment: A consumer mindset perspective. **Journal of Consumer Marketing**, 37(5), 487-499. doi: 10.1108/JCM-01-2018-2510
- Sondhi, N. (2017). Segmenting & profiling the deflecting customer: Understanding shopping cart abandonment. **Procedia computer science**, 122, 392-399.
- Southeast asia ecommerce outlook 2020. (2020) (T. Group Ed.): TMO Group.