

# THE IMPACT OF ONLINE FOOD SHOPPING MOTIVES TOWARDS BEHAVIOURAL INTENTION DURING COVID-19 PANDEMIC IN MALAYSIA

**Mastura Roni, Universiti Teknologi MARA Melaka**  
**Siti Hajar Mohamad, Vienna Resources (M) Sdn Bhd, Taman IKS Padang**  
**Syahiru Shafiai, Universiti Teknologi MARA Melaka**  
**Intan Maizura Abd Rashid, Universiti Teknologi MARA Melaka**  
**Harniyati Hussin, Universiti Teknologi MARA Melaka**  
**Amirah Hazimah Borhanordin, Universiti Teknologi MARA Melaka**

## ABSTRACT

*The online shopping patterns among users and customers have been seen changing and accelerating due to the impacts of Covid-19 pandemic around the globe. Recent trend on online shopping become an opportunity for firms to enhance their business by offering online ordering and delivery through optimization of mobile technology and e-commerce platforms. This study aims to analyse the impact of online food shopping motives towards behavioural intentions among online food delivery customers in Malaysia. The data was distributed based on a convenience random sampling of 500 online users whereby 135 consumers completed the surveys and usable for this study. The four drivers of online shopping motives namely perceived usefulness, perceived ease of use, normative motives and hedonic motivation were examined by performing reliability, validity, correlations and regressions analysis using IBM SPSS 25. Result demonstrates that normative motives, perceived ease of use and perceived usefulness were good determinants of online purchase behaviour intentions compared to hedonic motivation. Findings indicates that customers tends to use online shopping platforms because of the perception towards ease of use of the technology and usefulness of certain application during online transaction, as well as personal norms that can be communicated interpersonally. This study suggested that businesses need to optimize their online presence and incorporate the shopping motives in business strategies to ensure long term business sustainability.*

**Keywords:** Online Shopping Motives, Behavioural Intention, Covid-19 Pandemic, Online Food Delivery, Theory of Planned Behaviour, Theory of Acceptance Model

## INTRODUCTION

Covid-19 has become a global crisis since last two years whereas some countries has declared that the virus has become epidemic since no cure found. Even though the world is currently progressing on vaccination program, many countries are still struggling to keep sustaining the life of the people as well as the global economy. Most of the countries in the world have already opened their economic sectors to keep generating income for the whole nation, even still in the Movement Control Order (MCO) stage, as what happened in Malaysia recently. Since the pandemic started, business around the globe has been badly impacted, even big corporations, factories, physical stores, shopping malls and restaurants were closed, resulting in significant falls of demand for goods and services (Koch et al., 2020). As such, understanding the new norms and current demand in the market is crucial for business sustainability during this pandemic (Pulevska-Ivanovska & Karadakoska, 2020). On a positive side, the Covid-19 pandemic has grown the e-commerce platform and become one of the main distribution channels in the retail market globally (Bhatti et al., 2020).

The advancement of information and communication technology (ICT) has directed to the development of secure and convenient payment systems which are becoming an important shopping tool nowadays. The current pandemic situation and MCO implementation in Malaysia has opened a great online business opportunity and customers have been forced to make purchasing and food delivery through online platforms such as Food Panda and Grab Food, rather than going to a physical restaurant. This resulted in many online retailers beginning to develop new product recommendations and sales strategies because of the Covid-19 pandemic and drives e-commerce platform. As indicated by Gagua (2020), the e-commerce market will exponentially grow at 14.3 % annually for the next five years, thus expected to reach almost 20 % by 2024. The changes seen in the e-commerce market are expected to continue even after the Covid-19 pandemic ends (Hicintuka, 2020).

Nevertheless, studies related to e-commerce during Covid-19 pandemic are considered new and still lacking thus need further investigation (Ali et al., 2021). Although there are existing studies on online shopping motives against behavioural intentions through online shopping applications, there is significant lack of studies to address food delivery services in the current light of Covid-19 outbreaks in Malaysia. Hence, further investigation on online shopping applications in the context of food delivery services implemented during the Covid-19 outbreak in Malaysia is essential.

As such, following recommendation from Ali et al. (2021), this research intends to examine the determinants of online shopping motives that leads to behavioural intention among online food delivery customers during Covid-19 in Malaysia. This paper begins with a brief introduction and literature review on the factors affecting online shopping motives, basic concepts, underlying theory and behavioural intentions model. Next, research methodology is explained, followed by detailed analyses, results, and finally the discussion, limitation of study as well further recommendation for future research.

## LITERATURE REVIEW

A great understanding of the customer's shopping behaviour which influences buying behaviour is very important to ensure businesses cater their target market and increase sales volume. Since the volume of online orders experienced a drastic surge, this became a huge opportunity to grasp by online businesses. During Covid-19 pandemic in Malaysia, online food delivery has become a trend and widely acceptable. Generally, Prasetyo et al., (2021) defined online food delivery as any money-worth food delivery transaction made through a mobile handheld device such as a smartphone or personal digital assistant. The Covid-19 pandemic has spurred the growth of the online food delivery service industry, and among all Internet services, online food delivery is considered one of the most useful (Kapoor & Vij, 2018).

Previous research generally focused on investigating customer behaviour to online services, however, lack of study focusing on the perspective of online food delivery services and small sample size with specific age group (Chai & Yat, 2019). Following recommendation from Kaur et al. (2020) this study seeks to investigate consumer attitudes on online food delivery services, involving various age groups and across different states in Malaysia. The underlying factors contributing to online shopping motives amongst online customers are expected to be different from online food delivery services as compared to offline ordering services. Through extensive investigations from previous literatures, this study has found various determinants that becomes motives for predicting behavioural intention of online customers. This factors can be group into few perspectives which is related to customers perception, attitude, website, quality of service, information and customer loyalty (Vinish et al., 2021). The findings on the previous research denotes that studies on behavioural intention on online food delivery is keep progressing in Malaysia.

TPB has been widely used in previous studies in the context of online shopping applications such as restaurant apps and food delivery apps. Research shows that TPB can predict attitudes, subjective norms and perceived behavioural control toward behavioural intention of fast food consumption (Chai & Yat, 2019). Furthermore, Yeo et al. (2017) utilized TPB to analyse factors namely hedonic motivation, prior online purchase, time saving orientation, and price saving orientation in influencing convenience motivation and post usage usefulness to determine attitude and behavioural intention towards online shopping apps.

### **Perceived Usefulness and Behavioural Intention**

Perceived usefulness implied a perception that shopping performance would be increased as a result of online shopping activities and customers adopt certain products based on their perception that the product brings value and usefulness (Aw et al., 2021), as well improve their shopping performance. The positive link between perceived usefulness and behavioural intention has been identified in previous research. Perceived usefulness positively influenced online shopping intentions as well as contributes to various useful benefits such as measures customer's preferences to online store and increased customer satisfaction.

Moreover, perceived usefulness also positively affects online shopping attitudes and mobile banking acceptance (Navavongsathian et al., 2020). Similarly, Kim and Kwahk (2007) claimed that through the intention to use e-commerce on behalf of perceived values, the perceived usefulness and emotions played significant roles in accounting for both users. Ideally, hypothesis to test this relationship is:

*H1: Perceived usefulness positively affects behavioural intention of online food delivery during Covid-19 in Malaysia.*

### **Perceived Ease of Use and Behavioural Intention**

Generally, an individual opinion associated with new system or technology adoption without putting any effort and even no need to pay, thus become the motives to do online shopping is known as Perceived ease of use (PEU). Specifically, PEU describes how far a customer trust that a system is effortless (Taufik & Hanafiah, 2019). Customers who regularly perceived ease of use are positively influenced by the online shopping facilities that will met their expectation and useful. The PEU always related to technology usage to perform task easier and proven in various studies. PEU indicates significant impact towards self-service technology (Taufik & Hanafiah, 2019) and positively affects customer satisfaction on the mobile website, as well as important determinant in the adoption of technological products. Therefore, hypothesis suggested is as follows:

*H2: Perceived ease of use positively affects behavioural intention of online food delivery during Covid-19 in Malaysia.*

### **Normative Motives and Behavioural Intention**

Normative motives are also known as normative influences and subjective norms which are usually assessed in the context of consumer behaviour studies (Koch et al., 2020). Normative influence may be interpersonally communicated, often comes from interpersonal sources. Wall et al. (2008) addressed this issue in the health domain, showing that personal norms moderated the intention-behaviour relationship. This is consistent with the proposal by Harland et al. (1999) where personal norms are the immediate antecedent of altruistic acts, and causal chain leading to pro-environmental behaviour. These personal normative factors can influence person's behaviour when it is needed. It occurs in two situations, (a) when a person is aware of the behaviour for the welfare of others, and (b) when a person will choose to be responsible for himself. Hence, this study proposed following hypothesis to be tested:

*H3: Normative motives positively affects behavioural intention of online food delivery during Covid-19 in Malaysia.*

## Hedonic Motives and Behavioural Intention

The concept of hedonic motives means more subjective and personal than utilitarian which could produces more joy and playfulness than completing tasks. This motive reflects the shopping generated from the excitement and emotional potential of the customer. In particular, hedonic motives assess how much consumers feel about online shopping and focusing on the fun of doing the activity in the shopping application. The link between hedonic motives and behavioural intention has been found in previous research; those who valued hedonic shopping behaviours will contributes to behavioural intentions (Jung et al., 2021). Additionally, the findings concerning values such as the value of an exciting life (Pinto et al., 2011), enjoyment of life (Chrysohoidis & Krystallis, 2005), and adventurous spirit (Fraj & Martinez, 2006), where it appears that hedonic values may be useful predictors of intention to purchase sustainable products. Thus, the hypothesis for this relationship are as follows:

*H4: Hedonic motives positively affects behavioural intention of online food delivery during Covid-19 in Malaysia.*

## METHODOLOGY

This study utilised quantitative method in analysing the results. Convenience sampling method was used to collect samples from 500 online customers amongst those who had knowledge and experience buying online food delivery services in Malaysia during Covid-19 pandemic. Google form link was sent through personal Telegram and WhatsApp application to obtain customer's feedback. Prior to large data collection, research ethics was done and respondent's consent were attained. Data were collected from 10 June to 10 July 2021 among online consumers. Questionnaire was prepared in English and Malay and validated through pre-test by academic experts before distributed to respondents. The researcher ensures that no personal answer included and respondent's identity remain anonymous. The following subsections explain operational constructs and data analysis procedures for this study.

### Operational Constructs

This research adopts quantitative methods utilizing survey instrument to obtain information from food online delivery customers during Covid-19 pandemic in Malaysia. This study created three sections for the questionnaire. Part One: background of online users, Part two: Covid-19 related background information and Part Three: Online shopping motives constructs and behavioural intention. In the section of background of online users, a multiple-choice question was chosen. The online shopping motives constructs was measured by five-point Likert scale to rate the questions responses, it's range from one (1) "Strongly Disagree" to five (5) "Strongly Agree". Table 1 presented the construct of questions.

<b>Constructs</b>	<b>Items</b>	<b>No. of items</b>	<b>References</b>
<b>Behavioural Intention</b>	BI01: I intend to buy food online during the current situation	3	(Madden et al., 1992)
	BI02: I currently intend to buy food online		
	BI03: I will try to buy food online during the current situation		
<b>Perceived Usefulness</b>	PU01: Buying food online is currently a useful way to shop	4	(Devaraj et al., 2002)
	PU02: The online purchase of food currently makes shopping easier		
	PU03: Currently, buying food online allows me to shop more efficiently		

	PU04: My choices for online food purchases are currently being improved		
<b>Perceived Ease of Use</b>	PEOU1: I can easily find things that I need in food online application	4	(Suhartanto et al., 2019)
	PEOU2: I find that food online has information button to help me		
	PEOU3: I can complete a transaction quickly		
	PEOU4: I feel the food online application in terms of design and position are well organized		
<b>Normative Motives</b>	NM01: People who are important to me support ordering food online during the current situation	6	(Venkatesh et al., 2012)
	NM02: People who influence my behaviour think that I should buy food online during the current situation		
	NM03: People whose opinions I value approve if I buy food online during the current situation		
	NM04: The latest news about the economy encourage me to order food online		
	NM05: The current opinions published on social media about the economic situation encourage me to buy food online		
	NM06: Considering the current situation, the advice of economic experts encourages me to order food online		
<b>Hedonic Motivation</b>	HM01: During the current situation, I enjoy buying food online	3	(Venkatesh et al., 2012)
	HM02: During the current situation, I am satisfied with online purchases of food		
	HM03: During the current situation, buying food online is entertaining		

## Data Analysis Procedure

Reliability to test the stability was used for this study and the consistency of the constructs of behavioural intention; perceived usefulness, perceived ease of use, normative motives and hedonic motivation, using reliability coefficients of Cronbach alpha value. Sekaran & Bougie, (2016) states that Cronbach's alpha is a stability reliability coefficient indicating items in a set with a positive relationship with each other. Cronbach's alpha greater than 0.60 is acceptable which indicates reliability for the measurement and a value of 0.70 is preferred (Bagozzi, 1994). Furthermore, analysis for regression is used to find out the correlation between two or more variables that have a cause-and-effect relationship and can formulate predictions in this relationship (Uyanık & Güler, 2013). Hence, this study utilizes regression analysis to examine determinants of online shopping motives which can be predicted on behavioural intention.

## ANALYSIS AND FINDINGS

### Demographic profile analysis

Questionnaires were distributed based on a stratified random sample of 500 online customers. There were 135 completed surveys returned, yielding a 27.6% response rate as shown in Table 2. The majority of the online food customers were female (95) and for male was 40 customers. The highest age of online food customers was between 18 to 30 years calculated by 52.6% and the lowest use of online food customers was 51 years and above calculated by 5.2%. The highest monthly income for the online users with less than RM1000 constitutes 62.2% from overall respondents. The online user income per month between RM2001 to RM3000 represents 11.9%, and the range between RM4001 to RM5000 represents 3% which are the lowest participants.

**Table 2**

<b>SUMMARY OF RESPONDENTS' SOCIO DEMOGRAPHIC PROFILES.</b>		
<b>Characteristics</b>	<b>No. of respondents N=135</b>	<b>Percentage (%)</b>
<b>Gender</b>		
Male	40	29.6
Female	95	70.4
<b>Age</b>		
Between 18 to 30 years	71	52.6
Between 31 to 40 years	41	30.4
Between 41 to 50 years	16	11.9
51 years and above	7	5.2
<b>Income per month</b>		
Less than RM1000	84	62.2
Between RM1001 to RM2000	13	9.6
Between RM2001 to RM3000	16	11.9
Between RM3001 to RM4000	7	5.2
Between RM4001 to RM5000	4	3.0
More than RM5001	11	8.1
<b>Frequency of online shopping</b>		
Several times a week	19	14.1
Once a week	28	20.7
Once a month	53	39.3
Once every 3 months	11	8.1
Once every 6 months	6	4.4
Once a year	18	13.3
<b>Profession</b>		
Housewife	16	11.9
Student	66	48.9
Government servant	23	17
Private employees	9	6.7
Self-employed	17	12.6
Others	4	3.0
<b>Numbers of children</b>		
0	72	53.3
1	4	3.0
2	16	11.9
3	19	14.1
4	13	9.6
More than 4	11	8.1
<b>Residential area</b>		
Urban (> 20,000 residents)	75	55.6
Rural (< 20,000 residents)	60	44.4
<b>Selected online shops when buying food</b>		
Online stores of food (McDelivery, PizzaHut, Dominos, etc)	65	48.1
Grab Food	13	9.6
Food Panda	18	13.3
Uber Foods	1	0.7
General online platforms (fb, ig, etc)	27	20
Other	11	8.1

In terms of frequency of online shopping, 53 customers buy food online once a month which represents 39.3%, once a week with 28 customers (20.7%), follows by several times a week and once a year having 19 customers (14.1%) and 18 customers (13.3%) respectively. There are six online users buying food online within 6 months (4.4%). The highest participant numbers are students which indicated 66 customers (48.9%) with zero children of 72 (53.3%). Meanwhile, students represent 48.9% from total customer's profession and majority (75%) lives in urban areas with more than 20,000 residents. Further, most respondents buying fast food

using online shop such as McDelivery, PizzaHut, etc (48.1%), general online platforms such as fb, ig, etc (20%) and food panda (13.3%).

<b>Covid-19 Information Background</b>	<b>No. of respondents N=135</b>	<b>Percentage (%)</b>
Knowing a person who is or was infected with Covid-19		
Yes	68	50.4
No	67	49.6
Working from home		
Yes	92	68.3
No	43	31.9
Voluntarily wearing a face mask		
Yes	133	98.5
No	2	1.5
Quarantining		
Yes	58	43
No	77	57
Reading news on Covid-19		
Yes	111	82.2
No	24	17.8

Referring to information on Covid-19, as many as 50.4% knew a person had been infected with the SARS-CoV-2 virus. While 68% were not infected with the epidemic because they were outside the epidemic area and 43% were quarantined. In summary, as many as 82% know and read about Covid-19 news at least once a day.

### **Reliability and Validity Constructs**

The first step before proceeding with the analytical study, a reliability analysis was performed referring to Table 4. Moreover, the validity of discrimination is the most important test to ensure that the measurement model is of sufficient value. the validity of this discrimination will measure the extent to which individual items can measure one latent construct and not measure different latent constructs at the same time.

<b>Construct</b>	<b>Items</b>	<b>Cronbach's Alpha (n=135)</b>	<b>SD</b>	<b>BI</b>	<b>PU</b>	<b>PEOU</b>	<b>NM</b>	<b>HM</b>
Behavioural Intention (BI)	3	.92	1.06	1				
Perceived Usefulness (PU)	4	.89	.90	.76	1			
Perceived Ease of Use (PEOU)	4	.93	.86	.58	.81	1		
Normative Motives (NM)	6	.94	.90	.81	.78	.73	1	
Hedonic Motivation (HM)	3	.91	.94	.74	.78	.75	.86	1

### **Hypotheses Testing**

Table 5 displays the results of the multiple regression analysed to measure the strength of the proposed relationship. There were four hypotheses and all variables were retained after testing the reliability. This individual hypothesis was tested referring to the view set by Hair et al., (2016) using a multiple regression prediction model, i.e. with the behavioural intention as the dependent variable. the results of the analysis found that H1 – H3 have significance in the prediction model. The results supported hypotheses H1-H3, indicated that the relationship between perceived usefulness ( $\beta=0.588$  and  $p=0.00^{**}$ ), perceived ease of use ( $\beta=0.397$  and  $p=0.00^{**}$ ), and normative motives ( $\beta=0.656$  and  $p=0.00^{**}$ ) on online food behavioural intention. While H4 was not significant in the prediction model of hedonic motivation towards online food behavioural intention ( $\beta=0.136$  and  $p=0.22$ ).

Constructs	$\beta$	t-value	p-value
Constant	.012	.05	.91
H1: Perceived usefulness	.588	5.53	.00 <sup>**</sup>
H2: Perceived ease of use	.397	3.90	.00 <sup>**</sup>
H3: Normative motives	.656	5.94	.00 <sup>**</sup>
H4: Hedonic motivation	.136	1.24	.22
Notes: Significance at <sup>**</sup> $p < 0.001$ ; $R^2 = 0.731$ ; adjusted $R^2 = 0.723$ ; dependent variable: Behavioural intention			

## DISCUSSION

The result of this study is to achieve the main objective of studying the determinants of the motive for shopping to buy food online on a person's behaviour during the Covid-19 pandemic season in Malaysia. The combination of using the two theories of TPB and TAM explains that 73.1 percent of the variation on a person's behavioural intentions will buy food online. The combination of these models is statistically significant and the durability of the model may explain the motives of online shopping. It has been found, the results of other studies have also successfully used TPB alone as a theoretical framework to study about behavioural intentions when buying online (Sussman & Gifford, 2019).

This study proved that perceived usefulness positively affects online food behavioural intention, there are similarities in the results of their previous studies in related fields (Koch et al., 2020). The Covid-19 pandemic caused restaurants or shops to close and limited the opportunity to go out and buy on their own. They are also not sure about the closing period of the store will be closed for a long time, and with this consumer will be directed to deal with online food purchase transactions. in addition, buying food online can reduce the susceptibility of the virus because this activity does not cause contact with others. In addition, shopping online reduces the risk of infection, as an activity that does not involve direct contact with others. Therefore, the perceived usefulness of online shopping is an important factor during the epidemic and the online seller must take into account the needs of users in designing the online food system.

Consistent to the study of Hamid et al., (2016), this research found that perceived ease of use was significantly and positively related to behavioural intentions. A user-friendly website or food online shop leads to greater behavioural intention due to perceived ease of use of online food shops may allow the customer to obtain required information about their purchase. Thus, that leads to a positive attitude and increased behavioural intentions such as the intention to recommend online food stores and buy back from the same restaurant. For that reason, perceived ease of use can be important for developing online sites for shopping.

Additionally, this study highlighted the importance of normative motives and behavioural intentions. The positive relationship portrays high impact of control in explaining



variability in behaviour. This implies that Malaysian online consumers take into account the opinions of other important factors in their evaluation of online food purchase, which means there is a strong collectivist culture that emphasizes interpersonal relationships (Nguyen et al., 2021)

However, hedonic motivation is not a critical predictor on behavioural intention in this study. The findings of this study explain that opportunities are very limited to engage in outdoor activities such as leisure during the confinement period. Thus, consumers use online media to make food purchases for the purpose of fun and online shopping does not interfere with their leisure activities. Fiore et al., (2005) support the positive relationship between online shopping and motivational variables such as arousal and pleasure. The increased importance of hedonic motives to consumers staying at home during the Covid-19 outbreak hit, providing opportunities and space to enjoy leisure time at home as restaurants had to be closed during this period.

### **Implication of the Findings**

Based on the results, this study confirmed perceived usefulness, perceived ease of use and hedonic motivation drivers are positively related to consumers' online behavioural intention during the Covid-19 pandemic. The implication of findings could be elaborate on few angles. Firstly, the companies should change their business models to adapt with online purchase behaviour based on the identified determinants to ensure sustainable business in the long run. Second, to successfully meet customer needs in the future, companies need to make expectations about changes in customer behaviour. Third, throughout this crisis, companies have greatly improved and redeveloped their e-commerce strategies more rapidly. This acts to ensure that the e-commerce can maintain its popularity throughout the closure of the store even after the reopening of the store, the company has learned in detail about the motivation of their customers.

Furthermore, TPB and TAM appeared to effectively predict online food shopping to behavioural intention among consumers during Covid-19 pandemic in Malaysia. It was to encourage purchasing online food shopping from a behavioural perspective, companies, online seller and restaurant owners may be able to focus on social expectations about how to place orders online more easily and may improve consumers' sense of their ability when buying food online. These findings suggest that businesses should optimize the use of social media in disseminating transparent information about the current economic situation. This drives customers' intentions to buy online and continue to share the message on social media platforms like Facebook and Instagram. For example, traditional stores typically use communication channels to inform their customers about their very difficult economic situation. This should be known by their customers to continue buying online even if the store is closed. Companies need to introduce redeemable voucher and online purchasing methods and use online sales methods even though they are still less sophisticated.

Furthermore, the results of this study also show that their customers need to be introduced more quickly in accordance with their demands and effectively on the improvement of the company's online store system. For example, a company can provide an advisory space to customers by providing a live online buying experience. A digital dressing room method can provide entertainment to users where users can upload their own photos or create avatars to try out the product up closed.

Lastly, the study contributes to the scientific discourse regarding the relative importance of perceived usefulness, perceived ease of use and normative motives in the context of e-commerce. Throughout the outbreak, the food service industry has declined. However, the results of this study show that there are still opportunities for companies to increase online food purchases in these difficult times. With the advent of strategic online presence and compelling

motives when shopping for consumers. Hence these food service companies can increase the sales of declining companies.

### Directions of Future Research

This study focusing on wide consumers range whose regularly purchase products online thus become a limitation that could be address in future research. The respondents slightly underrepresent females and age below 30 years. Further research should expand the sample by considering more samples among the generations Y and Z population to enhance the study. Furthermore, this study explores the impact of the initial restrictions implemented due to the Covid-19 pandemic. Researchers should investigate whether this global crisis could change consumer behaviour in the future in improving understanding of this theory. Additionally, modification and combination of TPB and TAM may help to maximize their predictive efficacy. Analysis of other online servicing sectors like purchasing groceries online, trending products and perceptions should be explored. Also, this study considered only four determinants of online food shopping motives among online consumers in Malaysia. Other researchers may investigate other aspects of motivation as well as develop new measurement items with more rigorous analysis

### ACKNOWLEDGEMENT

This study was funded by a research grant under the Internal University Teja Grant Scheme GDT2021/1-23, Faculty of Business and Management, Universiti Teknologi Mara, Melaka Branch, Malaysia.

### REFERENCES

- Ali, M.R., Shafiq, M., & Andejany, M. (2021). Determinants of consumers' intentions towards the purchase of energy efficient appliances in pakistan: An extended model of the theory of planned behavior. *Sustainability (Switzerland)*, 13(2), 1–17.
- Aw, E.C.X., Kamal Basha, N., Ng,S.I., & Ho, J.A. (2021). Searching online and buying offline: Understanding the role of channel-, consumer-, and product-related factors in determining webrooming intention. *Journal of Retailing and Consumer Services*, 58(September 2020), 102328.
- Bagozzi, R. (1994). P. of marketing research. B. B. (1994). *Principles of marketing research*. Blackwell Business.
- Bhatti, A., Ur Rehman, S., Kamal, A.Z., & Akram, H. (2020). Factors effecting online shopping behaviour with trust as moderation. *Jurnal Pengurusan*, 60, 1–15.
- Chai, L.T., & Yat, D.N.C. (2019). Online Food Delivery Services: Making Food Delivery the New Normal. *Journal of Marketing Advances and Practitioners*, 1, 62–77.
- Chryssohoidis, G.M., & Krystallis, A. (2005). Organic consumers' personal values re-search: Testing and validating the list of values (LOV) scale and implementing a value-based segmentation task. *Food Quality Prefering*, 16(7), 585–599.
- Devaraj, S., Fan, M., & Kohli, R. (2002). Antecedents of B2C Channel Satisfaction and Preference: Validating e-Commerce Metrics. *Information Systems Research*, 13, 316–333.
- Fiore, A.M., Jin, H.J., & Kim, J. (2005). *For fun and profit: Hedonic value from image interactivity and responses toward an online store*. 22, 669–694.
- Fraj, E., & Martinez, E. (2006). Environmental values and lifestyles as determining factors of ecological consumer behaviour: An empirical analysis. *Journal of Consumer Market*, 23(3), 133–144.
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2016). *Multivariate Data Analysis* (7th edition). Pearson: New Delhi.
- Hamid, A.A., Razak, F.Z.A., Bakar, A.A., & Abdullah, W.S.W. (2016). The effects of perceived usefulness and perceived ease of use on continuance intention to use e-government. *Procedia Economics and Finance*, 35(October 2015), 644–649.
- Harland, P., Staats, H., & Wilke, H.A.M. (1999). Explaining proenvironmental intention and behavior by personal norms and the theory of planned behavior. *Journal of Applied Social Psychology*, 29(12), 2505–2528.
- Hicintuka. (2020). Covid-19 : How does it affect international e-commerce firms ? *International Business*, 4(8), 67–89.

- Jung, H.J., Oh, K.W., & Kim, H.M. (2021). Country differences in determinants of behavioral intention towards sustainable apparel products. *Sustainability (Switzerland)*, 13(2), 1–23.
- Kapoor, A.P., & Vij, M.J. (2018). Technology at the dinner table: Ordering food online through mobile apps. *Journal of Retailing and Consumer Services*, 43, 342–351.
- Kaur, P., Dhir, A., Talwar, S., & Ghuman, K. (2020). The value proposition of food delivery apps from the perspective of theory of consumption value. *International Journal of Contemporary Hospitality Management*, 33(4), 1129–1159.
- Kim, H., & Kwahk, K. (2007). Comparing the usage behavior and the continuance intention of mobile internet services. *Eighth World Congress on the Management of EBusiness (WCMeB)*, 15.
- Koch, J., Frommeyer, B., & Schewe, G. (2020). Online shopping motives during the COVID-19 pandemic—lessons from the crisis. *Sustainability (Switzerland)*, 12(24), 1–20.
- Madden, T.J., Ellen, P.S., & Ajzen, I. (1992). A comparison of the theory of planned behavior and the theory of reasoned action. *Pers. Soc. Psychol. Bull.*, 18.
- Navavongsathian, A., Vongchavalitkul, A., & Limsarun, T. (2020). Causal factors affecting mobile banking services acceptance by customers in Thailand. *Journal of Asian Finance, Economics and Business*, 7(11), 421–428.
- Nguyen, H.V., Nguyen, N., Nguyen, B.K., & Greenland, S. (2021). Sustainable food consumption: Investigating organic meat purchase intention by vietnamese consumers. *Sustainability (Switzerland)*, 13(2), 1–15.
- Pinto, D.C., Nique, W.M., Añaña, Ed.S., & Herter, M.M. (2011). Green consumer values: howdo personal values influence environmentally responsible water consumption? *International Journal of Consumer Studies*, 35(2), 122–131.
- Prasetyo, Y.T., Tanto, H., Mariyanto, M., Hanjaya, C., Young, M.N., Persada, S.F., ... & Redi, A.A.N.P. (2021). Factors affecting customer satisfaction and loyalty in online food delivery service during the COVID-19 pandemic: Its relation with open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 1–17.
- Pulevska-Ivanovska, L., & Karadakoska, E. (2020). Impact of e-marketing on consumer behavior. *Ekonomski Pogledi*, 17(4), 67–81.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Suhartanto, D., Dean, D.L., Leo, G., & Triyuni, N.N. (2019). Millennial experience with online food home delivery: A lesson from Indonesia. *International Journal of Information Knowledge Management*, 14, 277–294.
- Sussman, R., & Gifford, R. (2019). Causality in the Theory of Planned Behavior. *Personality and Social Psychology Bulletin*, 45(6), 920–933.
- Taufik, N., & Hanafiah, M.H. (2019). Airport passengers' adoption behaviour towards self-check-in Kiosk Services: the roles of perceived ease of use, perceived usefulness and need for human interaction. *Heliyon*, 5(12).
- Uyanik, G.K., & Güler, N. (2013). A Study on Multiple Linear Regression Analysis. *In Procedia - Social and Behavioral Sciences*, 106, 234–240.
- Venkatesh, V., Thong, J.Y.L., & Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Q.*, 36, 157–178.
- Vinish, P., Pinto, P., Hawaldar, I.T., & Pinto, S. (2021). Antecedents of behavioral intention to use online food delivery services: An empirical investigation. *Innovative Marketing*, 17(1), 1–15.
- Wall, R., Devine-Wright, P., & Mill, G.A. (2008). Interactions between perceived behavioral control and personal-normative motives: Qualitative and quantitative evidence from a study of commuting-mode choice. *Journal of Mixed Methods Research*, 2(1), 63–86.
- Yeo, V.C.S., Goh, S.K., & Rezaei, S. (2017). Consumer experiences, attitude and behavioral intention toward online food delivery (OFD) services. *Journal OfRetailing and Consumer Services*, 35.