




# “Determinants of sustainable consumption: Moderating role of pandemic fear”

## AUTHORS

Evi Susanti   
Layla Hana Marisa  
Endri Endri   


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Endri Endri, 2022

Evi Susanti, Associate Professor, Ph.D.,  
Management Department, STIE Jakarta  
International College, Indonesia.

Layla Hana Marisa, Bachelor Student,  
Management Department, STIE Jakarta  
International College, Indonesia.

Endri Endri, Associate Professor,  
Ph.D., Faculty of Economics and  
Business, Department of Management,  
University of Mercu Buana, Indonesia.  
(Corresponding author)



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Evi Susanti (Indonesia), Layla Hana Marisa (Indonesia), Endri Endri (Indonesia)

# DETERMINANTS OF SUSTAINABLE CONSUMPTION: MODERATING ROLE OF PANDEMIC FEAR

## Abstract

The Covid-19 pandemic has caused consumers to fear and feel anxious about doing activities outside their homes, such as shopping. Thus, they switched to e-commerce for sustainable consumption. This study focuses on sustainable consumption represented with the variables of perceived effectiveness of e-commerce platform (PEEP), economic benefits, interactivity, and pandemic fear. This study uses the Uses and Gratification Theory (UGT) to determine consumer motivation and purchase intentions. It explores the relationship between PEEP, economic benefits, interactivity, and sustainable consumption, with pandemic fear as a moderating variable. The analysis was conducted from February to July 2021, with e-commerce being the object of study. The study uses purposive sampling based on the criteria of respondents who have made a transaction at least once in one of the marketplaces in Jakarta, Indonesia. An online survey was employed to test 95 respondents consisting of Millennials and Generation Z who are active e-commerce users in Indonesia. The moderated regression analysis (MRA) or interaction test was applied to analyze the data. The results of the study found that pandemic fear can moderate PEEP's relationship with economic benefits and interactivity that can increase sustainable consumption. The research findings also prove that relying on interactivity in the buying process encourages them to use e-commerce. E-commerce can help consumers who are limited in making transactions due to fear of spreading the Covid-19 virus to fulfill sustainable consumption.

## Keywords

economic benefits, interactivity, perceived effectiveness of e-commerce platform, Uses and Gratification theory, Covid-19

## JEL Classification

M15, M31, O32

## INTRODUCTION

In late December 2019, WHO first identified a new virus, Covid-19, originating from Wuhan, China (Ornell et al., 2020). This disease can spread through tiny droplets from the mouth or nose when a person with Covid-19 coughs or exhales. To reduce the transmission of the virus, governments are implementing the 5M movements, namely wearing masks, washing hands, maintaining distance, staying away from crowds, and reducing mobility. Physical distancing policies are also carried out in various sectors (Newbold et al., 2020), and several access roads were closed for a certain period (Koh et al., 2020). This increases a person's fears and anxieties (Mertens et al., 2020), such as fear of contagion, stress, self-isolation, uncertainty, and economic hardship (Sher, 2020).

E-commerce is one of the consumers' choices in online commerce to fulfill needs (Indrasari et al., 2022). The fear and anxiety of the Covid-19 pandemic have caused a shift in public shopping media toward online shopping, whereas consumers previously carried out

mainly offline transactions (Davis et al., 2017). Online shopping is more efficient and effective and can maintain personal safety and reduce the virus's transmission risk (Tran, 2021). In addition, interactivity between sellers and buyers, with its dimensions of two-way communication, control, and synchrony, is an essential factor in increasing the relationship of trust, satisfaction, and sustainable consumption (Bao et al., 2016; Dabbous & Tarhini, 2019; Wu, 2019; Sultan et al., 2020; Pahala et al., 2021).

Consumers rely on interactivity to make purchasing and repurchase decisions associated with sustainable consumption during a pandemic (Tran, 2021). This study uses the UGT theory to explain why and how consumers are motivated to use e-commerce to meet their needs (Aydin, 2019; Cai & Wohn, 2019; Pang, 2016; Wu et al., 2016; Endri et al., 2020). Security factors, economic benefits, and interactivity are thought to be the primary triggers in using e-commerce to meet consumer needs (Mansur et al., 2019). This is supported by Wang and Zhang (2021), who showed an increase in the intensity of the use of e-commerce in conducting transactions during the pandemic. This can increase the country's economic growth, profitability, and sustainable consumption (Oláh et al., 2019; Anvari & Norouzi, 2016; Nurhayati et al., 2021).

Previous research has found the role of pandemic fear as a moderating variable in the relationship between the perceived effectiveness of e-commerce platforms (PEEP) and economic benefits (Oláh et al., 2018; Tran, 2021), economic benefits and sustainable consumption (Dabbous & Tarhini, 2019; Oláh et al., 2018; Tran, 2021), PEEP and interactivity (Dabbous & Tarhini, 2019; Purwanto & Kuswandi, 2017; Wu, 2019; Yang & Lee, 2017), and interactivity and sustainable consumption (Guillen-Royo, 2019). This paper is a follow-up study from Tran (2021), who used pandemic fear as a moderating variable on the relationship between PEEP, economic benefits, and sustainable consumption. Still, in this study, the interactivity variable is believed to influence PEEP and sustainability consumption, with pandemic fear as a moderator variable. In addition, the UGT theory is employed, although this theory is still rarely studied.

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## 1. LITERATURE REVIEW AND HYPOTHESES

### 1.1. Uses and gratification (UGR) theory

Uses and gratification theory (UGT) is a consumer's perception of the motivation to use e-commerce services to meet their needs (Aydin, 2019; Cai & Wohn, 2019). UGT is widely used to explore various media to understand better consumer motivation in using media (Camilleri & Falzon, 2021; Simanjuntak et al., 2022). Underlying UGT is that consumers are aware of their needs and are free to make their own media choices. If the media can meet expectations regarding their needs, consumers will use it repeatedly (Li et al., 2018; Najib et al., 2021). UGT discusses consumer patterns and motivations in seeking information, interacting with content and communities, and maintaining purchase decisions for specific situations (Korhan & Ersoy, 2016; Whiting & Williams, 2013). The case in question is the Covid-19 pandemic; this condition

can increase consumer buying interest in e-commerce platforms by considering the safety and health of individuals to make relevant purchasing decisions (Tran, 2021; Indrasari et al., 2022).

### 1.2. Perceived effectiveness of e-commerce platform, economic benefits, and pandemic fear

Ease and convenience are the fundamental reasons for shopping in e-commerce (Anisah & Suhendra, 2018). The security factor is also an essential thing in transacting online. The e-commerce platform has a security mechanism to protect online transactions from potential risks during regular pandemics (Tran, 2021). Based on Chen et al. (2015), PEEP's purpose is to help consumers avoid potential risks or negative experiences in online transactions. If consumers lack confidence in PEEP to protect their transactions, they need additional transactions to increase their trust (Fang et al., 2014).

E-commerce also provides various benefits for consumers and sellers (Setiawati et al., 2022). E-commerce emphasizes cost and time, and e-commerce companies provide economic incentives by offering discounts to consumers to increase market share and customer base (Oláh et al., 2018). For sellers, e-commerce can reduce operational costs because they do not need ample physical space to display their products and do not need to buy expensive land.

The Covid-19 pandemic triggers fear and concern in the community (Giordani et al., 2020; Nurhayati et al., 2022), causing a panic situation that makes stock unavailability in stores (Naeem, 2021). Tran (2021) explained that pandemic fear could increase economic benefits and motivate consumers to carry out transaction activities through e-commerce that requires trust and risk protection.

### 1.3. Economic benefits, sustainable consumption, and pandemic fear

Dabbous and Tarhini (2019) explained the effect of economic benefits on sustainable consumption. Namely, economic benefits have an impact on sustainable consumption. Economic benefits are consumer perceptions that e-commerce platforms offer promotions, discounts, and other preferential activities (Liu et al., 2020). Shopping through e-commerce platforms emphasizes costs and increases access to a green environment (Guillen-Royo, 2019). Reducing costs is critical in increasing sustainable consumption. This can trigger marketing stimuli that the economy offers lower than traditional transactions.

From the UGT perspective, consumers often respond to the benefits they receive through feelings of pride (Simon, 2017). However, the pandemic has increased consumer fears, leading to anxiety affecting technologies such as e-commerce (Al-Marroof et al., 2020). Tran (2021) explained that economic benefits could affect sustainable consumption to reduce Covid-19 when pandemic fear increases.

### 1.4. Perceived effectiveness of e-commerce platform, interactivity, and pandemic fear

PEEP is a customer perception that there is a secure online transaction in the e-commerce envi-

ronment that protects customers from potential risks (Fang et al., 2014). In a risky e-commerce environment, consumers rely more on communication and feedback to gather information to reduce transaction risks (Bao et al., 2016). Customers rely heavily on the information provided during interactivity, which is seen as an additional means of guaranteeing security (Fang et al., 2014). Through interactivity, buyers can build social bonds with sellers. When PEEP protects an e-commerce platform, consumers will communicate more with sellers to get more information because they feel that PEEP will reduce the risk of being involved in a communication relationship between buyers and sellers (Dong & Wang, 2018). Interactivity refers to the involvement between buyers and sellers to obtain adequate information in making purchasing decisions (Chong et al., 2018).

Interactivity can turn visits into purchases and is a significant concern in repurchase decisions. PEEP plays a vital role in online marketing, such as eliminating consumer perceptions of risks related to online transactions and system uncertainty (Bao et al., 2016). If PEEP can guarantee the e-commerce environment, consumers realize that their transactions are protected and are not too worried about potential financial losses because they think the media platform is reliable. However, suppose PEEP does not guarantee e-commerce security. In that case, consumers rely more on interactivity to communicate with sellers and obtain information, which is an additional guarantee to increase trust in transactions (Bao et al., 2016). Covid-19 causes a common reaction which is fear. Fear affects the use of technologies (Al-Marroof et al., 2020; Mulyana et al., 2022).

### 1.5. Interactivity and pandemic fear

Interactivity in e-commerce platforms is how consumers can communicate, seek helpful information, and make transactions through the platform (Parasuraman et al., 1985). Hussain et al. (2021) state that interactivity can affect relational contracts. A relational contract is an unwritten expectation between e-commerce and consumers to enhance sustainable consumer relationships. This can be related to sustainable consumption because when e-commerce can meet the long-term needs of its consumers, it will build profitable relation-

ship with consumers and obtain the ultimate goal of purchase and repurchase intentions.

If the level of interactivity is high, customers can find the perceived benefits of e-commerce and become more involved in online transactions, ultimately increasing online shopping intentions. Interactivity can also enhance the shopping experience of consumers and sellers, adding a competitive advantage and creating a loyal customer base (Islam et al., 2021; Addo et al., 2020). The higher the level of consumer interaction with the e-commerce platform, the more it is possible to increase sustainable consumption during the pandemic.

### 1.6. Aim and hypotheses

Based on the literature review and the conceptual framework shown in Figure 1, the paper focuses on sustainable consumption during Covid-19, which is associated with the PEEP, economic benefits, interactivity, and pandemic fear variables. Therefore, this study aims to empirically examine the relationship between PEEP, economic benefits, interactivity, and sustainable consumption with pandemic fear as a moderating variable. To prove empirically, the research hypotheses were formulated as follows:

*H1a: PEEP affects economic benefits.*

*H1b: Pandemic fear moderates the relationship between PEEP and economic benefits.*

*H2a: Economic benefits affect sustainable consumption.*

*H2b: Pandemic fear moderates the relationship between economic benefits and sustainable consumption.*

*H3a: PEEP affects interactivity.*

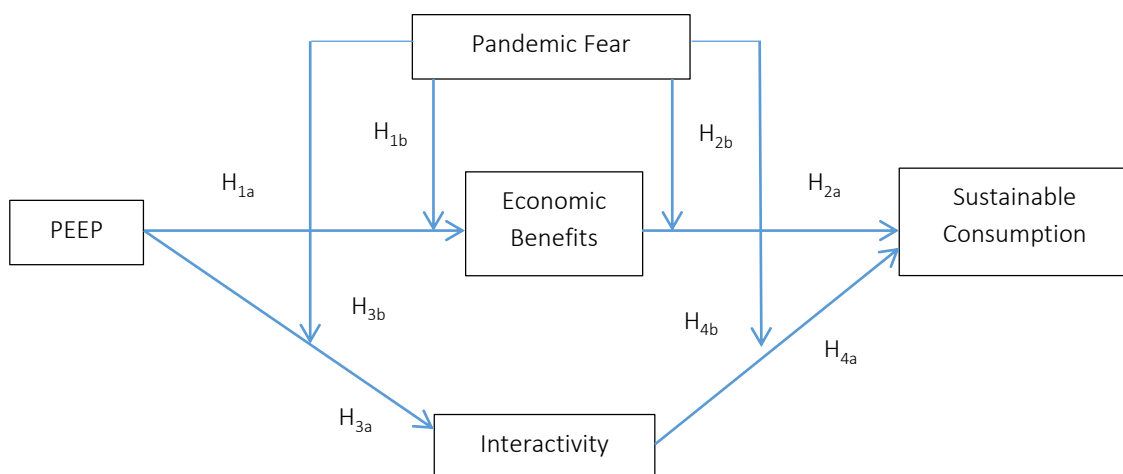
*H3b: Pandemic fear does not moderate the relationship between PEEP and interactivity.*

*H4a: Interactivity affects sustainable consumption.*

*H4b: Pandemic fear moderates the relationship between interactivity and sustainable consumption.*

## 2. METHODOLOGY

The population in this study are e-commerce platform users, precisely marketplace users in Indonesia located in the Jakarta area with a focus on Millennials and Generation Z. According to data from the Central Statistics Agency (Lestari, 2019), Indonesia's largest population, dominated by these generations, is 53.77%. These generations tend to understand more about using e-commerce by taking advantage of attractive promos. It can also be said that they tend to feel the economic benefits (Olivero & Lunt 2004). Therefore, companies can provide intensive offers to consumers, such as bonuses, discounts, cashback, and coupons (Escursell et al., 2021). The paper uses purposive sampling, targeting respondents who have made a transaction at least once in one of the marketplaces in Jakarta, Indonesia, with a total sample of 95 respondents. The data needed are obtained from online surveys.



**Figure 1.** Conceptual framework

The measurements of the PEEP variable (4 indicators), economic benefit (3 indicators), pandemic fear (3 indicators), and sustainability consumption (3 indicators) were adopted from Tran (2021), while the interactivity variable (3 indicators) was adopted from Ou et al. (2014). Table 1 shows the definitions and indicators of the variables. Moderated regression analysis (MRA) or interaction test is used to test pandemic fear as a moderating variable.

This research instrument has met the criteria. The instrument studied used a validity test where the value of  $r\text{-count} > r\text{-table}$  or 0.361 was distributed to 30 respondents. Furthermore, the reliability test was carried out with a minimum Cronbach's alpha of 0.60.

### 3. RESULTS

Table 2 shows that women aged 18-24 often shop on e-commerce platforms, where an income of 0-IDR 5,000,000 per month does not prevent

them from continuing to shop online during this pandemic. Table 3 shows the results of hypothesis testing. Thus, all hypotheses are supported.

**Table 2.** Respondents' demographics

Source: SPSS 26 data processing.

Demographic	Category	Frequency (n = 95)	Percentage %
Gender	Male	31	32.6%
	Female	64	67.4%
Age	9-17	2	2.1%
	18-24	70	73.7%
	25-30	19	20%
	31-40	4	4.2%
Status	Married	80	84.2%
	Single/Divorced	15	15.8%
Occupation	Student	47	49.5%
	Employee	39	41.05%
	Entrepreneur	5	5.24%
	Unemployed	4	4.21%
Income (million)	0-5	76	80%
	5-10	19	20%

**Table 1.** Operational definitions

Variable	Definition	Indicator
PEEP (Perceived Effectiveness Of E-commerce Platform) (Tran, 2021)	PEEP is security owned by e-commerce platforms to protect consumers from potential risks associated with online transactions during regular and pandemic times.	Suppose an error occurs in the online purchase. I believe that the e-commerce platform can protect me from potential risks. If something goes wrong with my online purchase, I trust the third party that the e-commerce platform uses to protect me from potential losses. I believe that the e-commerce platform is not taking advantage of me due to online purchases. If an error occurs in an online purchase, I believe that the other party used by the e-commerce platform should protect me from potential risks.
Economic Benefits (Tran, 2021)	Economic benefits are defined as benefits perceived by consumers, such as cost savings and discounts on purchases from e-commerce during a pandemic.	I saved money when buying on an e-commerce platform during the Covid-19 pandemic. I can improve my economic situation by buying from e-commerce platforms during the Covid-19 pandemic. Buying on e-commerce platforms is cheaper than direct purchases (offline) during the Covid-19 pandemic.
Interactivity (Ou et al., 2014)	Interactivity is a high level of involvement and communication between buyers and sellers.	Active control measures the level of dynamic control that customers and sellers have to communicate. Synchronicity represents the degree to which communication is synchronized. Two-way communication is the extent to which communication is mutually beneficial.
Sustainable Consumption (Tran, 2021)	Sustainable consumption is buying products or services on e-commerce platforms to meet consumer needs and desires and improve the safety and health of oneself and the community during a pandemic.	I will try to buy from e-commerce platforms during the Covid-19 pandemic I will use e-commerce platforms more often during the Covid-19 pandemic. I intend to use e-commerce platforms to meet my needs during the Covid-19 pandemic.
Pandemic Fear (Tran, 2021)	Pandemic fear is a fear of consumer contagion and a belief that affects the way consumers use e-commerce platforms to buy products during a pandemic.	I feel anxious about the Covid-19 pandemic. I am horrified by the Covid-19 pandemic. I am afraid to face the Covid-19 pandemic.

**Table 3.** Summary of research results

Source: SPSS 26 data processing.

Variables	Simple Linear Regression Test	Moderated Regression Analysis (MRA)	Coefficient of Determination Test (R <sup>2</sup> )	F-Test F <sub>abel</sub> 2,47	T-Test T <sub>able</sub> 1,98667	Result
	Sig < 0.05					
PEEP affects economic benefits (H1a)	0.000	–	20.2%	–	4.976	Supported
Pandemic fear mediates the relationship between PEEP and economic benefits (H1b)	–	0.042	31.4%	15.340	2.068	Supported
Economic benefits affect sustainable consumption (H2a)	0.000	–	13.4%	–	3.945	Supported
Pandemic fear mediates the relationship between economic benefits and sustainable consumption (H2b)	–	0.030	32.5%	16.053	2.200	Supported
PEEP affects interactivity (H3a)	0.005	–	7.1%	–	2.855	Supported
Pandemic fear mediates the relationship between PEEP and interactivity (H3b)	–	0.001	31.5%	15.396	3.449	Supported
Interactivity affects sustainable consumption (H4a)	0.003	–	7.9%	–	3.007	Supported
Pandemic fear mediates the relationship between interactivity and sustainable consumption (H4b)	–	0.049	29.9%	14.369	2.000	Supported

## 4. DISCUSSION

This study found that pandemic fear moderates the relationship between PEEP, interactivity, and economic benefits on sustainability consumption, which means that the fear of the Covid-19 spread causes consumer freedom to be limited so that consumers spend more time and money on e-commerce platforms (Fang et al., 2014; Tran, 2021). Consumers will not hesitate or worry because the security of privacy and transactions provided by e-commerce is guaranteed. Transaction security provided in personal and material data security can enhance consumer confidence in e-commerce. Moreover, the transaction activities carried out online can help consumers avoid and reduce potential risks.

Consumers need security in online shopping because it can protect them from various risks that may occur due to their transactions, such as fraud and product non-conformance. The protection provided can create a positive engagement relationship between sellers and buyers as well as for the e-commerce party itself. In addition, parties who use with e-commerce also secure all types of consumer transactions from errors in online purchases. E-commerce will not use consumers for their company's needs and make mistakes because they are bound by applicable law. With consumer trust in e-commerce, they will

have positive interactions such as communicating through the chat feature provided by e-commerce. Consumers are very dependent on the information supplied by the seller as long as the interactivity goes well, the seller's response is fast, and the information provided is accurate and clear (Hussain et al., 2021; Islam et al., 2021).

Bao et al. (2016) stated that if e-commerce guaranteed the security of consumer transactions, consumers are not too worried about their trades and would only rely a little on interactivity. However, in this study, consumers still rely on interactivity in the buying process in e-commerce, which is supported by Chong et al. (2018) and Wu et al. (2010). They state that the perception of security in online purchases is essential in establishing a positive interaction relationship between sellers and buyers. According to UGT theory, the economic benefits that consumers can feel are the motivation or encouragement of consumers to use e-commerce media to meet their needs and desires during the pandemic. Sellers provide various offers such as discounts, cashback, and free shipping, increasing consumer motivation to be more interested in shopping online. The shopping experience can help consumers save time and costs, who will continue to use e-commerce platforms to carry out all the transactions they need in the long term (Guillen-Royo, 2019).

## CONCLUSION

Pandemic fear can increase economic benefits and motivate consumers to carry out transaction activities through e-commerce that require trust and risk protection. Covid-19 has created a wave of fear worldwide, so consumers need the information to control fear and risk, which leads to a high level of interactivity when shopping on e-commerce platforms. This study concludes that pandemic fear can moderate PEEP's relationship to economic benefits and interactivity, increasing sustainable consumption. The e-commerce platform must provide several essential features, such as social interaction and content, and facilitate real-time communication. It is intended to build successful relationships in the decision-making process. The Covid-19 pandemic examines the extent to which people continue to shop during the pandemic with new shopping patterns. This study emphasizes the UGT theory and the pandemic fear approach as a feeling of being afraid to leave the house during the pandemic, resulting in uncertain conditions and reducing the company's income. This paper broadens the understanding of pandemic fear explicitly. It contributes to the sustainable consumption of Generation Z consumers during the pandemic.

The practical implications offer strategies that companies can implement where changes in consumer spending patterns are due to the Covid-19 pandemic. With this increasingly competitive business environment and the number of companies that cannot maintain their business, companies need to change business patterns toward online business because conditions force them to adopt a new strategy. In addition, companies need to pay attention to the safety and convenience of shopping so that consumers feel and interact with both companies and other consumers. This study suggests that although the pandemic creates an atmosphere of fear of leaving the house, online shopping system makes it easier for people to fulfill their daily needs.

This study develops Tran's (2021) findings by adding an interactivity variable. The paper considers the interactive urgency between sellers and buyers during the Covid-19 pandemic, giving consumers the confidence to shop. This study used a limited number of respondents and was carried out during the Covid-19 pandemic; for this reason, the pandemic fear variable was deemed appropriate because consumers were afraid to shop outside the house. However, the variables studied are suitable at a particular time; further research can examine other variables adjusted to certain conditions.

## AUTHOR CONTRIBUTIONS

Conceptualization: Evi Susanti, Layla Hana Marisa.  
 Data curation: Layla Hana Marisa.  
 Formal analysis: Evi Susanti, Endri Endri.  
 Funding acquisition: Layla Hana Marisa.  
 Investigation: Evi Susanti, Endri Endri.  
 Methodology: Evi Susanti, Layla Hana Marisa, Endri Endri.  
 Project administration: Layla Hana Marisa.  
 Resources: Evi Susanti.  
 Software: Layla Hana Marisa.  
 Supervision: Endri Endri.  
 Validation: Evi Susanti, Layla Hana Marisa, Endri Endri.  
 Visualization: Evi Susanti, Layla Hana Marisa.  
 Writing – original draft: Evi Susanti, Layla Hana Marisa.  
 Writing – review & editing: Endri Endri.



## REFERENCES

1. Addo, P. C., Jiaming, F., Kulbo, N. B., & Liangqiang, L. (2020). COVID-19: fear appeal favoring purchase behavior towards personal protective equipment. *Service Industries Journal*, 40(7-8), 471-490. <https://doi.org/10.1080/02642069.2020.1751823>
2. Al-Marouf, R. S., Salloum, S. A., Hassani, A. E., & Shaalan, K. (2020). Fear from COVID-19 and technology adoption: the impact of Google Meet during Coronavirus pandemic. *Interactive Learning Environments*. <https://doi.org/10.1080/10494820.2020.1830121>
3. Anisah, R. R., & Suhendra, A. A. (2018). Role of Trust, Customer Satisfaction, and Perceived Effectiveness of E-Commerce Institutional Mechanism to Repurchase Intention: Systematic Literature Review. *Journal of Physics: Conference Series*, 1060, 012041. <https://doi.org/10.1088/1742-6596/1060/1/012041>
4. Anvari, R. D., & Norouzi, D. (2016). The Impact of E-commerce and R&D on Economic Development in Some Selected Countries. *Procedia – Social and Behavioral Sciences*, 229, 354-362. <https://doi.org/10.1016/j.sbspro.2016.07.146>
5. Aydin, G. (2019). Examining social commerce intentions through the uses and gratifications theory. *International Journal of E-Business Research*, 15(2), 44-70. <https://doi.org/10.4018/IJEBR.2019040103>
6. Bao, H., Li, B., Shen, J., & Hou, F. (2016). Industrial Management & Data Systems Article information : Repurchase Intention in Chinese E-marketplace : Roles of Interactivity, Trust and Perceived Effectiveness of E-commerce Institutional Mechanisms. *Industrial Management & Data Systems*, 116(8), 1749-1778. <https://doi.org/10.1108/IMDS-07-2015-0296>
7. Cai, J., & Wohn, D. Y. (2019). Live Streaming Commerce: Uses and Gratifications Approach to Understanding Consumers' Motivations. *Proceedings of the 52nd Hawaii International Conference on System Sciences* (pp. 2548-2557). <https://doi.org/10.24251/hicss.2019.307>
8. Camilleri, M. A., & Falzon, L. (2021). Understanding motivations to use online streaming services: integrating the technology acceptance model (TAM) and the uses and gratifications theory (UGT). *Spanish Journal of Marketing - ESIC*, 25(2), 217-238. <https://doi.org/10.1108/sjme-04-2020-0074>
9. Chen, X., Huang, Q., Davison, R. M., & Hua, Z. (2015). What Drives Trust Transfer? the Moderating Roles of Seller-Specific and General Institutional Mechanisms. *International Journal of Electronic Commerce*, 20(2), 261-289. <https://doi.org/10.1080/10864415.2016.1087828>
10. Chong, A. Y. L., Lacka, E., Boying, L., & Chan, H. K. (2018). The role of social media in enhancing guanxi and perceived effectiveness of E-commerce institutional mechanisms in the online marketplace. *Information and Management*, 55(5), 621-632. <https://doi.org/10.1016/j.im.2018.01.003>
11. Dabbous, A., & Tarhini, A. (2019). A socio-technical approach is to assess the impact of knowledge and perceived economic benefits on sustainable consumption through the sharing economy. *Technological Forecasting and Social Change*, 149. <https://doi.org/10.1016/j.techfore.2019.119775>
12. Davis, R., Smith, S. D., & Lang, B. (2017). A comparison of online and offline gender and goal-directed shopping online. *Journal of Retailing and Consumer Services*, 38, 118-125. <https://doi.org/10.1016/j.jretconser.2017.02.011>
13. Dong, X., & Wang, T. (2018). Social tie formation in Chinese online social commerce: The role of IT affordances. *International Journal of Information Management*, 42, 49-64. <https://doi.org/10.1016/j.ijinfomgt.2018.06.002>
14. Endri, E., Syafarudin, A., Santoso, S., Imaningsih, E. S., Suharti, T., & Rinda, R. T. (2020). Consumption Behavior Patterns of Generations Y Halal Products in Indonesia. *Academy of Entrepreneurship Journal*, 26(2), 1-10. Retrieved from <https://www.abacademies.org/articles/consumption-behavior-patterns-of-generations-y-halal-products-in-indonesia-9253.html>
15. Escursell, S., Llorach-Massana, P., & Roncero, M. B. (2021). Sustainability in e-commerce packaging: A review. *Journal of Cleaner Production*, 280(part 1), 124314. <https://doi.org/10.1016/j.jclepro.2020.124314>
16. Fang, Y., Qureshi, I., Sun, H., McCole, P., Ramsey, E., & Lim, K. H. (2014). Trust, satisfaction, and online repurchase intention: The moderating role of perceived effectiveness of institutional e-commerce mechanisms. *MIS Quarterly: Management Information Systems*, 38(2), 407-427. <https://doi.org/10.25300/MISQ/2014/38.2.04>
17. Giordani, R. C. F., Zanoni da Silva, M., Muhl, C., & Giolo, S. R. (2020). Fear of COVID-19 scale: Assessing fear of the coronavirus pandemic in Brazil. *Journal of Health Psychology*, 27(4), 901-912. <https://doi.org/10.1177/1359105320982035>
18. Guillen-Royo, M. (2019). Sustainable consumption and well-being: Does online shopping matter? *Journal of Cleaner Production*, 229, 1112-1124. <https://doi.org/10.1016/j.jclepro.2019.05.061>
19. Hussain, S., Li, Y., & Li, W. (2021). Influence of platform characteristics on purchase intention in social commerce: mechanism of psychological contracts. *Journal of Theoretical and Applied Electronic Commerce*

- Research*, 16(1), 1-17. <https://doi.org/10.4067/S0718-18762021000100102>
20. Indrasari, A., Nadjmie, N., & Endri, E. (2022). Determinants of satisfaction and loyalty of e-banking users during the COVID-19 pandemic. *International Journal of Data and Network Science*, 6(2), 497-508. <https://doi.org/10.5267/j.ijdns.2021.12.004>
  21. Islam, H., Jebarajakirthy, C., & Shankar, A. (2021). An experimental-based investigation into the effects of website interactivity on customer behavior in an online purchase context. *Journal of Strategic Marketing*, 29(2), 117-140. <https://doi.org/10.1080/0965254X.2019.1637923>
  22. Koh, W. C., Naing, L., & Wong, J. (2020). Estimating the impact of physical distancing measures containing COVID-19: An empirical analysis. *International Journal of Infectious Diseases*, 100, 42-49. <https://doi.org/10.1016/j.ijid.2020.08.026>
  23. Korhan, O., & Ersoy, M. (2016). Usability and functionality factors of the social network site application users from the perspective of uses and gratification theory. *Quality and Quantity*, 50(4), 1799-1816. <https://doi.org/10.1007/s11135-015-0236-7>
  24. Lestari, D. (2019). Measuring e-commerce adoption behaviour among gen-Z in Jakarta, Indonesia. *Economic Analysis and Policy*, 64, 103-115. <https://doi.org/10.1016/j.eap.2019.08.004>
  25. Li, Y., Yang, S., Chen, Y., & Yao, J. (2018). Effects of perceived online-offline integration and internet censorship on mobile government microblogging service continuance: A gratification perspective. *Government Information Quarterly*, 35(4), 588-598. <https://doi.org/10.1016/j.giq.2018.07.004>
  26. Liu, Y., Li, Q., Edu, T., Jozsa, L., & Negricea, I. C. (2020). Mobile shopping platform characteristics as consumer behavior determinants. *Asia Pacific Journal of Marketing and Logistics*, 32(7), 1565-1587. <https://doi.org/10.1108/APJML-05-2019-0308>
  27. Mansur, D. M., Sule, E. T., Kartini, D., Oesman, Y. M., Putra, A. H. P. K., & Chamidah, N. (2019). Moderating the role of technology theory in the existence of consumer behavior in e-commerce. *Journal of Distribution Science*, 17(7), 15-25. <https://doi.org/10.15722/jds.17.7.201907.15>
  28. Mertens, G., Gerritsen, L., Duijndam, S., Saleminck, E., & Engelhard, I. M. (2020). Fear of the coronavirus (COVID-19): Predictors in an online study conducted in March 2020. *Journal of Anxiety Disorders*, 74, 102258. <https://doi.org/10.1016/j.janx-dis.2020.102258>
  29. Mulyana, A., Ridaryanthi, M., Faridah, S., Umarella, F. H., & Endri, E. (2022). Socio-Emotional Leadership Style as Implementation of Situational Leadership Communication in the Face of Radical Change. *Academic Journal of Interdisciplinary Studies*, 11(3), 150-161. <https://doi.org/10.36941/ajis-2022-0074>
  30. Naeem, M. (2021). Social media platforms develop consumer panic buying during the Fear of the Covid-19 pandemic. *Journal of Retailing and Consumer Services*, 58, 102226. <https://doi.org/10.1016/j.jretconser.2020.102226>
  31. Najib, M., Ermawati, W.J., Fahma, F., Endri, E., & Suhartanto, D. (2021). FinTech in the Small Food Business and Its Relation with Open Innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 88. <https://doi.org/10.3390/joitmc7010088>
  32. Newbold, S. C., Finnoff, D., Thunström, L., Ashworth, M., & Shogren, J. F. (2020). Effects of Physical Distancing to Control COVID-19 on Public Health, the Economy, and the Environment. *Environmental and Resource Economics*, 76(4), 705-729. <https://doi.org/10.1007/s10640-020-00440-1>
  33. Nurhayati, I., Endri, E., Aminda, R. S., & Muniroh, L. (2021). Impact of COVID-19 on Performance Evaluation Large Market Capitalization Stocks and Open Innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 56. <https://doi.org/10.3390/joitmc7010056>
  34. Nurhayati, I., Endri, E., Riani, D., & Bimo, W. A. (2022). Community's Potential and Preferences for Islamic Banking: the Case of Indonesia. *WSEAS Transactions on Environment and Development*, 18, 1094-1105. <https://doi.org/10.37394/232015.2022.18.104>
  35. Oláh, J., Kitukutha, N., Haddad, H., Pakurár, M., Máté, D., & Popp, J. (2019). Achieving sustainable e-commerce in environmental, social, and economic dimensions by taking possible trade-offs. *Sustainability*, 11(1), 89. <https://doi.org/10.3390/su11010089>
  36. Olivero, N., & Lunt, P. (2004). Privacy versus willingness to disclose in e-commerce exchanges: The effect of risk awareness on the relative role of trust and control. *Journal of economic psychology*, 25(2), 243-262. [https://doi.org/10.1016/S0167-4870\(02\)00172-1](https://doi.org/10.1016/S0167-4870(02)00172-1)
  37. Ornell, E., Schuch, J. B., Sordi, A. O., & Kessler, F. H. P. (2020). 'Pandemic fear' and COVID-19: Mental health burden and strategies. *Brazilian Journal of Psychiatry*, 42(3), 232-235. <https://doi.org/10.1590/1516-4446-2020-0008>
  38. Ou, C. X., Pavlou, P. A., & Davison, R. M. (2014). Swift guanxi in online marketplaces: The role of computer-mediated communication technologies. *MIS Quarterly: Management Information Systems*, 38(1), 209-230. <https://doi.org/10.25300/MISQ/2014/38.1.10>
  39. Pahala, Y., Widodo, S., Kadarwati, Azhari, M., Mulyati, Lestari, N.I., Madjid, S.A., Sidjabat, S., Limakrisna, N., & Endri, E. (2021). The effects of service operation engineering and green marketing on consumer

- buying interest. *Uncertain Supply Chain Management*, 9(3), 603-608. <https://doi.org/10.5267/j.uscm.2021.5.011>
40. Pang, H. (2016). Understanding key factors affecting young people's WeChat usage: An empirical study from uses and gratifications perspective. *International Journal of Web-Based Communities*, 12(3), 262-278. <https://doi.org/10.1504/IJWBC.2016.077757>
  41. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing*, 49(4), 41-50. <https://doi.org/10.1177/002224298504900403>
  42. Purwanto, P., & Kuswandi, K. (2017). Effects of flexibility and Interactivity on the perceived value of and satisfaction with e-commerce (evidence from Indonesia). *Market- Trziste*, 29(2), 139-159. <https://doi.org/10.22598/mt/2017.29.2.139>
  43. Setiawati, R., Eve, J., Syavira, A., Ricardianto, P., Nofrisel, & Endri, E. (2022). The Role of Information Technology in Business Agility: Systematic Literature Review. *Quality Access to Success*, 23(189), 144-149. <https://doi.org/10.47750/QAS/23.189.16>
  44. Sher, L. (2020). The impact of the COVID-19 pandemic on suicide rates. *QJM : Monthly Journal of the Association of Physicians*, 113(10), 707-712. <https://doi.org/10.1093/qjmed/hcaa202>
  45. Simanjuntak, M., Mansur, S., Saragih, N., Hayati, S., & Endri, E. (2022). The role of quality and trust on using website news. *International Journal of Data and Network Science*, 6(3), 683-692. <https://doi.org/10.5267/j.ijdns.2022.4.004>
  46. Simon, F. (2017). Relationship norms and media gratification in relational brand communication. *Journal of Business Research*, 79, 12-22. <https://doi.org/10.1016/j.jbusres.2017.05.023>
  47. Sultan, P., Tarafder, T., Pearson, D., & Henryks, J. (2020). Intention-behavior gap and perceived behavioral control-behavior gap in the theory of planned behavior: moderating roles of communication, satisfaction, and trust in organic food consumption. *Food Quality and Preference*, 81, 103838. <https://doi.org/10.1016/j.foodqual.2019.103838>
  48. Tran, L. T. T. (2021). Managing the effectiveness of e-commerce platforms in a pandemic. *Journal of Retailing and Consumer Services*, 58, 102287. <https://doi.org/10.1016/j.jretconser.2020.102287>
  49. Wang, Q., & Zhang, F. (2021). What does China's economic recovery after the COVID-19 pandemic mean for the economic growth and energy consumption of other countries? *Journal of Cleaner Production*, 295, 126265. <https://doi.org/10.1016/j.jclepro.2021.126265>
  50. Whiting, A., & Williams, D. (2013). Why people use social media: a uses and gratifications approach. *Qualitative Market Research: An International Journal*, 16(4), 362-369. <https://doi.org/10.1108/QMR-06-2013-0041>
  51. Wu, G., Hu, X., & Wu, Y. (2010). Effects of Perceived Interactivity, Perceived Web Assurance, and Disposition to Trust on Initial Online Trust. *Journal of Computer-Mediated Communication*, 16(1), 1-26. <https://doi.org/10.1111/j.1083-6101.2010.01528.x>
  52. Wu, J. H., Peng, L., Li, Q., & Chen, Y. C. (2016). Falling in love with online shopping carnival on singles' day in China: An uses and Gratifications perspective. *Proceedings of the 2016 IEEE/ACIS 15th International Conference on Computer and Information Science, ICIS 2016*. <https://doi.org/10.1109/ICIS.2016.7550801>
  53. Wu, L. (2019). Website interactivity may compensate for consumers' reduced control in E-Commerce. *Journal of Retailing and Consumer Services*, 49, 253-266. <https://doi.org/10.1016/j.jretconser.2019.04.003>
  54. Yang, S., & Lee, Y. J. (2017). The Dimensions of M-Interactivity and Their Impacts in the Mobile Commerce Context. *International Journal of Electronic Commerce*, 21(4), 548-571. <https://doi.org/10.1080/10864415.2016.1355645>