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The Effects of Hesitation on Digital Consumer Behaviour in Relation to Online Cart Abandonment

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Abstract

As the e-commerce market expands, so does the opportunity for researchers to investigate and study the motivations that drive digital consumers to complete their online purchases. However, a study to understand digital consumer behaviour sentiment around shopping cart abandonment in Malaysia is still limited. Thus, the purpose of this paper is to investigate the implications of organisational and entertainment purposes on online shopping cart abandonment and broaden the framework to include the role of hesitation at the checkout stage as a mediator. Data was collected using an online questionnaire distributed randomly via a social media platform. A total of 229 online shoppers participated as respondents in this study. The result indicated organisational and entertainment purposes have a significant influence on consumers' abandoning their online carts. It was also found that hesitation at checkout had a direct effect and an indirect effect on the rate of shopping cart abandonment when hesitancy becomes a mediator. The findings of this study offer an insight to online retailers into the consumer motivations for neglecting their online carts and the role of hesitation at checkout as a mediator, which has not been explored in Malaysia.

Keywords: Organisational Purpose, Entertainment Purpose, Hesitation, E-commerce, and Consumer Behavior

Introduction

The emergence of various online payment methods, powerful smartphones, the power of social media networks, and better logistical facilities have induced the growth of e-commerce in Malaysia (Malaysian Communications and Multimedia Commission, 2018). According to the Internet Uses Survey 2020, the rate of Malaysians using the internet is up to 88.7% of the population, and 64.2 % of them use the internet for online shopping activities (Malaysian Communications and Multimedia Commission, 2020). Furthermore, Malaysia was among the countries which were projected to have the biggest growth in e-commerce sales in 2022 (Coppola, 2022). Thus, the Malaysian e-commerce market offers a substantial opportunity for online businesses.

While the e-commerce market is expanding, online retailers are still having trouble with the problem of abandoned shopping carts. The term "shopping cart abandonment" describes the situation in which a potential client adds an item to their cart but then exits the website without making a purchase (Coppola and Sousa, 2008; Manjula and Kumar, 2019). The rate of shopping cart abandonment reached 69.99% for the year 2022 (Baymard Institute, 2022), which indicates that almost 70% of customers leave items in their cart without completing the purchase. Even worse, this rate has been gradually increasing since 2014, highlighting the difficulty for online retailers in converting website visits into buyers (Pasquali, 2022). Most online merchants invest time, money, and effort into getting customers to visit their website or mobile app, and ultimately, all this work goes in vain since they lose customers just as they were getting ready to make a purchase. Osman (2021) stated that when customers abandon their cart, it costs marketers an average of \$2 to \$4 trillion per year. Online businesses suffer billions of dollars in losses due to shopping cart abandonment. For the year 2021, it is estimated that \$4 trillion worth of merchandise will be abandoned in shopping carts (Flynn, 2021). According to research by Barclays, a British universal bank, customers in the UK abandon their online shopping carts at a rate of £29.37 on average per month, which may result in over £18 billion in lost revenue annually. Meanwhile, in the United States, Forest Forrester Research predicts annual losses caused by cart abandonment of \$18 trillion (Nichols, 2018).

People choose to leave their shopping carts for a variety of reasons. Online businesses must therefore comprehend what reasons cause customers to abandon their cart in order to develop appropriate strategies to address this behaviour (Kavitha and Kannan, 2020). Understanding why these consumers initially decide to leave is crucial for achieving an increased number of completed purchases. This study was carried out to identify the causes. Hence, the objectives of this paper are listed as follows: a) To determine whether organisational and entertainment factors can influence shopping cart abandonment. b) To examine the effect of hesitation at the checkout stage as a mediator, which has never been explored before in Malaysia. The results of this study may provide insight into the causes of online shopping cart abandonment. Therefore, it can provide a direction for online business owners to reduce online shopping cart abandonment.

Literature Review

Shopping Cart Abandonment

Shopping cart abandonment has been acknowledged since the 1990s, and Rewick (2000) considered this term as an act of the consumer that leaves their online shopping cart without completing the purchase. The blow of COVID-19 in 2020 has forced consumers to change their purchasing method to a virtual one, and this sudden event has led to an increment in shopping cart abandonment as users are increasing. Based on past studies, there are two variables that contribute to shopping cart abandonment, which are the behaviour variables (Cho, 2004; Moore and Mathews, 2008) and the technology variables (Li and Chatterjee, 2006). According to Moore and Mathews (2008), the factors that contribute to shopping cart abandonment are perceived risk, particularly performance risk. It was stated that the existence of risk during online retail can influence consumers to abandon their cart. While Li and Chatterjee (2006) conducted a study on retail websites and discovered that consumers abandon the cart when they do not have enough intention to purchase the item, when there is an excessive comparison process, and when there are promotional stimuli that lead to other websites. Besides that, Kukar-Kinney and Close (2010) in their investigation find that online price

promotion, information gathering, and entertainment purposes are among the factors of the respondents' filling their shopping cart, and these factors also become the main reasons why the abandonment occurs. This finding is like the one found by Yusuf et al (2021), who found that entertainment motivation is the main reason for customers to put the shopping goods in their cart. The result is also compatible with a study that mentioned organisational tools, entertainment value, and perceived cost were the three underlying factors leading to young adults' shopping cart abandonment in Malaysia (Mad et al., 2021).

Organisational Purpose

Dealing with the cart abandonment, one of the obvious drivers is the use of the cart for organisational purposes. Since Bloch, Sherrell, and Ridgway (1986) find that consumers use the cart to gather information about the products they are interested in, and it indirectly helps them narrow down the choices. This statement was verified by Forsythe and Shi (2003), who claimed that consumers prefer to use the Web to find information instead of making any purchase. Besides, this finding aligned with the data reported by the Forrester Research survey that showed almost half of their respondents used the online cart for information gathering (Magill, 2005). Adding to that, Strack and Deutsch (2006) find that the act of researching has reduced the tendency for unplanned buying among consumers, which led to cart abandonment. It is because, as they gather more information, it might negatively impact their opinion on the quality and value of the added products. Instead of that, Kukar-Kinney and Close (2010); Strack and Deutsch (2006) find that the act of researching has reduced the tendency for unplanned buying among consumers. Because price is regarded as an important factor in shopping, significant changes in it will result in changes in shopping platforms and, indirectly, cart abandonment (Kukar-Kinney and Close, 2010). Furthermore, Mad et al (2021) discovered that organisational or research tools are one of the significant factors of shopping cart abandonment among Malaysian young adults. Similar findings were found in research by Scheinbaum, Kukar-Kinney as well as (Benson and Nodoro, 2022).

Entertainment Purpose

Shopping was generally regarded as a pleasurable activity and was used as an escapism activity by some consumers (Novak et al., 2003). For that reason, Korgaonkar and Bellenger (1980); Hirschman and Holbrook (1982) find that it is not commonly used to obtain certain products. Most of these customers do not intend to buy the items and only put them in the cart to satisfy their desire (Mathwick et al., 2001; Wolfinger and Gilly, 2001). Hedonic customers navigate online shopping websites as a form of entertainment (Arul and Krithika, 2019). Luo (2002); Kukar-Kinney and Close (2010) also have stated that consumers find that the online experience is more satisfactory as browsing on a website will relieve their boredom. As a fun activity normally related to young adults, Mad et al. (2021) conducted a study among young adults and, surprisingly, the result shows a contrast. The study finds that most of the respondents, who are students, rarely use the shopping cart as an entertainment value. However, Yusuf et al (2021) find that entertainment motivation (EM) has a positive and significant effect on shopping cart abandonment. This finding confirmed the result by Kukar-Kinney and Close (2010) that mentioned that consumers using a shopping cart for entertainment is positively related to shopping cart abandonment. This conclusion is also supported by (Scheinbaum et al., 2012; Arumugam and Parasuraman, 2017). In other words, as consumers choose to leave the items in the shopping cart to relieve boredom, it will also increase the shopping cart abandonment rate, which means a loss for the sellers.

Hesitation at Checkout

Cho et al (2006) defined online shopping hesitation as the act of delaying the purchasing process by adding extra processing time before finalising the purchase. Previous research has listed that shopping cart abandonment was one of the three online hesitations. According to Doob (1990), when an individual is in a state of mind of uncertainty, it commonly leads to hesitation. Besides, people who are hesitant tend not to make decisions in order to keep something from happening (Fee & Tangney, 2000). A study at a store found that too many choices can also cause hesitation, and it then makes customers leave without buying any item (Jessup et al., 2009). In addition, Huang et al (2018) have conducted research and extended a previous study by distinguishing between online shopping hesitation and cart abandonment. Besides, the paper also examines the role of hesitation at checkout in the ambivalence-abandonment relationship. It was revealed that emotionally ambivalent consumers tend to hesitate at the checkout stage after adding the items to their shopping cart. According to studies, shoppers frequently use shopping carts for research purposes (Kukar-Kinney and Close, 2010), indicating a lack of intent to complete the purchase immediately. This action can also contribute to hesitation at checkout. Therefore, there will be high chances that when the customers reach the stage where they need to make payment for the added items, they will feel hesitant to complete it at the checkout stage.

Conceptual Framework and Hypotheses Development

Figure 1 illustrates the conceptual framework of factors affecting shopping cart abandonment, in which hesitation at checkout is included as a mediator factor. The purpose of this study was to reveal the relationship that might exist between independent variables (organisational purpose and entertainment purpose), a mediator (hesitation at checkout), and a dependent variable (shopping cart abandonment). It was reported by Jiang et al (2021) that the discussion and findings on shopping cart abandonment behaviour are still lacking. Hence, as there was an urge for further in-depth research, this paper has narrowed down the highly influenced variables and listed the following research hypotheses.

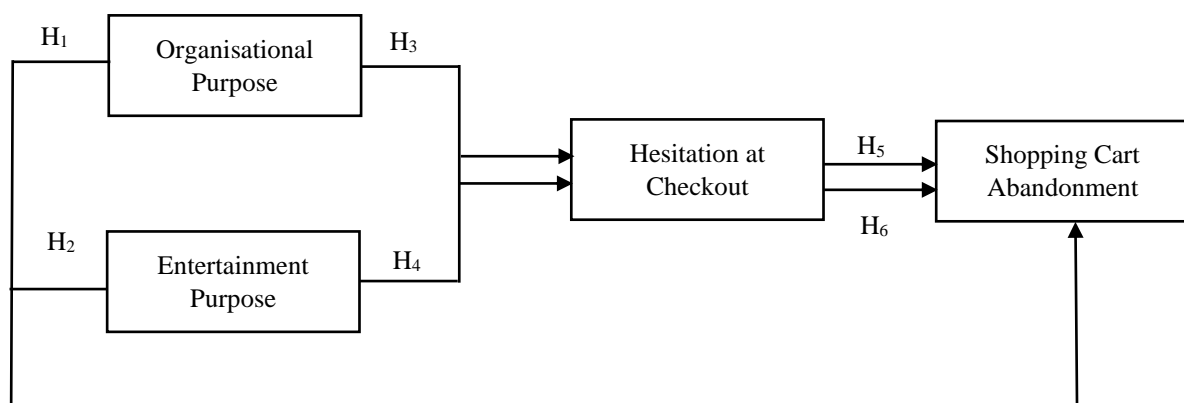


Figure 1 Conceptual Framework of Factors Affecting Shopping Cart Abandonment: Hesitation at Checkout as a Mediator

H₁: There is a significant relationship between organisational purpose and shopping cart abandonment.

H₂: There is a significant relationship between entertainment purpose and shopping cart abandonment.

H₃: There is a significant relationship between organisational purpose and hesitation at checkout.

H₄: There is a significant relationship between entertainment purpose and hesitation at checkout.

H₅: There is a significant relationship between hesitation at checkout and shopping cart abandonment.

H₆: Hesitation at checkout mediates the relationship between independent variables (organisational purpose and entertainment purpose) and shopping cart abandonment.

Data and Methodology

To achieve the objective of this study, the data was collected through an online questionnaire that was distributed randomly using social media platforms like Facebook Messenger, Telegram, and WhatsApp. This study used convenience sampling as a sampling method because this type of sampling method allows researchers to get responses faster and more efficiently (Sekaran, 2000). As all the questions in the survey were compulsory to answer, no questionnaire was excluded. The survey was conducted from July to August 2022, and in the end, 242 completed questionnaires were obtained. 13 responses, however, were eliminated following a preliminary examination of collected data since they had not made at least one online purchase in the previous six months. This sample is adequate as Israel (1992) stated that a minimum of 204 samples is sufficient to achieve a $\pm 7\%$ precision level where the confidence level is 95% and $P = .5$ for a population of more than 100,000. SPSS 22 was used to statistically test and analyse all the data.

The questionnaire consisted of 22 questions in total, and it was divided into 5 parts. The first section is to collect demographic information of the respondent (9 questions), followed by shopping cart abandonment (3 questions), organisational purpose (4 questions), entertainment purpose (3 questions), and lastly, hesitation at the checkout stage (3 questions). The measurement of the survey items was done using the five-point Likert scale. Respondents were asked to choose a Likert scale from 1 (strongly disagree) to 5 (strongly agree). All the questions to tap these domains were derived from previous research by (Erdil, 2018; Kukar-Kinney and Close, 2010; Yusuf et al., 2021).

Findings and Discussion

Sample profile

Table 1 reports the socio-demographic information of respondents for this research. As usual, most of the respondents were female, with 76.4% of value. Since about 59% of the respondents are students, only 25.3% of the respondents were married. In terms of age, most of them are about 18 to 30 years old (69%), followed by those aged 31 to 40 years old (27.1%). Most of the respondents came from the age category of 18–30 years, since they accounted for 67.2% of Internet users in Malaysia (Malaysian Communications and Multimedia Commission, 2020). Besides, most respondents have an income of less than RM1,500 as the working respondents do not even reach 100. On top of that, the blow of pandemic COVID-19 has totally influenced the transition of shoppers to online shopping when 84.3 % of the respondents agreed with the statement.

Table 1

Socio-Demographic Information of Respondents

Respondent's Information		Frequency	Percent
Gender	Male	54	23.6
	Female	175	76.4
	Total	229	100.0
Marital Status	Single	171	74.7
	Married	58	25.3
	Total	229	100
Age	Under 18	1	0.40
	18-30	158	69.0
	31-40	62	27.1
	41-50	6	2.60
	51-60	2	0.90
	Total	229	100.0
Employment Status	Student	135	59.0
	Salaried worker	77	33.6
	Self-employed/business	10	4.4
	Unemployed	7	3.1
	Total	229	100.0
Income	≤1500	141	61.6
	1501-3000	22	9.6
	3001-4500	22	9.6
	3001-4500	17	7.4
	6001-7500	10	4.4
	>7500	17	7.4
	Total	229	100.0
Did COVID-19 encourage you to shop online?	Yes	193	84.3
	No	36	15.7
	Total	229	100

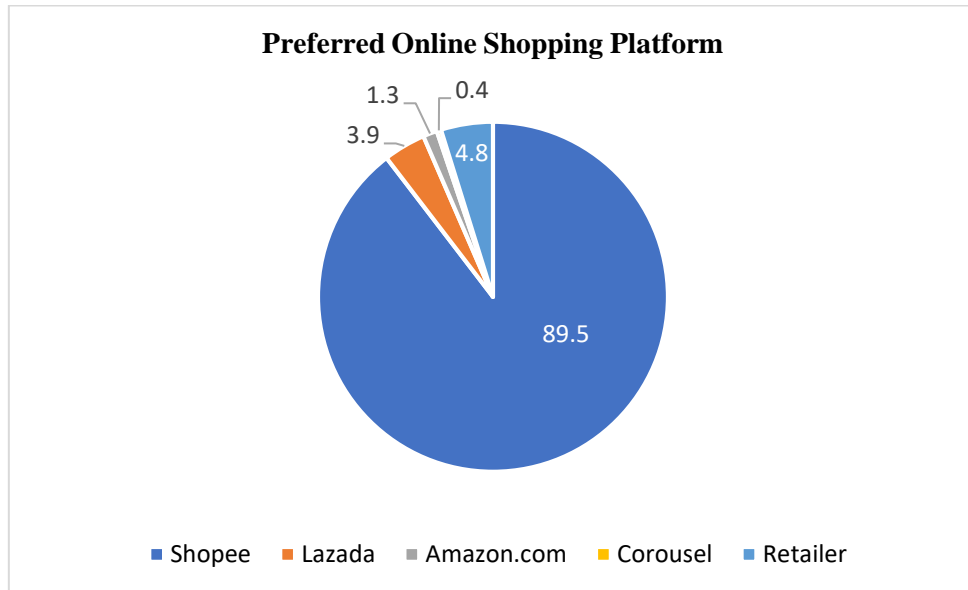


Figure 2 Respondents' Preferred Online Shopping Platform

Next, Figure 2 and Figure 3 reported the respondents' preferred online shopping platform and the number of items in their shopping cart, respectively. It was shown that Shopee was at the top, with 89.5% of respondents choosing Shopee as their favourite platform, compared to its rival Lazada (3.9%). The retailer platform also gained trust from shoppers when it recorded a slightly higher value compared to Lazada. Furthermore, the wide usage of online shopping carts was proven as majority respondents had a minimum of 50 items in their shopping cart. Clothing and fashion, health and beauty are the main products customers choose to buy on an online platform, followed by home appliances and electronic devices, as shown in Figure 4.

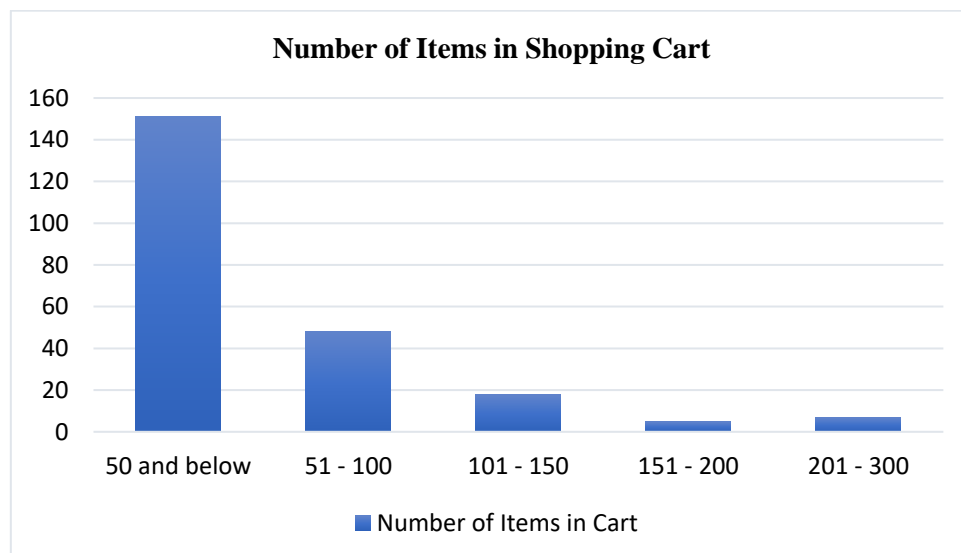


Figure 3 Respondents' Number of Items in Shopping Cart

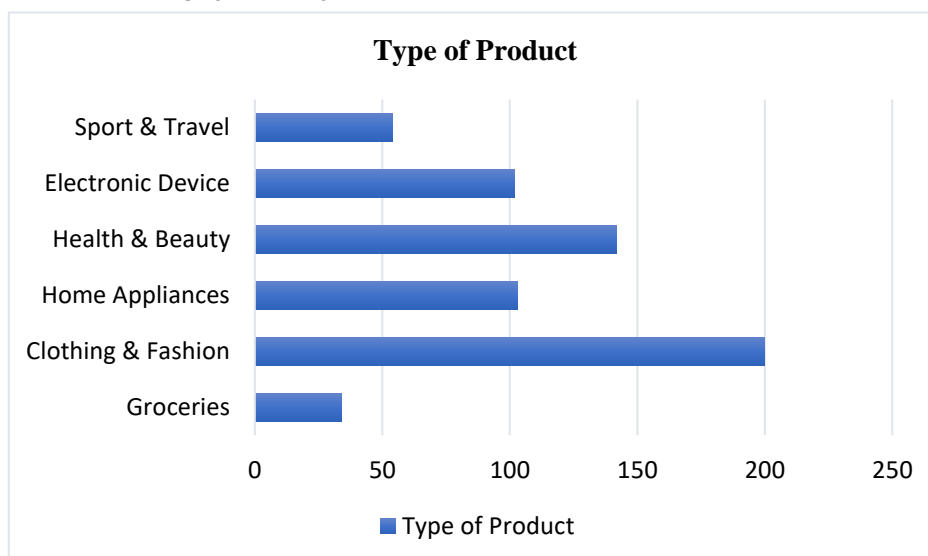


Figure 4 Type of Product Bought Online by Respondents

Descriptive Analysis

Table 2 reports the descriptive statistics of the four research variables, which are shopping cart abandonment, organisational purpose, entertainment purpose, and hesitation at checkout. The entertainment purpose recorded the lowest value of mean (2.8821) and the highest value of standard deviation (1.11833), indicating that shoppers rarely used the shopping cart to fill their boredom. Organisational purpose has the highest mean, followed by shopping cart abandonment and hesitation at checkout. These values were interpreted using the constructed interval suggested by (Pimentel, 2010). The five measurements of the Likert Scale were considered, which are: Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), and Strongly Agree (5). The interpretations for the weighted mean are then shown in Table 3. Consequently, it showed that the respondents agreed they used the online cart for organisational purposes but provided neutral responses when they were asked whether they used it for entertainment purposes. They also agree that they hesitated at the checkout stage of purchasing activity.

Table 2

Descriptive Statistics of Research Variables

No	Variable	Number of Questions	Mean	Standard Deviation
1	Shopping Cart Abandonment	3	3.9694	0.78082
2	Organisational Purpose	4	4.1441	0.61056
3	Entertainment Purpose	3	2.8821	1.11833
4	Hesitation at Checkout	3	3.7293	0.81438

Table 3

The Responses on the Variables Affecting Shopping Cart Abandonment

No	Variable	Mean	Standard Deviation	Description
1	Shopping Cart Abandonment	3.9694	0.78082	Agree
2	Organisational Purpose	4.1441	0.61056	Agree
3	Entertainment Purpose	2.8821	1.11833	Neutral
4	Hesitation at Checkout	3.7293	0.81438	Agree

Reliability Analysis

The reliability analysis was conducted before the mediation analysis to evaluate the consistency of the set of items as a group. The value of Cronbach's alpha was measured and the result is presented in Table 4. According to Pallant (2001), a Cronbach's alpha value within the range of 0.60 to 0.80 is acceptable. In addition, a value of 0.80 or greater is preferred (Cortina, 1993). Therefore, all the variables are acceptable, with all variables recording a Cronbach's Alpha value of more than 0.6. Besides, entertainment purpose and hesitation at checkout are preferable since both variables recorded a Cronbach's Alpha value of more than 0.8.

Table 4

Cronbach's Alpha Value of Research Variables

No	Variable	Number of Questions	Cronbach's Alpha
1	Shopping Cart Abandonment	3	0.708
2	Organisational Purpose	4	0.672
3	Entertainment Purpose	3	0.889
4	Hesitation at Checkout	3	0.808

Mediation Analysis

Step 1 Regression of Organisational Purpose and Entertainment Purpose on Shopping Cart Abandonment

For mediation analysis, the first step was started by evaluating the regression of the independent variables (organisational purpose and entertainment purpose) on the dependent variable (shopping cart abandonment). The R-value in Table 5 shows a value of 0.492, indicating a possible relationship between the independent variables and dependent variable, thus it is adequate for further analysis. While the value of R-square demonstrates 24.2% of the variance in shopping cart abandonment, the difference between the value of adjusted R-square is small, which is good for the model. Besides, the result of ANOVA in Table 6 shows a significant model with a recorded value of F-ratio of 36.164, which represents an acceptable model. Next, in Table 7, it was shown that both variables have a significant relationship to shopping cart abandonment, resulting the acceptance of H1 and H2. The result indicates a 1% increase in organisational purpose among shoppers and a 0.496 increase in shopping cart abandonment. Other than that, shopping cart abandonment also increases by 0.151 for every 1% increase in entertainment purpose among shoppers. These findings indicate that organisational purpose has more impact on the dependent variable than entertainment purpose.

Table 5

Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	0.492 ^a	0.242	0.236	0.68261

Table 6
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.7020	2	16.851	36.164	0.000 ^b
	Residual	105.307	226	0.466		
	Total	139.008	228			

Table 7
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	1.478	0.312		4.736	0.000
	Organisational Purpose	0.496	0.077	0.388	6.454	0.000
	Entertainment Purpose	0.151	0.042	0.216	3.593	0.000

Step 2 Regression of Organisational Purpose and Entertainment Purpose on Hesitation at Checkout

Next, independent variables (organisational purpose and entertainment purpose) were regressed with the mediator (hesitation at checkout). The R-value in Table 8 shows a value of 0.415, indicating the existence of a relationship between the independent variables and the mediator. The R-square demonstrates 17.2% of the variance in hesitation at checkout, and the adjusted R-square is slightly lower, representing a good model. Besides, the result of ANOVA in Table 9 shows a significant model with a recorded value of F-ratio of 23.478, which represents an acceptable model. Next, in Table 10, it was shown that both variables have a significant relationship to hesitation to checkout, resulting acceptance of H3 and H4. The result indicates a 1% increase in organisational purpose among shoppers and a 1.068 increase in hesitation at checkout. Other than that, hesitation at checkout also increases by 0.554 for every 1% increase in entertainment purpose among shoppers. Comparing the result in step 2 with the one in step 1, it shows that independent variables have more impact on the mediator than the dependent variable.

Table 8
Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	0.415 ^a	0.172	0.165	2.23291

Table 9
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	234.117	2	117.058	23.478	0.000 ^b
	Residual	1126.809	226	4.986		
	Total	1360.926	228			

Table 10
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	5.164	1.021		5.058	0.000
	Organisational Purpose	1.068	.252	.267	4.248	0.000
	Entertainment Purpose	0.554	.137	.253	4.032	0.000

Step 3 Regression of Hesitation at Checkout on Shopping Cart Abandonment

Subsequently, this study evaluates the relationship between the mediator and the dependent variable by regressing hesitation at checkout on shopping cart abandonment. The result of the R-value in Table 11 is 0.395, which shows a weak correlation. However, the value of R-square demonstrates 15.6% of the variance in shopping cart abandonment, and the difference between the value of R-square and the adjusted R-square is small, which is good for the model. Additionally, the result of ANOVA in Table 12 shows a significant model with a recorded value of F-ratio of 42.068, which represents an acceptable model. Next, in Table 13, it was shown that the mediator has a significant relationship to shopping cart abandonment and H5 was accepted. The result also indicates a 1% increase in hesitation at checkout among shoppers, leading to a 0.379 increase in shopping cart abandonment.

Table 11
Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	0.395 ^a	0.156	0.153	0.71877

Table 12
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.733	1	21.733	42.068	0.000 ^b
	Residual	117.275	227	0.517		
	Total	139.008	228			

Table 13
Coefficients

Model			Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
1	Constant		2.556	0.223		11.455	0.000
	Hesitation at Checkout	at	0.379	0.058	0.395	6.486	0.000

Step 4 Mediation Analysis

In the mediation analysis, it first started with the regression analysis and then followed with the mediation effect testing. The regression analysis was once again conducted to evaluate the role of the mediator in the relationship between independent variables (organisational purpose and entertainment purpose) and shopping cart abandonment. The R-value in Table 14 shows a value of 0.537, indicating a moderate correlation, thus it is adequate for further analysis. Instead, the value of R-square shows that there is 28.8% of the variance in shopping cart abandonment and the difference between the R-square value and the adjusted R-square is small, which is good for the model. Besides, the result of ANOVA in Table 15 shows a significant model with a recorded value of F-ratio of 30.390, which represents an acceptable model. Next, in Table 16, it was shown that all variables have a significant relationship to shopping cart abandonment, indicating that with the existence of a mediator, a 1% increase in organisational purpose among shoppers will lead to a 0.416 increase in shopping cart abandonment. Other than that, shopping cart abandonment also increases by 0.109 for every 1% increase in entertainment purpose among shoppers. Additionally, a 1% increase in hesitation in checkout among shoppers will also lead to a 0.226 increase in shopping cart abandonment.

Table 14
Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	0.537 ^a	0.288	0.279	0.66307

Table 15
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.084	3	13.361	30.390	0.000 ^b
	Residual	98.924	225	.440		
	Total	139.008	228			

Table 16
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	1.090	0.320		3.406	0.001
	Organisational Purpose	0.416	0.078	0.325	5.358	0.000
	Entertainment Purpose	0.109	0.042	0.156	2.586	0.010
	Hesitation at Checkout	0.226	0.059	0.235	3.810	0.000

In the next step, the mediation effect testing was evaluated using the PROCESS macro in SPSS. It started with the organisational purpose as the independent variable. The result shows that the direct effect between organisational purpose (p-value =0.000) and the outcome variable, hesitation at checkout, is significant (p-value ≤0.05). It was followed by a significant result

when we observed the effect of organisational purpose and hesitation at checkout on the outcome of shopping cart abandonment, where both the p-value of the independent variables were 0.000. The mediation model of study was illustrated in Figure 5, and the value of the coefficients was shown.

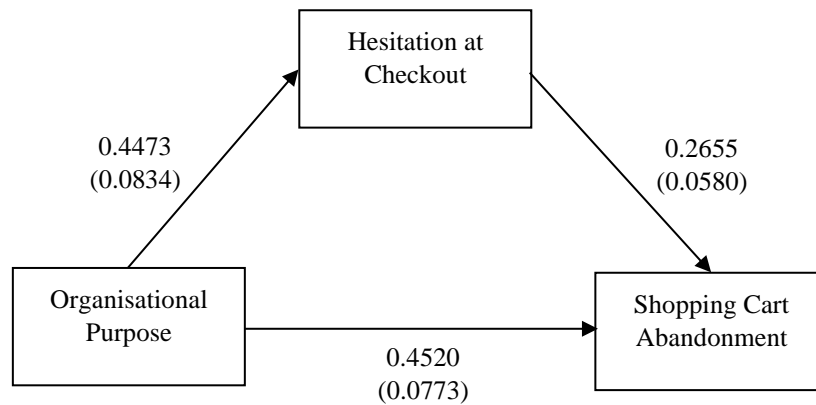


Figure 5 Mediation Model of Organisational Purpose

Subsequently, the result of the total, direct and indirect effect of organisational purpose on shopping cart abandonment via mediator was presented in Table 17. The result is significant because the confidence interval of the bootstrap does not include zero. It is shown that the indirect effect of organisational purpose on shopping cart abandonment via hesitation at checkout ($b = 0.1187$, 95% CI [0.0529; 0.2041], bootstrapped) does not completely remove the direct effect ($b = 0.4520$, $t = 5.8473$, $p < 0.001$, 95% CI [0.2997; 0.6043]); it is only partially mediated. The result clearly states that the indirect effect is comparatively small compared to the direct effect, which indicates that only 20.8 percent of the total effect (0.5707) is mediated.

Table 17

Total, Direct and Indirect Effect of Organisational Purpose on Shopping Cart Abandonment via Hesitation at Checkout

	Effect	SE	t	p	LLCI	ULCI
Total effect	0.5707	0.0760	7.5135	0.0000	0.4211	0.7204
Direct Effect	0.4520	0.0773	5.8473	0.0000	0.2997	0.6043
Indirect effect (s)	Effect	BootSE	BootLLCI	BootULCI		
	0.1187	0.0392	0.0529	0.2041		

The steps are then repeated for the second independent variable, which is for entertainment purposes only. Figure 8 shows the mediation model of entertainment purpose. It was found that the direct effect between entertainment purpose (p -value = 0.000) and the outcome variable, hesitation at checkout, is significant (p -value ≤ 0.05). The effect of entertainment purpose and hesitation at checkout on the outcome of shopping cart abandonment was also significant, where each of the p -values of the independent variables was 0.0008 and 0.000.

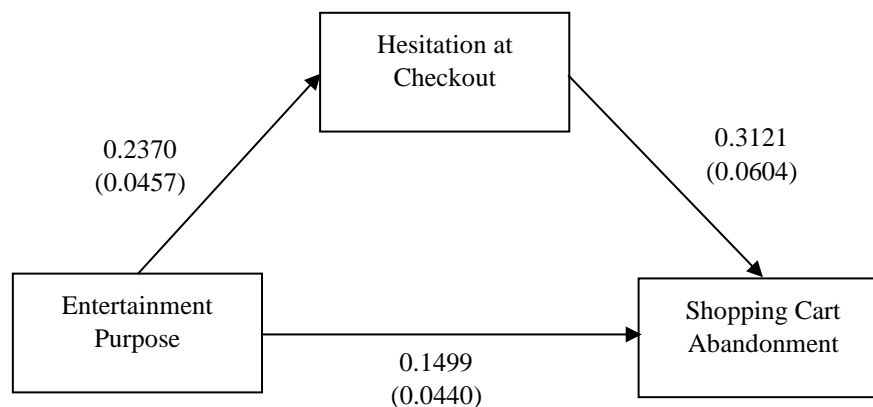


Figure 6 Mediation Model of Entertainment Purpose

Later, the result of the total, direct and indirect effect of entertainment purpose on shopping cart abandonment via hesitation at checkout was presented in Table 18. The result is significant because the confidence interval of the bootstrap does not include zero. It is shown that the indirect effect of entertainment purpose on shopping cart abandonment via mediator ($b = 0.0740$, 95% CI [0.0328; 0.1288], bootstrapped) does not remove the direct effect completely ($b = 0.1499$, $t = 3.4073$, $p < 0.001$, 95% CI [0.0632; 0.2366]), indicating that the effect is only partially mediated. The result clearly states that the indirect effect is comparatively small compared to the direct effect, and thus only 33.1 percent of the total effect (0.2239) is mediated. As a conclusion, the mediation analysis shows that hesitation at checkout mediates the relationship between independent variables (organisational purpose and entertainment purpose) and shopping cart abandonment, which confirms the research hypothesis, H6.

Table 18

Total, Direct and Indirect Effect of Entertainment Purpose on Shopping Cart Abandonment via Hesitation at Checkout

	Effect	SE	t	p	LLCI	ULCI
Total effect	0.2239	0.0439	5.1006	0.0000	0.1374	0.3104
Direct Effect	0.1499	0.0440	3.4073	0.0008	0.0632	0.2366
Indirect effect (s)	Effect	BootSE	BootLLCI	BootULCI		
	0.0740	0.0242	0.0328	0.1288		

Conclusion

The goal of the study was to investigate the reasons why online shoppers abandon their shopping carts, namely organisational and entertainment purposes. The outcome demonstrated that both variables had a significant impact on a digital customer's decision to abandon items in their shopping carts. This result is in line with earlier research from Kukar Kinney and Close (2010); Scheinbaum et al (2012); Erdil (2018), which suggests that customers are more likely to abandon products they add to their cart if they use the cart for organisational or entertainment reasons. Additionally, this significant relationship is mediated by the variable of hesitation at the checkout stage. If the customer hesitates at checkout stage it will increase the rate of shopping cart abandonment since it will form a dissatisfaction in consumers' mind and subsequently deter them from completing their

purchase (Erdil, 2018). Additionally, this study verified the moderating role of pre-decisional conflict, which is consistent with (Erdil, 2018).

Practically, this finding may have implications for online retailers looking to convert online visitors to online buyers. Online business may use remarketing strategies, such as email reminders or social media remarketing, to remind customers about the items in their cart and capture the aspirational qualities of the products that initially attracted them. Customers that use shopping carts for organisational purposes will benefit the most from this tactic, as it will serve as a reminder for them to come back to the website and finish their purchase.

The present study has significant limitations. One of the study's weaknesses is the use of convenience sampling (non-probability sampling) which will hinder the ability to generalise the results of the survey to the population as a whole. Thus, future studies should employ better sampling techniques such as stratified sampling. Next, larger sample sizes should be used in future investigations in order to improve statistical consistency and the capacity to generalise the results.

Reference

- Arul, K., & Krithika, M. (2019). Influence of online shopping cart abandonment: the moderating effect of perceived waiting time. *International Journal of Innovation Technology and Exploring Engineering (IJITEE)*, 9(1).
- Arumugam, S. S., and Parasuraman, J. (2017). Virtual Shopping Cart Abandonment and Consumers' Affinity Towards Conventional Shopping Behavior. *International Journal of Business and Administration Research Review*, Vol. 3, Issue.17, Jan - March, 2017. pp 81-8
- Baymard Institute. (n.d). *48 Cart Abandonment Rate Statistics 2022*. Retrieved September 2, 2022 from <https://baymard.com/lists/cart-abandonment-rate>.
- Barclaycard. (n.d). *Retailers losing out on £18bn each year through 'Surf and Turf' online shopping trend*. Retrieved September 2, 2022 from <https://home.barclaycard/press-releases/2018/04/Retailers-losing-out-on-18bn-each-year-through-Surf-and-Turf-online-shopping-trend/>
- Benson, L. G., & Ndoró, T. T. (2022). An Investigation into Online Shopping Cart Abandonment in South Africa. *International Review of Management and Marketing*, 12(3), 26-30.
- Bloch, P. H., Sherrell, D. L., & Ridgway, N. M. (1986). Consumer search: An extended framework. *Journal of consumer research*, 13(1), 119-126.
- Cho, J. (2004). Likelihood to abort an online transaction: influences from cognitive evaluations, attitudes, and behavioral variables. *Information & Management*, 41(7), 827-838.
- Cho, C. H., Kang, J., & Cheon, H. J. (2006). Online shopping hesitation. *CyberPsychology & behavior*, 9(3), 261-274.
- Coppola, D. (2022, February 18). *Leading countries based on retail e-commerce sales growth in 2022*. Statista.com. <https://www.statista.com/statistics/266064/revenue-growth-in-e-commerce-for-selected-countries/>
- Coppola, J. & Sousa, K. (2008). Characteristics affecting the abandonment of e-commerce shopping carts – a pilot study. *Northeast Decision Sciences Institute Proceedings*, 384-389.
- Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of applied psychology*, 78(1), 98.
- Doob, L. W. (1990). *Hesitation: Impulsivity and reflection*. Greenwood Press.

- Fee, R. L., & Tangney, J. P. (2000). Procrastination: A means of avoiding shame or guilt?. *Journal of Social Behavior and Personality*, 15(5; SPI), 167-184.
- Flynn, E. (2021, November 17). *Decrease Abandoned Carts and Increase Conversion Using Swrve and Shopify*. SWRVE. <https://www.swrve.com/resources/weblog/decrease-abandoned-carts-and-increase-conversion-using-swrve-and-shopify>
- Forsythe, S. M., & Shi, B. (2003). Consumer patronage and risk perceptions in Internet shopping. *Journal of Business research*, 56(11), 867-875.
- Hirschman, E. C., & Holbrook, M. B. (1982). The experiential aspects of consumption: Consumer fantasies, feelings, and fun. *Journal of consumer research*, 9(2), 132-140.
- Huang, G. H., Korfiatis, N., & Chang, C. T. (2018). Mobile shopping cart abandonment: The roles of conflicts, ambivalence, and hesitation. *Journal of Business Research*, 85, 165-174.
- Israel, G. D. (1992). Determining Sample Size. *Gainesville: University of Florida; 1992*. Report No.:Fact Sheet PEOD-6.
- Jessup, R. K., Veinott, E. S., Todd, P. M., & Busemeyer, J. R. (2009). Leaving the store empty-handed: Testing explanations for the too-much-choice effect using decision field theory. *Psychology & Marketing*, 26(3), 299-320.
- Jiang, D., Zhang, G., & Wang, L. (2021). Empty the shopping cart? The effect of shopping cart item sorting on online shopping cart abandonment behavior. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(6), 1973-1996.
- Kavitha, K., and Kannan, D. (2020), Consumer attitude towards shopping cart abandonment in online shopping. *Studies in Indian Place Names*, 40(59), 389-96.
- Korgaonkar, P., & Bellenger, D. N. (1980). Profiling the recreational shopper. *Journal of Retailing*, 56(3), 77-91.
- 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.
- Li, S., & Chatterjee, P. (2006, June). Reducing shopping cart abandonment at retail websites. In *INFORMS Marketing Science Conference, University of Pittsburgh, Pittsburgh*.
- Luo, X. (2002). Uses and gratifications theory and e-consumer behaviors: A structural equation modeling study. *Journal of Interactive advertising*, 2(2), 34-41.
- Mad, S., Omar, N. A., & Sarudin, E. S. (2021). Malaysia: Exploring the Drivers of Cart Abandonment and Consumer Behaviour's. *Journal of Academic Research in Business and Social Sciences*, 11(10), 949-961.
- Magill, K. (2005). Building a better shopping cart. *Multichannel Merchant*, 1(8), 18-19.
- Malaysian Communications and Multimedia Commission. (2018). *E-commerce Consumers Survey 2018*. Malaysian Communications and Multimedia Commission. <https://www.mcmc.gov.my/skmmgovmy/media/general/pdf/ecs-2018.pdf>
- Malaysian Communications and Multimedia Commission. (2020). *Internet Users Survey 2020*. Malaysian Communications and Multimedia Commission. <https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/IUS-2020-Report.pdf>
- Manjula, N., & Mahesh Kumar, V. (2019). E-Commerce Cart Abandonment: Exploring Consumer Behavior's and Reasons for Cart Abandonment. *International Journal of Engineering Research & Technology (Ijert) Volume 08, Issue 09 (September 2019)*
- Mathwick, C., Malhotra, N., & Rigdon, E. (2001). Experiential value: conceptualization, measurement and application in the catalog and Internet shopping environment☆. *Journal of retailing*, 77(1), 39-56.

- Moore, S., & Mathews, S. (2008). An exploration of online shopping cart abandonment syndrome—a matter of risk and reputation. *Journal of Website Promotion*, 2(1-2), 71-88.
- Nichols, R. (2018, February 9) Understanding Shopping Cart Abandonment, <https://www.abtasty.com/blog/understanding-shopping-cart-abandonment/>. Retrieved on 16 September 2021.
- 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.
- Osman, M. (2021), How to Decrease Shopping Cart Abandonment on Your Ecommerce Site, <https://kinsta.com/blog/shopping-cart-abandonment/>. Retrieved on 15 September 2022.
- Pallant, J. (2001). SPSS Survival Manual: A Step-by-Step Guide to Data Analysis Using SPSS. *Behaviour Change*, 18(1), 58-62.
- Pasquali, M. (2022). *Global online shopping cart abandonment rate 2006-2021*. Statista.com. <https://www.statista.com/statistics/477804/online-shopping-cart-abandonment-rate-worldwide/>
- Pimentel, J. L. (2010). A note on the usage of Likert Scaling for research data analysis. *USM R&D Journal*, 18(2), 109-112.
- Rewick, J. (2000). Clinching the holiday e-sale: some 65% of online shopper's bolt at the checkout point; e-tailers try to keep them. *Wall Street Journal B*, 1.
- Scheinbaum, A. C., Kukar-Kinney, M., & Benusa, K. (2012). Towards a Theory of Consumer Electronic Shopping Cart Behavior: Motivations of E-Cart Use and Abandonment. *Online Consumer Behavior: Theory And Research In Social Media, Advertising, And E-Tail*, Angeline G. Close, ed., Routledge.
- Sekaran, U. (2000). *Research methods for business: A skill-building approach* (3rd Ed.).
- Strack, F., & Deutsch, R. (2006). Reflective and impulsive determinants of consumer behavior. *Journal of Consumer Psychology*, 16(3), 205-216.
- Wolfenbarger, M., & Gilly, M. C. (2001). Shopping online for freedom, control, and fun. *California management review*, 43(2), 34-55.
- Yusuf, L. L., Tamara, D., & Setiadi, N. J. (2021). The Determinants for Shopping Cart Abandonment. *Emerging Markets: Business and Management Studies Journal*, 8(2), 89-107.