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# **The Impact of Perceived Usefulness, Perceived Ease of Use, Perceived Value and Perceived Risk on Purchase Intention via Hypermarket Drive-Thru among Klang Valley Consumers**

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## **Abstract**

This study examines the impact of perceived usefulness, perceived ease of use, perceived value and perceived risk on Klang Valley consumers purchase intention to using hypermarket drive thru services. A total of 363 responses were collected from consumers in Klang Valley through online platform. The finding revealed that perceived value, perceived ease of use and perceived usefulness had a positive and significant impact on Klang Valley consumer's purchase intention whereas perceived risk contributed insignificant impact on consumer's purchase intention using hypermarket drive thru services. The results identified that perceived usefulness exhibited higher significant impact on consumer purchase intention to use hypermarket drive thru services followed by perceived ease of use and perceived value during COVID-19 pandemic. The current study contributed significantly to theoretical and practical implementation for marketers and hypermarket retailers to better promote the adoption towards hypermarket drive thru services among Klang Valley consumers through effective strategy.

**Keywords:** perceived usefulness, perceived value, perceived risk

## **1.0 Introduction**

The impact of Covid-19 pandemic on retail sector is heterogenous. Lockdown and social distancing measures have changed the consumers attitude, intentions and purchasing behaviours at physical retail store than online retailers. Tan Hai Hsin the Managing Director of Malaysia Retail Group perceive that the retail business valued at RM107.5 billion in 2019, is likely to lose RM10.9 billion in 2020 as a result of the COVID-19 pandemic due to closures of non-essential retail activities such as cinema, theatres and other entertainment venue contributed to decline in consumer spending (Malaysiakini, 2020 July 31). Table 1 shows a comparison of retail sales based on sub-sector for 1<sup>st</sup> and 3<sup>rd</sup> quarter, 2020. The growth rate of the Malaysian Retail Industry as a whole for the 3<sup>rd</sup> quarter is still considered weak as the third wave of the Covid-19 pandemic and the second Conditional Movement Control Order (CMCO) caused consumers only go out to buy necessities and choose not to shop contributing to the decline in other retail sales. In addition, according to Retail Group Malaysia (RGM) reducing in the take home salary during this period also limits purchasing power among Malaysian.

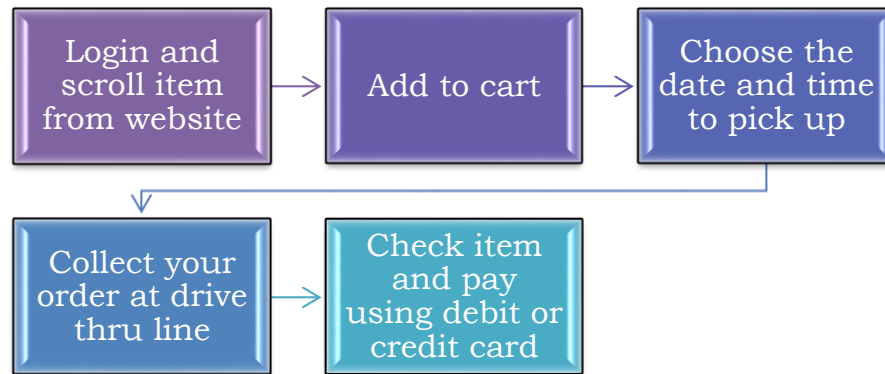
**Table 1:** Retail Sales rate by Subsector For the Year 2020

Retails Sub Sector	% Retail Sales (Q1,2020)	% Retail Sales (Q3,2020)
Overall( <i>Malaysia Retail Industry growth rate</i> )	-11.4	-9.7
Department store cum supermarket	-8.5	-6.2
Department store	-17.5	-17.7
Supermarket and hypermarket	-3	-15.1
Fashion and fashion accessories	-30.5	-12.5
Pharmacy and personal care	-3.9	-11.1

Sources: Murugiah (2020), The Star (2020, July 13)

Hence, to improve the performance of Malaysia Retail Industry, adaptation towards technology is a necessity even though it requires costly investment. Hypermarket are considering on omnichannel instead of relying heavily on the brick and mortar (conventional hypermarket). Thus, Covid-19 pandemic became a turning point for the conventional hypermarket retailers to adopt the drive-through technology in their day to day operations. In Malaysia, drive thru most commonly used in fast food and healthcare industry. McDonalds in Malaysia opens its first ever drive thru restaurant at Jalan Pahang, Titiwangsa in December 1988 (Nabilah, Atiqah, Najwa, Zulaika & Kasih, 2022). In addition to that, the first drive through pharmacy in Malaysia started in Pulau Pinang (2008), Queen Elizabeth Hospital in Kota Kinabalu (2015) (Liew, Aizan Adifarhan & Lik, 2020). Furthermore, Pantai Hospital in Bayan Baru, Penang offers their first drive-through test for Covid-19 in Malaysia (McIntyre, 2020 March 17<sup>th</sup>).

Since, drive-through become common among Malaysian, AEON, Tesco and Lulu Hypermarket introduced drive thru service as their diffusion of innovation in retail industry. The first hypermarket with drive thru service in Malaysia was invented by AEON hypermarket on 1<sup>st</sup> April 2020 (The Star 2020, April 1<sup>st</sup>), Lulu Hypermarket launched their "Click & Collect" on 3<sup>rd</sup> April 2020 (Tan, 2020 April 4<sup>th</sup>) and finally Tesco, the 3<sup>rd</sup> hypermarket in Malaysia introduce their "Order and Collect" from 10<sup>th</sup> April 2020 onwards (Tan, 2020 April 11<sup>th</sup>). This drive-thru services will ease their customers in purchasing groceries without queuing for hours outside hypermarket and maximize social distancing during the epidemic and also help the retailer to increase their sales and profit without disobeying the government restriction. Figure 1 show the process of ordering groceries through a hypermarket drive thru service.



**Figure 1:** Process of ordering through hypermarket drive thru

### 1.1 Problem statement

The implementation of MCO, social distancing measures and other Covid-19 SOP at retail stores causes inconvenience among the consumers where some of them went back home with frustrated because they are not being able to purchase anything due to long queue and running out of stocks for certain items in hypermarket (Munir Majid, 2020). Furthermore, essential items such as rice, cooking oil, toilet tissue, instant noodles and canned food flew off shelves due to panic buying among the consumers once the Prime Minister announce its MCO implementation to tackle surging coronavirus cases (New Straits Times 2020, March17). The above scenario is supported by the findings from the Department of Statistic Malaysia, where 18 - 44 percent of household income is spent mainly on food and non-alcoholic beverages during Covid-19 pandemic (Sofea Azahar, 2020). It shows that during Covid-19 pandemic the demand for essential items is greater than its supply. It is because most people work from home and students attending their class online thus they feel economic and safe when they consume homecooked food which is clean and cheap.

Furthermore, the fear of viruses that could spread through cash transaction in physical stores have accelerated the adoption of e-wallet payment method. Datuk Seri Alexander Nanta Linggi, Minister of Domestic Trade and Consumer Affairs perceive that the use of e-wallet has increased by 600 million (131%) transaction in 2020 (Bernama 2022). Furthermore, Sheyantha Abeykoon CEO of Boost concluded that for the past 18 months from January 2020 until June 2021 number of e-wallet merchants increased by 85% due to high demand from the consumers (Birruntha, 2021). In addition, Malaysian Communication and Multimedia Commission (MCMC) concluded that 64.2% of the internet users in 2020 frequently shop online compare to 53.3% in 2018 (MCMC, 2020). During this pandemic e-commerce sector shows stupendous growth within a short time frame. Lazada Malaysia declares that its orders have increased 80% on average compare to pre-pandemic (Lydia Nathan, 2021 January 1<sup>st</sup>). It's because consumer feel more convenience and safe during online transaction rather than the physical transaction at retail stores. Therefore, this study was conducted to determine the impact of perceived usefulness, perceived ease of use, perceived value and perceived risk on purchase intention via drive-thru service at hypermarket

because purchasing groceries item via drive-thru is something new for Malaysian consumers.

## **1.2 Research objective**

The aim of this study is to evaluate the impact of perceived usefulness, perceived ease of use, perceived value and perceived risk on purchase intention via hypermarket drive-thru among klang valley consumers. The specific objective of this study is (i) to identify the relationship between independent variable (perceived value, perceived usefulness, perceived ease of use and perceived risk) with dependent variables (purchase intention) and (ii) to determine the effect of perceived value, perceived usefulness, perceived ease of use and perceived risk on Klang Valley customer's purchase intention using drive-thru services at hypermarket. The findings from this research will help us to get a better understanding on the most significant factor that effect the consumers intention to purchase their groceries items using the drive thru services and also to justify the existing theory of Technology Acceptance Model (TAM) that perceived usefulness is influenced by perceived ease of use is relevant during the covid-19 pandemic scenarios.

## **2.0 Literature review**

### **2.1 Perceived value**

Perceived value are benefits that the users expect to derive from using it. According to Chowdhury, Haque & Maulan (2019) satisfaction only takes place when customer believe they have obtain the sufficient value for money but Petrick (2002) highlighted that perceived value not only about the price of product but also other factors such as quality, emotional response and reputation affect the consumers purchase decisions. Perceived value has significant and positively effect on consumers purchase intention (Chi, Yeh, & Tsai, 2011). Hence, Luo, Li & Sun (2022) also concluded that perceived value has a significant impact on consumer purchase intention for energy saving product in China. Thus, the following hypothesis is proposed:

*H1: There is a significant impact between perceived value and Klang Valley consumer's purchase intention using drive thru services at hypermarket*

### **2.2 Perceived usefulness**

According to Davis (1993) in Jason and Siti Aishah (2021) perceived usefulness means individual belief that by using technology it help them to enhanced their online shopping performance. It means that how helpful is the system to the consumer to get what they are intended. Hanjaya, Kenny, & Gunawan (2019) concluded that in Indonesia, information quality and perceived usefulness have a significant impact towards consumers online purchase intention compare to perceived ease of use and serviced quality. Chan, Rahman, Mamun, Salameh, Wan Hussain, & Alam (2022) concluded that perceived usefulness has the most significant impact on the adoption of mobile shopping during the Covid-19 pandemic followed by perceived ease of use and enjoyment. Finally perceived usefulness and attitude have a significant impact among the students and staff at Hungarian Universities towards continues intention to use the e-wallet payment method during

Covid-19 pandemic (Daragmeh, Sági, & Zéman, 2021). Thus, the following hypothesis is proposed:

*H2: There is a significant impact between perceived usefulness and Klang Valley consumer's purchase intention using drive thru services at hypermarket*

### **2.3 Perceived ease of use**

Perceived ease of use can be defined as individual's perception when they use a particular system is it convenient (Davis, 1989 in Ariffin, Abd Rahman, Muhammad & Zhang (2021). Hanjaya et al.(2019) concluded in Singapore, perceived ease of use, perceived usefulness and service quality have a significant impact on consumers online purchase intention. These are the dominating factor because when the mobile apps are easy to use, easy to learn on how to operate and very simple will increase the consumer's intention to purchase by using it. Thus, the following hypothesis is proposed:

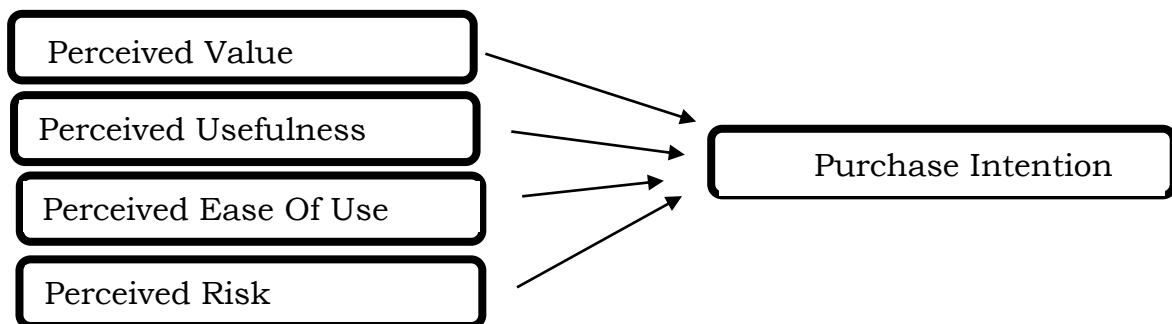
*H3: There is a significant impact between perceived ease of use and Klang Valley consumer's purchase intention using drive thru services at hypermarket*

### **2.4 Perceived risk**

Perceived risk comprises of five element such as product risk, financial risk, security risk, convenience risk and non-delivery risk. Gan and Wang (2017) found that perceived risk has no effect on the purchase intention it is because rapid development of online shopping and the service provider reduce the user's perceived risk by offering multi-channel payment. According to Ahmed and Akhlaq in Iqbal (2021) perceived risk have negative impact on consumers purchase intention thru online purchase because when they feel that the online transaction is highly risky then they will not engage on to it. The above statement is inline with Kim and Forsythe (2010) in Fikri, Nurmalina, Najib, & Simanjuntak (2019) states that perceived risk tends to be an obstacle for online shopping because it will affect the choice of consumer to shop online. Thus, the following hypothesis is proposed:

*H4: There is a significant impact between perceived risk and Klang Valley consumer's purchase intention using drive thru services at hypermarket*

### **2.5 Theoretical framework**



**Figure 2:** Theoretical Framework

The above theoretical framework is the adopted from Lai and Zainal (2015). Technology Acceptance Model (TAM) was introduced by Fred Davis in 1986 and it describe the general factors of technology acceptance that lead to users' behaviour. Two elements from Technology Acceptance Model (TAM) which is perceived usefulness and perceived ease of use are used in this study together with other external variable such as perceived value and perceived risk to get a better understanding on the Klang Valley consumers purchase intention via drive thru at hypermarket.

### **3.0 Methodology**

This is a descriptive study that examines the characteristic of the population in terms of factors that determine their intention to purchase through drive thru services provided by the hypermarket in Klang Valley. This study is based on cross sectional study where data collected from 25<sup>th</sup> June until 30<sup>th</sup> August 2020 among consumers in Klang Valley. Retail business in Klang Valley accounts for 60% of the country's total retail sales where the most densely inhabited area in the country and also severely affected by the pandemic (Vasantha Ganesan,2021). Therefore, this study is focused in Klang Valley, total population in Klang Valley are 118,311.8 (Jabatan Perangkaan Malaysia, 2020) and based on Krejcie and Morgan table the right sample size is 384. Due to the limitation and restriction imposed by the Covid-19, online survey using google form was adopted to collect data using convenience sampling. The link regarding this online survey was sent through social media platforms like WhatsApp, Telegram and Facebook.

Online survey using google form is used to collect data from respondents. This google survey form is divided into three sections as follows: section A respondents' demographic, section B general information relating to buying behaviour at hypermarket and section C questions related to dependent and independent variables. All the questions in section C use five-point Likert Scales anchored with 1= strongly disagree, 5= strongly agree and 3= neutral (neither agree nor disagree) as midpoint. Four items were used to measure customer purchase intention in which all these questions were adapted from Rose, Cho & Smith (2016). For perceived Value, items 1, 2 and 3 were adapted from Yee and Faziharudean (2010) while item 4 and 5 are adapted from Fang, Wen, George, & Prybutok (2016). Meanwhile for perceived usefulness and perceived ease of use question 1 until 5 are adapted from Lewis and Hf (2019). Finally, for perceived risk all four items are adapted from Ariff, Sylvester, Zakuan, Ismail, & Ali (2014) and item 5 are adapted from Tsai and Yeh (2010).

## **4.0 Results and discussion**

### **4.1 Demographic analysis**

Total 363 responses received through google form but only 350 responses are valid and reliable. From these 350 respondents, majority of them are from Selangor (83.4 percent), Kuala Lumpur (11.7 percent) and Putrajaya (4.9 percent). Detail breakdown of demographic profile are shown in table 2. Furthermore, analysis shows that respondent usually buy their groceries from AEON hypermarket (39.1 percent), Tesco (35.1 percent), other (24.6 percent) and Lulu Hypermarket (1.2 percent). In addition, 46.6 percent of the

respondent visited the hypermarket once a month, while 39.7 percent (weekly), 13.4 percent (every 2-3 months) and 0.3 percent visit in daily basis. During this pandemic, only 21.7 percent of the respondent have purchased groceries using drive thru services and 86 percent are satisfied with the drive thru services. Table 2 shows the demographic profile of the respondent.

**Table 2:** Demographic information

Dimension		Frequency	Percent
Gender	Male	105	30
	Female	245	70
Age	18-25 years old	79	22.6
	26-35 years old	40	11.4
	36 – 45 years old	78	22.3
	46 years old and above	153	43.7
Education	SPM	60	17.1
	Diploma	122	34.9
	Degree	131	37.4
	Master	13	3.7
	PHD	24	6.9
Occupation	Unemployed	29	8.3
	Student	67	19.1
	Government Sectors	118	33.7
	Private Sectors	88	25.1
	Self Employed	48	13.7
Income	Below RM1000	92	26.3
	RM 1001- RM2500	36	10.3
	RM2501- RM4000	40	11.4
	RM4001- RM5500	50	14.3
	Above RM5501	132	37.7

#### **4.2 Reliability analysis**

Based on table 3, the overall reliability for twenty-four (24) related variables that influence the Klang Valley consumer's purchase intention using drive-thru services at hypermarket are  $\alpha=0.962$ . Thus, I conclude that the factors that influence Klang Valley consumers purchase intention using drive-thru at hypermarket during Covid-19 pandemic have proven internal consistency because reliability value exceeds 0.90. In addition, the Cronbach's alpha coefficient for all dimensions are between 0.898 to 0.942, which is considered good.



**Table 3:** Summary of Cronbach's Alpha Coefficients

Dimensions	No. of items	Cronbach's Alpha Coefficient
Perceived Value	5	0.935
Perceived Usefulness	5	0.942
Perceived Ease Of Use	5	0.912
Perceived Risk	5	0.898
Purchase Intention	4	0.932
Total	24	0.962

#### 4.3 Pearson Correlation Analysis

Based on the correlation coefficient value in table 4, I conclude that all independent variable has a positive relationship with purchase intention and the strength of relationship between perceived usefulness ( $r = 0.620$ ), perceived ease of use ( $r = 0.616$ ) and perceived value ( $r = 0.503$ ) with purchase intention are strong. However, the strength of relationship between perceived risk ( $r = 0.471$ ) and purchase intention is medium.

**Table 4:** Pearson Correlation between Dependent and Independent Variables (where  $n=350$ )

Independent Variables	Coefficient (r)	Significant Level (P)	Strength of Relationship
Perceived Value	.503**	.000	Strong
Perceived Usefulness	.620**	.000	Strong
Perceived Ease of Use	.616*	.000	Strong
Perceived Risk	.471*	.000	Medium

\*\* . Correlation is significant at the 0.01 level (2-tailed)

#### 4.4 Multiple regression analysis

Based on the results presented in table 5, it shows that perceived usefulness, perceived ease of use and perceived value not only has a positive and strong relationship but it also has a significant impact on Klang Valley consumer's purchase intention using drive thru services at hypermarket however perceived risk does not have any significantly impact on the dependent variable because the p-value is greater than 0.05. Perceived usefulness ( $\beta=0.335$ ) is the main contributor to consumer's purchase intention followed by perceived ease of use ( $\beta = 0.232$ ) and perceived value

( $\beta=0.182$ ). Therefore hypothesis 1, hypothesis 2 and hypothesis 3 are supported by the above findings meanwhile hypothesis 4 are rejected.

**Table 5:** Summary of Multiple Linear Regression

Hypothesis	Variable	Dependent – Purchase Intention		
		Standardized Beta	Sig.	Finding
<i>H1</i>	Perceived Value	0.182	0.001	Supported
<i>H2</i>	Perceived Usefulness	0.335	0.000	Supported
<i>H3</i>	Perceived Ease of Use	0.232	0.003	Supported
<i>H4</i>	Perceived Risk	-0.006	0.918	Rejected

*Note: Significant at 0.05 level*

All the independent variables used in this study only able to explain 43.9 percent of Klang Valley consumer’s purchase intention using drive thru services at hypermarket whereas 56.1 percent might be explained by other variables such as service quality, perceived enjoyment, ubiquitous connectivity and system quality

## 5.0 Discussion and conclusion

Perceived Usefulness has a positive and the most significant impact on the consumers purchase intention using drive thru followed by perceived ease of use and perceived value. These findings are consistence with the previous studies in the context of online purchase intention among Indonesian by Hanjaya et al (2019) and mobile shopping adoption during Covid-19 pandemic by Chan et al (2022). According to Chan et al (2020) the new application will be successful when it focus more on the users experience and demand rather solely focused in developing the most advance and modern shopping sites. Indeed, when hypermarket introduce their drive thru service, their main focus is to reduce the long queue outside the hypermarket, overcoming stock-out issues due to panic buying, protect the consumer from being infected by Covid-19 virus and increase their sales and profit. Therefore, theoretical assumption perceived usefulness is influenced by perceived ease of use is not applicable during Covid-19 pandemic because in this study it has proven that perceived usefulness is more significant rather than perceived ease of use. Hence, the success of the apps introduced in the market depends on what extend that the consumer perceived it as useful based on current scenario. Majority of respondent prefer to use drive thru services because consumer aware on the seriousness of the disease and physical contact at hypermarket can make them vulnerable be contracting with virus. The survey finding reveal that, 22 percent of the respondents really experienced purchasing groceries

items via drive thru during Covid-19 dan 86 percent of them are satisfied with the services. It is because drive thru services provide Klang Valley consumer's with great convenient time to collect groceries items from the hypermarket of their choice. With these services, Klang Valley consumers no need to rush to hypermarket early in the morning in order to get the first chance to enter the hypermarket without waiting in a long queue for hours. The findings from the survey also indicate that majority of the respondent agreed that drive thru at hypermarket makes their shopping considerably easier, efficient and fast.

Perceived ease of use is the second most important variable that has a significant impact on the consumer purchase intention via drive thru at hypermarket. It shows that although particular innovation is something that is very beneficial for the consumers during Covid-19 but the acceptance level among the end consumers depends on how user friendly is the application. If the apps are very easy to access with simple instruction it may be able to attract more people to use it in future. The above findings are consistence with previous studies done by Hanjaya et al (2019). Since majority of the respondent are female with degree qualification and aged above 46-year-old, placing an order for groceries item via drive thru service are easier because they are guide with the simple instruction, apps are very user friendly and live update regarding the availability of the grocery's items allow the customer to plan their purchase more effectively and efficiently before they place an order. In additional hypermarket provide 2 options to their customer where the order can be placed via hypermarket website or through WhatsApp. Consumer can choose the method that they are very convenience to use.

Perceived value is the third variable that have a positive and significant impact on the consumer's purchase intention using drive thru services. The above findings are consistence with previous studies done by Chi et al (2011) and Luo et al (2022) perceived value have significant impact on consumer purchase intention for energy saving products in China. Drive thru in hypermarket is not similar with drive thru in fast food industry because in nature at hypermarket consumer will select all the groceries item from the display shelve by using all their 5 senses. Hence, when hypermarket introduced drive thru services the end consumers are not be able to use all their 5 senses when performing the purchase. Therefore, they are highly relaying the empathy and integrity of the personal shopper. So they want the personal shopper to provide best service and have a good understanding on the consumers' needs and preferences so that they can pick the best quality item and hand them over to the rider or customer during the collection process. Personal shopper appointed by the hypermarket will ease the consumers' job in choosing, weighing, billing and update the consumers if there is unavailability of the selected item. When all the item is ready for collection the reminder will be sent to the consumer and the consumer itself can-do self-checking on the status of their order from time to time. Majority of Klang Valley respondent agreed that product or services provided by the respective hypermarket via drive thru is good value for money, price are reasonable and its worth for the quality of the product that they receive. Therefore, it can be concluded that when perceived value is greater than the cost it may encourage the consumer to use drive thru services more frequently

to purchase their groceries items rather than they physically present to the hypermarket.

Finally, perceived risk does not have a significant impact on the purchase intention using drive thru services. It is because Covid-19 pandemic has exposed the consumers to various online activities such as purchasing in e-commerce platform and use e-wallet as most favourable method of payment. Therefore, the finding in this study are in line with Gan and Wang (2017) found that perceived risk has no effect on the purchase intention in online. A similar example is, purchase through online shopping are increasing from time to time although a lot of fraud cases are reported. It is because rapid development of online shopping and the service provider reduce the user's perceived risk by offering multi-channel payment such as cash on delivery, debit card or credit card. Therefore, it will be the consumers responsible to choose the right website to make their purchases and always be aware when they involve in online transaction.

As a conclusion, Covid19 pandemic has impacted many businesses including hypermarket. In order to sustain and generate more sales hypermarket innovation strategies drive thru services become essential to gain the consumers trust. Consumer belief drive thru services introduced by hypermarket is one of the protective behaviours because it reduces the risk of contracting with virus and simplifies the consumers selection process within their convenience shopping timing. This drive thru services has successfully attracted the interest of users in Klang Valley to use and enjoy the benefit of it.

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