

## The Impact of Covid-19 Pandemic on Consumer Behavior: J&T Express Courier Services in Malaysia and Indonesia

Phing Shuin Liew<sup>1</sup>, Wei Ning Liew<sup>2</sup>, Cia Shim Lim<sup>3</sup>, Jenq Yang Lim<sup>4</sup>, Salwa Inka Qonitah<sup>5</sup>

Universiti Sains Malaysia<sup>1234</sup>  
Jalan Sg Dua, 11800 Minden, Pulau Pinang, Malaysia.  
STIE Malangkucecwara<sup>5</sup>  
Jl. Terusan Candi Kalasan, 65142 Blimbing Malang, Indonesia.  
Correspondence Email: phingshuin0801@student.usm.my

### ARTICLE INFORMATION

**Publication information**  
**Research article**

### HOW TO CITE

Liew, S. P., et al. (2022). The impact of Covid-19 pandemic on customer behavior: J&T Express courier services in Malaysia and Indonesia. *Asia Pasific Journal of Management and Education*, 5(1), 65-78.

**DOI:**  
<https://doi.org/10.32535/apjme.v4i3.1428>

Copyright© 2022 owned by Author(s).  
Published by APJME



This is an open-access article.  
License:  
Attribution-Noncommercial-Share Alike  
(CC BY-NC-SA)

Received: 4<sup>th</sup> April 2021  
Accepted: 4<sup>th</sup> October 2021  
Published: 20<sup>th</sup> March 2022

### ABSTRACT

The Covid-19 pandemic causes people to reduce physical interactions as everyone is encouraged to keep a safe distance to reduce the spreading of the virus. During this pandemic, as cities are locked down, e-commerce has become a trend, and therefore, a delivery company like J&T Express is needed in order to deliver items purchased by customers to their homes. The objective of the study is to find out the impact of the Covid-19 pandemic on consumer behavior towards the intention to use J&T Express services. The data were collected from a survey questionnaire about the consumer behavior in Malaysia and Indonesia towards courier company J&T Express. This study was gathered data from 100 consumers through Google Form. The findings of this research reveal that consumer intention to use the courier services increased during the Covid-19 pandemic.

**Keywords:** Consumer Behavior, Courier Service, Covid-19, Indonesia, J&T Express, Malaysia

## INTRODUCTION

In the recent few years, the Coronavirus is also known as Covid-19 which affects almost every country around the world. The coronavirus outbreak had made huge impacts and affected various forms of organizations and industries, this includes the courier service industry such as J&T Express. The use of the Internet and technological advancements has facilitated the exponential growth of e-commerce in the courier service sector, adhere companies, organizations, governments, and individuals (Hui & Fernando, 2019). J&T Express is a logistic service industry engaged in package delivery from Indonesia and now it has become one of the most successful logistic companies as this company has now extended its business to Malaysia, Singapore, Thailand, and the Philippines. According to the report of J&T Express in 2021, 5170 employees mean it was raise -growth of 4.19% compared to before the pandemic of Covid -19 in Malaysia. During the period of Covid-19, J&T Express Online and Social Media Presence also proved that this courier company was still growing as it had an increase in the number of followers in Twitter account from 92.3 thousand followers in October 2020 to 124.41 thousand in the next year. This means that J&T Express has gained lots of attention and sure users are getting more into it.

To stop the Covid-19 pandemic, many states have taken measures to avoid the virus from spreading further (Teoh, Gan, & Seow, 2021). Therefore, many previously offline activities have been driven online as a result of physical distancing and lockdown procedures (WTO, 2020). This includes a trend away from in-person shopping rather than obtaining goods and services online, which has resulted in significant growth in the year 2020 (OECD, 2020). According to Hartono et al. (2017), innovation in producing and distributing offerings that go beyond usability and functionality is defined as a sustainable service. Besides that, it highlighted the need of using a user-driven approach to developing sustainable services (Baldassarre, Calabretta, Bocken, & Jaskiewicz, 2017). According to the previous research result on Indonesian e-commerce by Wilson & Christella (2019), can be concluded that the correlation between latent variables was lower than each variable's square root value of AVE. For instance, the correlation between latent variables, such as customer satisfaction (0.608), time saved (0.457), delivery performance (0.568), product variety (0.501), and reliability (0.670) was lower than the square root value of AVE of variable website design quality (0.708).

Bressolles and Durrieu (2011) investigated the link between service quality, customer service, and customer satisfaction in the online context by using the dimensions of the three variables. Based on a research result conducted by Candra and Juliani (2018), shows a good convergent validity measurement of average variance extracted (AVE) value should be greater than 0.5. It means that the variables have met the convergent validity. The research shows that the customer satisfaction (0.739) variable shows a good convergent validity measurement while e-service quality (0.368) and customer value (0.390) do not have a good convergent validity because both of them show value smaller than 0.5.

The purpose of this research is to determine the impacts of Covid-19 on consumer behavior towards the intention to use courier services such as J&T Express. This study is going to show how Covid-19 has made an impact on the consumers of J&T Express from Malaysia and Indonesia.

### **LITERATURE REVIEW**

The Covid-19 pandemic that suddenly hit the world greatly affected various sectors, one of which was the economic sector which caused changes in business resilience. Many economists consider this outbreak as a metaphorical "black swan" event, which is defined as a "surprising, unanticipated occurrence of immense magnitude and several effects which significantly affects the political and economic environment and may result in business failures." (Gregurec, Furjan, & Pupek, 2020). At first, e-commerce and mobile commerce usually are used to place orders for goods even before the covid-19 exists. Nowadays, numerous significant corporations have started to carry out sales platforms through that. This is needed because offline sales are predicted to be decreased. Hopefully, this anticipation will not affect product sales. Nevertheless, companies are up against a never-before-seen issue. Their survival is contingent on the implementation of management strategies that will enable them to overcome the sharp drop in orders as well as the pressure of costs arising not only from rent, wages, and taxes but also from increases in the price of raw materials because of the significant decline in suppliers. The innovation challenges which include "ethical, social, economic, and legal aspects" that come from incorporating digital technology such as artificial intelligence in establishing sustainable business models have to be addressed concerning the Sustainable Development Goals present in the UN 2030 Agenda (Di Vaio et al., 2020).

Several traders such as customers, merchants, and shoppers, consider E-commerce as an advanced program to deliver their commercial activities under the Movement Control Order (MCO) and to make sure that the economy remains competitive. They can market their products without having to meet physically while following the Standard Operating Procedure (SOP) during lockdowns by using E-commerce (Mazlan, 2021). With the Movement Control Order (MCO) depriving the joy of physical purchasing once again, a further surge in demand for courier services is expected (Azman, 2021). Obviously, the whole of the operations on courier companies in Malaysia will be expected to increase due to MCO. Consumers who have just started using delivery services because of Covid-19 may continue to do so even though the public health crisis has already passed (Logistic Mitchell'sny, 2021). Malaysian e-commerce is expected to reach RM30.2 billion in 2020, up from RM24.2 billion in 2019 (GlobalData, 2020). Pos Malaysia Bhd, GDEX Bhd, and Nationwide Express Holdings Bhd, which represent Malaysia's postal and courier sectors, reported total revenue of RM2.79 billion in 2020, up 3.7 percent from the previous year's RM2.69 billion (NST Business, 2021). Malaysian establishments' e-commerce revenue totaled RM279.0 billion in the third quarter of 2021, up 17.1 percent year on year. Quarter-on-quarter growth remained positive at 4.3 percent. E-commerce revenue totaled RM801.2 billion between January and September, a 23.1% year-on-year rise (MIDA, 2021). Indonesia's E-commerce has benefited significantly from the Covid-19 epidemic, with transactions increasing by 23% and an estimated gross merchandise value (GMV) of US \$32 billion (Azis, 2021). Simultaneously, the Indonesian e-commerce

industry faces significant hurdles, including policy and regulatory uncertainty, low internet penetration, inadequate logistics infrastructure, low human resource quality, and low digital payment penetration (Azis, 2021).

### **Factors Affecting People To Use Courier Service**

One of the factors affecting people to use courier service is speed and convenience (Karcz & Slusarczyk, 2016). The process of courier transport is carried out systematically and consistently. There are many ways consumers can use to get the logistics courier service, for example, text messages, e-mail, websites, or applications dedicated to smartphones and tablets (Ramana et al., 2013). It is shown that 15.05 billion deliveries are completed worldwide in 2020 and the average time for each delivery is 12 minutes (Elogii, 2020).

The second factor influencing people's decision to utilize a courier service is the trust and reliability of the service. There is a two-way link between trust and service excellence. Customers are more inclined to trust a service if they have a positive view of its quality. A service provider has to attempt to eliminate perceived uncertainties, volatility, and risk during the service offering process to build consumer confidence (Song, 2019). Thus, it is confirmed that in the case of online services, perceived ease of use influenced trust, which in turn influenced perceived usefulness (Belanche et al, 2012). According to a consumer study by Oracle Retail, 86% of consumers wish that they can choose the most convenient delivery option at the time of ordering (Babu, 2019). Besides, safety is also a factor affecting people using courier services. This can be done by reducing the chance of incurring damages if sent items are damaged while in route. In the instance under consideration, the loss ratio on the package (the number of damaged shipments and complaints) is extremely low. The company has implemented a regression policy for any losses incurred by its subcontractors, which has resulted in a considerable reduction of the complaints 92% of consumers also stated that they will continue to do business with a company if the return process is easy (Elogii, 2020), which will indirectly decrease the loss of the consumers. To protect the rights of the consumers, there were 60% of retail companies consider reverse logistics as an important asset for their organizations. As Ewell (2020) states that in terms of efficacy and timeliness, a policy is inconsistent.

### **Marketing Mix 4P**

A marketing mix 4P is one of the business tools to operate and enhance their marketing strategy. The 4Ps is the general term for the production-centric marketing four-element which is known as Product, Place, Price, and Promotion.

The first element of 4P is the product. A product is defined as a tangible object or service that a consumer is willing to pay for (Iřoraitė, 2016). Due to the product's nature and attributes, the first element of the marketing mix is the product, which has an impact on the other three (Badi, 2018). It contains half of the tangible goods including grocery and furniture items, as well as intangible products including services that customers obtain (Singh, 2016). To build a profitable relationship between customers and the enterprise, the enterprise must produce good quality products and high-performance service. The enterprise could satisfy the needs and wants of the customers and create a competitive advantage for the product. A product must have the appropriate characteristics and supporting factors, such as

an appealing design, good functionality, guarantees, warranties, after-sales support, and others. It is vital to improve a product frequently to keep it updated and avoid being surpassed by the competition (Marketing Mix, 2019).

The place can be referred to as the method through which products and services are conveyed from the supplier or manufacturer to the customer (Goi, 2009). The place is including the mode of transportation, distribution channels, assortment, location, logistics, warehousing facilities, convergence, and inventory control management (Singh, 2012). An effective distribution process is linked to the implementation of marketing initiatives. To achieve the successfulness, the organization must accomplish the accessibility aim of offering the product in the right place, at the right time, and in the right quantity. Nowadays, sales networks are increasingly moving to the internet, allowing sales and customers to interact without the distance as previously that influenced by e-commerce on marketing. There are a few distribution tactics available such as franchising, intensive distribution, selective distribution, and exclusive distribution.

The third element of 4P is Price. The price of a product is the amount paid by consumers. Marketers must consider the product's actual and perceived value, as well as seasonal discounts, competitor pricing, and supplier costs (Twin, 2021). Business leaders J&T may boost the payment of delivery to give the customer feel that the delivery service was good in their courier company. Alternatively, they may cut the price in order to entice more people to utilize their courier services. In addition, J&T's business executives can use some statistics like discounts, offer prices, and credit policies to lower the cost of payment in delivery. According to the marketing policy on online shopping apps, they may get most of the discounts and credit policies that will lower the payment delivery price. It will encourage more people to utilize their courier service to deliver their packages.

The last element of 4p is Promotion. Advertising, promotional strategy, and public relations are all examples of promotion. The purpose of product promotion is to persuade consumers why they need a product and why they should spend a given price for it. (Twin, 2021). Advertising is an important form of promotion allowing you to publicize your product or service and brand to a wide or target audience. Different types of advertising include newspaper advertising, television advertising, social media advertising, and Internet advertising targeted advertising that targets a company's target market is referred to as "promotion." A corporation might utilize an email campaign, an Instagram campaign, or a product-focused PR campaign to reach its target audience at the right time and in the right place such as J&T courier company has done a lot of promotions on Instagram and Youtube to convince consumers to use courier delivery by using promotion code.

## **RESEARCH METHOD**

This study examined the impact of the covid-19 pandemic on consumer behavior towards the intention to use courier services (J&T Express) in Malaysia & Indonesia. For this research, an online study was done by using Google Form, the inquiry form is the most appropriate and successful method of gathering information and data (Lim & Teoh, 2021; Ooi & Teoh, 2021). A survey can be completed by mail, phone, computer, or in person. It is a research instrument that

collects data by asking respondents a series of questions (McLeod, 2018). The target population for this study is 50 Malaysian and 50 Indonesian consumers. A questionnaire was created by us and it is designed in three sections. The respondent needs to complete their demographic information in section one. In the second section, the consumer's behavior towards J&T Express was collected. The survey of the impact of Covid-19 on the usage of courier service will be done in the third section. The five-point Likert scale was used for the third section which is shown to never to always (1= never, 5 = always). In addition to conducting a survey, journals and some scientific publications give the researchers an understanding of the area of research. The aim of this research is to gather data and information from Malaysia and Indonesia on their behavior to use the courier services after being affected by Covid-19 to examine their observations and views.

## RESULTS

The respondents have to complete questionnaires specially made to analyze the usage of courier services, especially J&T Express during the Covid-19 pandemic. The questionnaire is divided into various sections, one of which is about the respondents' background, the consumer behavior towards courier service, and the impact of Covid-19 on J&T Express.

**Table 1.** Demography

Response	Frequency	Percent (%)
<b>Nationality</b>		
Indonesian	50	50
Malaysian	50	50
<b>Gender</b>		
Male	45	45
Female	55	55
<b>Age</b>		
18 and below	12	12
19-25	58	58
26-35	21	21
40 and above	9	9
<b>Occupation</b>		
Full-time student	63	63
Employed	24	24
Unemployed	3	3
Self-employed	5	5
Housewife	2	2
Retired	3	3

The respondents' demography is shown in Table 1 above. There is a total of 100 respondents to fill up the survey which is 50% Malaysian and 50% Indonesian. As many as 55% of the respondents were female, about 45% were male. About half were from the age 19-25 (58%), followed by the age 26-35 (21%), the age 18 and

below (12%), and 40 and above (9%). 63% were full-time students, 24% were employed, 5% were self-employed and 3% were unemployed, and 3% retired, for housewives were 2%. These results show that most youths and full-time students used courier services.

Respondents were directed to express their opinion about J&T Express. 100% know there is a J&T Express courier service among other courier services. This shows that J&T Express is very often found in the community and is one of the courier services that many customers are interested used it. 100% of the respondents used J&T Express before. This shows the existence of J&T Express which is quite large in the community. J&T Express has its own place which is very interesting and profitable to use.

**Table 2.** J&T Express Consumer Behavior

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Do you know J&amp;T express courier service?</b>		
Yes	100	100
No	0	0
<b>Have you used J &amp; T Express courier service before?</b>		
Yes	100	100
No	0	0
<b>For what reason you are using the courier service during this Covid-19 pandemic?</b>		
Online shopping	89	89
Send parcel to relatives and friends	40	40
Business	16	16
For job purposes	9	9

Table 2 shows the reason why respondents used courier service during this Covid-19 pandemic. Based on the survey, the research found that have 88 respondents (88%) used the courier service for online shopping due to most online shops having provided a courier company to send their package when a customer paid. Besides that, most respondents will buy daily necessities online because they need to follow the latest SOP and are not allowed to shop in stores during MCO. During the full month of the Movement Control Order (MCO), Malaysia's courier industry recorded a 69 percent monthly increase to an average daily throughput of 590,000 parcels in April. Its average output in May topped levels shown in the greatest years of the Malaysian courier industry (Izzah, Dilaila, & Yao, 2021).

There are 40 respondents (40%) who were using the courier service to send parcels to relatives and friends it will be more convenient than sending it by themselves. Cross-state bans were implemented on most of state Malaysia during MCO 2.0, it prohibited across the horse, cross-state, and inter-county. Out-of-office shopping, and is limited to 10km away from home. These are the reasons why respondents will choose courier companies to send parcels to relatives and friends who were far from them. Next, 15 respondents (15%) were using the courier

service for business and 9 respondents (9%) on working. Using courier service was simple and convenient to them on their job when to send the customer packages and send it automatically.

**Table 3.** Impact of Covid-19 towards usage of courier service (J&T Express)

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
<b>During the Covid-19 pandemic, do you still use courier services?</b>		
Never	0	0
Seldom	3	3
Once	15	15
Often	34	34
Very often	48	48
<b>How much do you think the pandemic has affected you on the frequency of using courier service (J&amp;T Express)?</b>		
Not Affected	3	3
Weakly Affected	4	4
Neutral	20	20
Affected	32	32
Strongly Affected	41	41
<b>How often do you use J&amp;T Express before the Covid-19 pandemic?</b>		
Never	10	10
Seldom	17	17
Once	26	26
Often	30	30
Very Often	17	17
<b>How often do you use J&amp;T Express during this Covid-19 pandemic?</b>		
Never	2	2
Seldom	7	7
Once	19	19
Often	48	48
Very Often	24	24
<b>Even after the pandemic ends soon? will you continue to use J&amp;T Express services?</b>		
Yes	100	100
No	0	0
<b>What are the reasons to continue using J&amp;T Express services after the pandemic?</b>		
More convenient as we can shop from home	60	60
Fast delivery	60	60
Online shopping platforms provide free deliveries	52	52
Items arrived in a good condition	34	34
The price is cheaper compared to other courier companies	31	31
Promotions and vouchers by J&T Express	14	14



Table 3 summarizes the impact of Covid-19 on the usage of courier service (J&T Express). During the Covid-19 pandemic, there has been a lot of impacts and changes including courier services. Based on the survey, 48% of the respondents responded that they were continuing using the courier service while 34% of the respondents were often using courier services during the Covid-19 pandemic. During the pandemic, many people choose to buy things from e-commerce. After all, it was convenient and will decrease the risk of spreading the virus. According to Bhatti, Akram, Basit, and Khan (2020) report, 52% of consumers avoid going to brick and mortar stores because they are overcrowded and instead prefer to shop on e-commerce websites and have their items delivered via courier service.

## DISCUSSION

As everyone can see, about 41% of the respondents felt that the pandemic enormously affected them on the frequency of using courier service and from the 100 respondents there were only 3 of the respondents are not affected. Before the pandemic, the movement is not controlled. Everyone can go anywhere they want to give or get something. As the pandemic makes, many people's movement is restricted and needs the police permission when going somewhere far than 10 km. During the pandemic, most people use the courier service to send the parcel to relatives or buy the thing from an e-commerce store instead of getting permission from the police to go to the destination to get or give the items. During the peak of the pandemic in the United States, delivery services became more popular and increased about fivefold than usual.

Before the pandemic, 17% of the respondents responded that they were rarely using J&T Express as before this pandemic and 26% of it just will use it once a time, people could buy things from the store and send the items directly to relatives and friends, so the demand for courier service was not so high. According to research, the use of courier services increased by 55 percent throughout the epidemic in contrast to the prior pandemic (Figliozzi & Unnikrishnan, 2020). As a result, it can be seen that courier services are being used less frequently than they were during the Covid-19 outbreak. But there were also 30% of the respondents are often using the J&T Express as J&T Express already established in Malaysia in 2017 and most of the e-commerce websites are using their service like Shopee and Lazada.

Table 3 above shows that 48% of the respondents are quite often using the J&T Express courier service throughout the pandemic. 24% of the 100 respondents use the service during pandemics very often followed by 19% meaning 19 respondents who say that they use J&T Express services sometimes on a neutral term. 7 out of 100 respondents say that they rarely use this service while a minority of 2% which is 2 respondents state that they have never used the J&T Express service before.

From the data from the survey, the researchers can conclude that most people still use the J&T Express service after this Covid-19 pandemic. This is shown where all of the 100 respondents gave feedback that they will continue to use J&T Express services. This is because people often buy things online. Supply and shipping systems are activated after shopping. Coronavirus affects differently on different products, meaning the impact of Covid-19 on several products is very high

and has less impact on some products (Andrienko, 2020). Overall e-commerce sales soared as a result of the virus, with people avoiding going out, maintaining social distance, and purchasing and working from home, such as Walmart grocery e-commerce increasing by 74% (Troy, 2020). The increase in sales of e-commerce means that people tend to buy things online, the goods purchased online are delivered using courier and delivery companies like J&T Express.

A majority of 60 respondents (60%) reported that they will continue to use J&T Express services as it is more convenient as they can shop online without having to purchase goods at the physical store while 60 out of the 100 respondents also voted that they use this courier service as it is fast in delivery. About half of the respondents which makes up 52% of them stated that they will continue to use the service as some of the online shopping platforms provide free delivery coupons. A 34% out of 100 respondents say that their items and parcels arrived in a good condition. This is in line with what Tendur, Hutabarat, and Tumbelaka (2021) state in their research that service quality is also a determinant factor in business service industries. Meanwhile, 28 respondents gave feedback that the reason is that the price of J&T Express service is cheaper compared to other competitors companies such as Ninja Van, Lazada Express, and so on. Among many factors affecting consumers' choice of using a certain delivery service is the price of the service (Haron et al., 2017). This is one of the main reasons why J&T Express expands rapidly and becomes the first choice of many business owners and consumers (Leong, 2020). Only a small number of respondents which is 11 respondents reviewed that they will continue to use J&T Express as promotions and vouchers are provided by the company. Therefore, J&T Express should be looking for a better solution to meet the customer's expectations, because it is the main reason that people will use the service continuously.

## **CONCLUSION**

The Covid-19 pandemic surely had an enormous impact on the economies all around the world. Although the economy is trying to get back on track, the new Covid-19 virus variants, as well as a surge in tested positive cases in large emerging economies and some populations in established economies who refuse to be vaccinated, raise concerns regarding the speed and strength of an economic recovery in the short future.

From the paper, it can be seen that a courier services company like J&T Express is a well-known courier company in Malaysia and Indonesia. is still being used by many Malaysians and Indonesians during and after the pandemic as the paper serves as evidence. It is known that people are still using courier services as they use mainly for online shopping and J&T Express is also a preferred choice for people as they provide fast delivery instead of.

Many business operations had been forced to shut down during the economic recession caused by the Covid-19 pandemic. However, J&T Express can be more proactive and creative to create a sustainable courier company and further expand their business activities throughout Asia countries.

## **REFERENCES**

- Andrienko, O. (2020). Ecommerce & consumer trends during coronavirus. Retrieved from <https://www.semrush.com/blog/ecommerce-covid-19/>
- Azis, I. J. (2019). The Indonesian economy in transition: Policy challenges in the Jokowi Era and Beyond edited by Hal Hill and Siwage Dharma Negara. *Asian-Pacific Economic Literature, Asia Pacific School of Economics and Government, The Australian National University*, 33(2), 143-145. doi: 10.1111/apel.12276
- Azman, H. (2021). Delivery services a booming industry. The Malaysian Reserve. Retrieved from <https://themalaysianreserve.com/2021/01/25/delivery-services-a-booming-industry/>
- Babu, S. (2019). 13% of shoppers never come back if their delivery isn't on time. Retrieved from <https://smallbiztrends.com/2019/10/delivery-statistics.html>
- Badi, K. S. (2018). The impact of Marketing Mix on the competitive advantage of the SME sector in the Al Buraimi Governorate in Oman. *Sage open*, 1-10. doi: 10.1177/2158244018800838
- Baldassarre, B., Calabretta, G., Bocken, N., & Jaskiewicz, T. (2017). Bridging sustainable business model innovation and user-driven innovation: A process for sustainable value proposition design. *Journal of Cleaner Production*, 175–186. Doi: 10.1016/j.jclepro.2017.01.081
- Belanche, D., Casalo, A.V., & Flavian, C. (2012). Integrating trust and personal values into the Technology Acceptance Model: The case of e-government services adoption. *Cuadernos de Economía y Dirección de la Empresa*, 15, 192–204. doi: 10.1016/j.cede.2012.04.004
- Bhatti, A., Akram, H., Basit, H. M., & Khan, A. U. (2020). E-commerce trends during covid-19 pandemic. *International Journal of Future Generation Communication and Networking*, 13(2), 1449-1452.
- Bressolles, G., & Durrieu, F. (2011). Service quality, customer value and satisfaction relationship revisited for online wine websites. Retrieved from <http://academyofwinebusiness.com/wp-content/uploads/2011/09/15-AWBR2011-Bressolles-Durrieu.pdf>
- Candra, S., & Juliani, M. (2018). Impact of e-service quality and customer value on customer satisfaction in local brand. *Binus Business Review*, 9(2), 125–132. doi: 10.21512/bbr.v9i2.4650
- Di Vaio, A., Boccia, F., Landriani, L., & Palladino, R. (2020). Artificial intelligence in the agri-food system: Rethinking sustainable business models in the Covid-19 scenario. *Sustainability*, 12(12), 1-12. Doi: 10.3390/su12124851
- Elogii. (2020). 101 delivery statistics for 2020. Retrieved from <https://elogii.com/blog/delivery-statistics-2020/>
- Ewell, B. J. (2020). How returns and reverse logistics can influence customer brand loyalty. Retrieved from <https://sps.honeywell.com/us/en/support/blog/productivity/how-returns-and-reverse-logistics-can-influence-customer-brand-loyalty>
- Figliozi, M., & Unnikrishnan, A. (2021). Exploring the impact of socio-demographic characteristics, health concerns, and product type on home delivery rates and expenditures during a strict Covid-19 lockdown period: A case study from Portland, OR. *Transportation Research Part A: Policy and Practice*, 153, 1–19. doi: 10.1016/j.tra.2021.08.012

- GlobalData. (2020). Covid-19 accelerates e-commerce growth in Malaysia, says. Retrieved from <https://www.globaldata.com/covid-19-accelerates-e-commerce-growth-malaysia-says-globaldata/>
- Goi, C. L. (2009). A review of marketing mix: 4Ps or more?. *International Journal of Marketing Studies*, 1(1), 2-15.
- Gregurec, I., Furjan, M. T., & Pupek, K. T. (2020). The impact of Covid-19 on sustainable business models in SMEs. *Sustainability*, 13(3), 1-24. doi: 10.3390/su13031098
- Haron, H., Abu Bakar, S. Z., Haron, H., & Hui, H. K. (2017). Critical success factors on delivery preferences of e-commerce in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 7(11), 1383-1393. Doi: 10.6007/IJARBSS/v7-i11/3577
- Hartono, M., Santoso, A., & Prayogo, D.N. (2017). How Kansei Engineering, Kano and QFD can improve logistics services. *International Journal of Technology*, 8, 1070–1081. doi: 10.14716/ijtech.v8i6.689
- Hui, H. Y., & Fernando, Y. (2019). Improving competencies for the courier service industry in Malaysia. In M. K. Pour., & Information Resources Management Association (Eds), *Advanced methodologies and technologies in digital 25 marketing and entrepreneurship* (pp. 268-277). Pennsylvania, USA: IGI Global.
- Išoraitė, M. (2016). Marketing Mix Theoretical Aspects. *International Journal of Research-Granthaalayah*, 4(6), 25-37. doi: 10.29121/granthaalayah.v4.i6.2016.2633
- Izzah, N., Dilaila, F., & Yao, L. (2021). The growth of reliance towards courier services through e-business verified during COVID-19: Malaysia. *Journal of Physics: Conference Series*, 1-12. doi:10.1088/1742-6596/1874/1/012041
- Karcz, J., & Slusarczyk, B. (2016). Improvements in the quality of courier delivery. *International Journal for Quality Research*, 10(2), 355-372. Doi: 10.18421/IJQR10.02-08
- Leong, D. (2020). Courier express players face double whammy –stiff competition and Covid-19. Retrieved from <https://focusmalaysia.my/mainstream/courier-express-players-face-double-whammy-stiff-competition-and-covid-19/>
- Lim, C. H., & Teoh, K. B. (2021). Factors influencing the SME business success in Malaysia. *Annals of Human Resource Management Research*, 1(1), 41-54. Doi: 10.35912/ahrmr.v1i1.380
- Logistic Mitchell'sny. (2021). How Covid-19 has changed the delivery industry. Retrieved from <https://logistics.mitchellsny.com/how-covid-19-has-changed-the-delivery-industry/>
- Marketing Mix. (2019). Literature review and company example. Retrieved from <https://phdessay.com/marketing-mix-literature-review-and-company-example/>
- Mazlan, M. (2021). Challenge E-Commerce to the logistics courier services provider during MCO in Malaysia. *IOSR Journal of Business and Management*, 23(2), 59-62. DOI: 10.9790/487X-2302025962
- Mcleod, S. (2018). Questionnaire: Definition, examples, design and types. Retrieved from <https://www.simplypsychology.org/questionnaires.html>
- MIDA. (2021). E-commerce continues to grow. Retrieved from <https://www.mida.gov.my/mida-news/e-commerce-continues-to-grow/>
- NST Business. (2021, July 23). New norms under Covid-19 crisis strengthens Malaysian postal & courier sector. Retrieved from

- <https://www.nst.com.my/business/2021/07/710897/new-norms-under-covid-19-crisis-strengthens-malaysian-postal-courier-sector>
- OECD. (2020). Connecting businesses and consumers during Covid-19: Trade in parcels. Retrieved from <https://www.oecd.org/coronavirus/policy-responses/connecting-businesses-and-consumers-during-covid-19-trade-in-parcels-d18de131/#back-fnotea0z3>
- Ooi, T. P., & Teoh, K. B. (2021). Factors affecting the turnover intention among employees in Penang manufacturing industry. *Annals of Human Resource Management Research*, 1(1), 29-40. doi: 10.35912/ahrmr.v1i1.379
- Ramana, V. D., Rao, N. K., Kumar S. J., & Venkatasubbaiah, K. (2013). Identification of measurement items of design requirements for lean and agile supply chain – confirmatory factor analysis. *International Journal for Quality Research* 7(2), 258.
- Singh, M. (2016). Marketing Mix of 4P'S for competitive advantage. *IOSR Journal of Business and Management*, 3(6), 40-45.
- Singh, P. K. (2012). Management of business processes can help an organization achieve competitive advantage. *International Management Review*, 8(2), 19-26.
- Song, H., Ruan, W., & Park, Y. (2019). Effects of service quality, corporate image, and customer trust on the corporate reputation of Airlines. *Sustainability*, 11, 3302. doi: 10.3390/su11123302
- Teoh, K. B., Gan, K. H., & Seow, X. T. (2021). The psychosocial safety climate and burnout among Penang hoteliers. In Noel, S., Dimitrios, B., Therdchai, C., Jati, K. A., Leong, Q. L., Chidchanok, A, ... Ken, B. (Eds), Proceedings of the Phuket International Tourism Conference (pp. 96-108). Thailand: Phuket Rajabhat University.
- Tendur, S. T. E., Hutabarat, V. V., & Tumbelaka, S. S. X. (2021). Price perception, service quality and customer satisfaction (Empirical study on Cafes at Tondano City). *International Journal of Tourism and Hospitality in Asia Pasific*, 4(3), 19-31.
- Troy, M. (2020, May 19). Walmart grocery drives 74% e-commerce growth. Retrieved from <https://progressivegrocer.com/walmart-grocery-drives-74-e-commerce-growth>
- Twin, A. (2021). The 4 Ps. Retrieved from <https://www.investopedia.com/terms/f/four-ps.asp>
- Wilson. N., & Christella, R. (2019). An empirical research of factors affecting customer satisfaction: A case of the Indonesian E-Commerce Industry. *Development Research of Management*, 14(1). Doi:10.19166/derema.v14i1.1108
- WTO. (2020). E-commerce, trade and the Covid-19 pandemic. Retrieved from [https://www.wto.org/english/tratop\\_e/covid19\\_e/ecommerce\\_report\\_e.pdf](https://www.wto.org/english/tratop_e/covid19_e/ecommerce_report_e.pdf)