

The determinants of online shopping experience and online customer satisfaction among millennials in Malaysia

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ABSTRACT

The main objective of this study is to examine the determinants of online shopping experience and online customer satisfaction among the Millennials in Malaysia. This quantitative research has collected 147 online survey questionnaires from the sample frame of MBA Millennials with past online shopping experience using non-probability purposive sampling method. The primary data collected for this cross-sectional explanatory study data is being assessed using IBM SPSS version 29. Adopted from previous studies, this study relied on the research instrument of a five-point Likert scale questionnaire that covered two segments. The first segment covered the demographic information of respondents while the second segment measured the five constructs, namely one dependent variable (online customer satisfaction) and four independent variables (i) experience with product; (ii) experience with online information; (iii) experience with service; and (iv) experience with e-platform. The study generated an outcome of all the independent variables that has a significant positive impact on the online customer satisfaction, with the exception of experience with online information. Hence, it is resolved in this study that positive experience with online information will not generate a positive online customer satisfaction among the Millennials in Malaysia. This study holds a few inherent limitations. Firstly, the data collected are from MBA students in Universiti Malaya-Wales and Universiti Malaya, which do not truly represent entire country. Secondly, given that this research adopts a purposeful sampling method, opponents believe that this method is susceptible to errors and biased opinions. Lastly, this quantitative research captures an effective response by solely relying on a five-point Likert scale questionnaire, especially this is a social science topic. This study is valuable to e-retailers, human resource departments and academicians who are interested in understanding the determinants of online shopping experience and online customer satisfaction among the Millennials in Malaysia.

Keywords: Online Shopping Experience, Online Customer Satisfaction, Millennials in Malaysia Intention.

INTRODUCTION

The aim of this study is to examine the determinants of online shopping experience (OE) and their influence on online customer satisfaction (OS) among Millennials in Malaysia. Alleviated by COVID-19, digitalisation and consumerism

mega trends have reshaped global business models across industries, particularly in the e-commerce industry with an accelerated shift from traditional retail industry towards digital shopping platforms (Nanda, Xu & Zhang, 2021). These trends are similar in Malaysia as well. With established

digital technologies infrastructures and matured smartphone penetration (93%) in Malaysia, experts believe that the e-commerce industry will grow at a steady doubled-digits growth rate with 23% contribution to Southeast Asia's e-commerce industry (Hageman, 2022).

The digital structural shift is apparent among the Millennials, representing 50% of Malaysia's working population, who are looking for positive online shopping experiences and are tech-savvy to equip up-to-date technologies to achieve satisfaction from online shopping (Subramaniam, 2022). In 2021, 70% of Malaysian Millennials contributed RM195 billion into the e-commerce industry, which represents 6.5% of Malaysia's Gross Domestic Product (GDP) (Department of Statistics Malaysia, 2021b). Hence, the return of online shopping confidence unbridled Millennials' rebound which breeds new expectations, in which online Millennials are looking at going beyond meeting the functional and safety needs in e-commerce (Saylikhanov, 2019). As individualism trends become more apparent, online Millennials are expecting more customisable and solution-based products which spurs innovation waves in Malaysia's online shopping environment (Sneader & Singhal, 2021). As e-commerce becomes an important feature in Malaysia's economy and a strong catalyst for business growth, many are gaining attention to understand Millennial's online shopping experience and online customer satisfaction to unleash the full potential in the new economy (Karim et al., 2020).

LITERATURE REVIEW

Online customer satisfaction is not a buzzword in the 21st century digital era with numerous studies conducted to understand its effect on online shopping experience (Guan et al., 2022). Although the journey to achieve optimal online customer satisfaction is complex due to challenges in identifying the right online shopping experience, companies that perform well in this area tend to outperform their peers, which increased the incentives for business owners to capitalise on

emerging business opportunities (Gligor & Maloni, 2022).

Millennials grew up in the digital era and are exposed to innovative experiences and have the opportunity to witness technology refinement throughout the life-stage (Herring, 2019). Consequently, this cohort appreciates the convenience brought by technologies and is likely to be less dependent on conventional print media. This creates a huge opportunity for the e-commerce industry since the demographic characteristic fits the e-commerce industry (Indartoyo, 2021). Interestingly, at least 65% of Millennials preferred the high-touch shopping experiences which poses a business threat with market reopening in the post-pandemic period (Briedis et al, 2020). However, therein lies business opportunity, especially to those business owners who have successfully integrated online and physical shopping experiences.

Traditionally, consumers faced challenges of high search cost due to time invested to search for the product needed in a physical store (Xu & Jackson, 2019). Hence, the e-commerce business model provides a solution, and it fits Millennial needs because it creates a positive online shopping experience via a wide assortment, which enhances online customer satisfaction. Predominantly among Millennial online consumers, culturally diverse culturally diverse backgrounds trigger tailored-needs to create excitement in the shopping experience and therefore increased satisfaction (Gupta, 2023). Mofokeng (2021) elaborated that e-retailers who offer a clear and complete product range in the same store will increase online customer satisfaction since it relieves the pain point of high search cost in physical stores. Aligning with business results, wider assortment and online-exclusive product offering generates at least 35% higher profit compared to its peers (Kantar, 2021).

Technology disruption in the 21st century revolutionised the e-commerce industry with convenience technology–touchpoint to address the physical touchpoint gap in e-commerce (Gao

& Xu, 2021). Historically, brick-and-mortar stores benefit from asymmetric information and provide opportunities for business owners to take advantage of flawed pricing mechanisms and hike up the pricing on the poorly informed consumers (Duggal & Verma, 2022). This phenomenon is prevalent in the monopoly environment, which was common in the 80s, in which the retailers will put pressure on the fragmented consumers to make purchase decisions that are undesired due to low bargaining power (Bushe, 2019).

In the early stage of the e-commerce industry, most online buyers are satisfied by the fulfilment of basic elements of the shopping experience, such as well-packaged parcels and on-time delivery (Milioti, Pramartari & Zampou, 2020). As Malaysia's e-commerce industry reaches maturity, customers are seeking for deeper engagement with the e-retailer, including excellent customer services, satisfactory delivery mode and seamless return policies (Kantar, 2021). This is aligned with experiential learning theory in which once online customers are learning tangible and concrete knowledge with e-commerce, online customers are expecting an end-to-end solution to satisfy their online shopping journey.

Experience of e-platform is categorised into website design and search engine excellence. Firstly, an effective design of the website must include three elements, namely information-oriented, transaction-oriented, and customer-oriented (Rita, Oliveira & Farisa, 2019). Secondly, due to the wide assortment in online channels, the ability to reduce online searching cost will improve customer satisfaction. At least 60% of online shoppers are dissatisfied at the searching time and cost due to irrelevant search results (Xu, 2020). Consequently, a strong search engine provides prominent business opportunities to improve customer experience, addressing customer pain during purchase journey

RESEARCH MODEL AND THEORY

Firstly, Chen and Chang (2003) developed the descriptive model with the aim to explore online shopping experience from three elements, including interactivity (experience with e-platform); transaction (experience with products); and fulfilment (experience with services). The data source of this model is developed from a pool of online shoppers with descriptive pain and gain



Diagram 1: Chen and Chang model (source: Chen and Chang, 2003)

from online shopping experience and is therefore relevant to be adopted in this research (Diagram 1).

The second model is developed by Rose et al. (2012) which emphasised on both cognitive and emotional elements of online shopping experience to arrive at online customer satisfaction (Diagram 2). Compared to the descriptive model, this model offers a more comprehensive review of online shopping experience with deeper analysis of the emotional elements. Further, this model is adapting to the brick-and-mortar shopping experience, with added elements to synchronise into the online environment. This includes experiences with website designs and Internet connection which is novel in e-commerce settings. This model is highly applicable in this research since



Diagram 2: Rose et al. model (source: Rose et al., 2012)

Millennials are actively seeking for a deeper usage in e-commerce, which is inclining towards

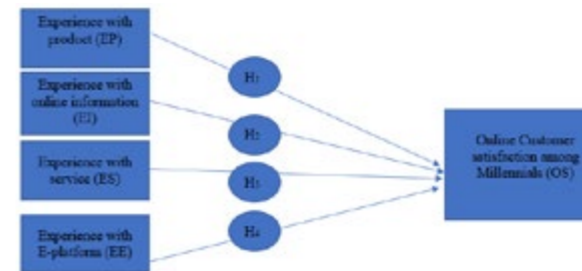


Diagram 3. Conceptual Framework

emotional experience (Kantar, 2021).

RESEARCH FRAMEWORK AND HYPOTHESES

H1: Experience with product has a positive significant impact on online customer satisfaction among Millennials.

H2: Experience with online information has a positive significant impact on online customer satisfaction among Millennials.

H3: Experience with service has a positive significant impact on online customer satisfaction among Millennials

H4: Experience with e-platform has a positive significant impact on online customer satisfaction among Millennials.

Research Methodology

This study will be using a quantitative research method, focusing on collection of numerical data to describe a specific situation. This method is suitable in this study since the use of numerical data offered a more systematic review of the results with strong validity and reliability findings (Poitras et al., 2019). Besides, given that there is a lack of emphatical studies and data in this topic, primary research is more suitable since it allows collection of original data that are highly specific to the research objective (Mofokeng, 2021).

Firstly, this study will be conducted in hypothesis analysis with an objective to assess the causes (online shopping experience) and effects (online customer satisfaction). Secondly, this

quantitative research gathers numerical data and utilises statistical tests to examine the relationship between the variables. Thirdly, this study will be explaining the relation between variables, explicitly four online shopping experiences (experience with product; online information; service and e-platform) as independent variables and online customer satisfaction as dependent variable in the context of Millennials in Malaysia. Lastly, driven by time-constraint, this research will be collecting primary data at a single point in time in 2023 via online questionnaires from the target population using a sampling method.

The collection of primary data in this study will be adopting online survey questionnaires method using Google forms. This is an appropriate approach considering several aspects. Firstly, although the market has been reopened in Malaysia post COVID-19, considering the volatility of COVID-19 situation in Malaysia, online collection of data is often superior to conventional methods due to limited exposure to unnecessary physical contacts. Secondly, online survey questionnaires are suitable in this study since it provides solutions for collection of large samples to achieve the research objectives in an effective and efficient manner, considering privacy protection of participants' and limited research resources. Lastly, consistent with the data collection method adopted by previous researchers with similar quantitative research topics, most studies conducted are using online survey questionnaires method to collect primary data. (Mofokeng, 2021).

To ensure the multiple regression analysis is being carried out effectively, a linear regression model is being developed with careful consideration of correlation between independent variables in the study (Hoque et al., 2020). To prevent skewed results and create better model, a constant term is included in the multiple regression analysis, and it is formulated as follow:

$$OS = \beta_0 + \beta_1 EP + \beta_2 EI + \beta_3 ES + \beta_4 EE + \epsilon$$

whereby,

OS = Online Customer satisfaction among Millennials (dependent variable)

β_0 = constant

EP = Experience with product

EI = Experience with online information

ES = Experience with service

EE = Experience with e-platform

ε = Error term

Data Findings and Analysis

Descriptive Statistic

The overall characteristic of the demographic of respondents is inclined to homogeneous in nature, particularly, all of the respondents are (i) aged within the range of 27 to 42; (ii) possesses postgraduate degree; and (iii) possess online shopping experience in the past. This is in line with the adoption of non-probability purposive sampling method with an intention to achieve efficiency in collection of responses from a group of information-rich people (Millennials in Malaysia with MBA who has experience in online shopping) (Olsen, Vogt & Andereck, 2018). Although online shopping frequency varies among the respondents, with more than 87% of the respondents has more than 5 times online shopping experience within the last 12 months, the research findings are expected to be similar in accordance to the Pareto theory (Nagaballi & Kale, 2020). In terms of gender, the demographic results show almost equal weightage in this study. Some critics believe that female online customers are skewed towards emotional element in online shopping experience while male preferred cognitive online shopping experience (Tyrväinen, Karjaluoto, & Saarijärvi, 2020). Although non-probability purposive sampling is an approved method, this still represents a limitation of study which provides an opportunity for future researchers to address via cross-validating the findings within the same sampling frame (Saunders, Lewis & Thornhill, 2009).

Overall, all the variables have a low standard

deviation value (less than one) which indicates that the data are clustered around the mean (Mishra et al., 2019). Table 1 summarises all of the sub-variables descriptive analysis data which gives us a good indication that the mean represents well the data given that all of the data, including the sub-variables, are less than 1 (threshold defined by Mishra et al., 2019). Although all data generates a healthy distribution, there are some variables are heavier skewed towards the reading of 4 while some are inclining towards 3. From Table 1, the data in this study shows a skewness towards “Agree” range, with an exception to “Experience with service” and “Experience with online information”. “Experience with service” has the lowest mean among the variables, namely only 2.991. This shows that the respondents in this study are feeling neutral over the questions relating to “Experience with service”, especially in the questions surrounding “It is easy to find customer service representatives if there is a problem” and “This website provides good amount of time to return an unwanted product” with the mean score of 2.96 and 2.87 respectively. On another spectrum, “Experience with online information” has the highest mean score of 4.329, particularly on “This website provides sufficient product information” and “This website presents effective visual images of the products” with mean value of 4.45. In relation to “Experience with E-platform” (mean score of 3.991), most respondents agreed to have “This website is convenient to search for a product” and “This website provides a tool that enables product comparison” with mean value of 4.13 and 4.12, whereas “This website provides assurance for security of personal information” have the lowest mean score amounting to only 3.73. “Experience with product” gives a mean score of 3.567 with skewness of higher mean score in “I can find most of the products I need on the website” and “There are good selections for products at the website” valued at 3.76 and 3.66. However, relating to “The product range of the website is clear” and “The products have lower prices than offline stores”, most respondents are

Variable	Mean	Standard Deviation	Sub-variables	Mean	Standard Deviation
EP	3.567	0.8809	EP1 The product range of the website is clear	3.44	0.770
			EP2 The products of other website are better than at the site	3.75	0.810
			EP3 I can find most of the products I need on the website	3.76	0.770
			EP4 There are good selections for products at the website	3.66	0.770
EI	4.329	0.24779	EI1 The website provides sufficient product information	4.45	0.270
			EI2 The website presents effective visual images of the products	4.45	0.270
			EI3 The website provides product information easy to understand	4.44	0.270
			EI4 The website presents product information that is relevant and relevant	4.44	0.270
ES	2.991	0.91199	ES1 I have received prompt services from the website	3.2	0.770
			ES2 The time spent by the website is well organized and perfectly suited	3.26	0.810
			ES3 It is easy to find customer service representatives if there is a problem	2.96	0.810
			ES4 I am satisfied with the delivery made of the website over express delivery, home delivery	3.89	0.810
EE	3.991	0.91199	EE1 The website is convenient to search for a product	4.13	0.770
			EE2 The website is easy to navigate around pages	4.11	0.770
			EE3 The website provides a tool that enables product comparison	4.12	0.770
			EE4 The website provides assurance for security of personal information	3.73	0.770
OS	4.13	0.5707	OS1 I feel satisfied with my overall experience	4.25	0.270
			OS2 I would recommend this company to other people	4.25	0.270
			OS3 I will continue to do online shopping in the near future	4.2	0.270
			OS4 The online shopping experience is good compared to other people	4.08	0.270

Table 1: Descriptive Analysis

neutral over the construct in the questionnaire. Lastly, “Online customer satisfaction” has a mean value of 4.16 whereby “I feel satisfied with my overall experience”, “I have made right choices during the experience” and “I would recommend this company(s) to other people” have the highest mean score at 4.25.

RELIABILITY TEST

A reliability test is recommended to perform for usage of the multiple regression models via the Cronbach’s Alpha method, especially for newly developed questionnaire. Cronbach’s Alpha value that is more than 0.7 is accepted (Taber, 2018).

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
EP_Mean	16.0351	5.147	.693	.871
EI_Mean	16.1916	4.933	.739	.860
ES_Mean	16.4717	4.411	.762	.854
EE_Mean	16.2698	4.531	.707	.868
OS_Mean	16.2245	4.651	.752	.856

Table 2: Reliability Test: Cronbach’s Alpha

Table 2 indicates that all 5 variables are reliable. Experience with product scale conveyed the highest alpha value ($\alpha = .871$), followed by Experience with e-platform ($\alpha = .868$), Experience with online information ($\alpha = .860$), Online customer satisfaction ($\alpha = .856$) and Experience with services ($\alpha = .854$). Therefore, the results shown concludes that the questionnaires in this study are reliable which can be used for intended usage in the coming chapters.

MULTICOLLINEARITY

It is crucial to investigate the correlation of each of the independent variables. According to Gjonikarameta et al. (2021), correlation coefficients (r value) that are within the range of 0.5 and 0.7 indicate a moderate magnitude in correlation while r value more than 0.7 indicates that the variables are highly correlated. From Table 3, the correlation matrix shows that each of the independent variables have a moderate correlation. Although the correlation between “Experience with service” and “Experience with online information” are the highest at the r value of 0.678, it is still within a moderate range which is acceptable and is not leading to multicollinearity issues.

Secondly, variance inflation factor (VIF) is

Correlations				
	EP_Mean	EI_Mean	ES_Mean	EE_Mean
EP_Mean	Pearson Correlation	1	.668**	.615**
	Sig. (2-tailed)		<.001	<.001
	N	147	147	147
EI_Mean	Pearson Correlation	.668**	1	.678**
	Sig. (2-tailed)	<.001		<.001
	N	147	147	147
ES_Mean	Pearson Correlation	.615**	.678**	1
	Sig. (2-tailed)	<.001	<.001	
	N	147	147	147
EE_Mean	Pearson Correlation	.511**	.566**	.617**
	Sig. (2-tailed)	<.001	<.001	<.001
	N	147	147	147

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

Table 3: Correlation of Independent Variables

Coefficients ^a			
Collinearity Statistics			
Model	Tolerance	VIF	
1	EP_Mean	.499	2.004
	EI_Mean	.424	2.360
	ES_Mean	.435	2.301
	EE_Mean	.571	1.751

a. Dependent Variable: OS_Mean

Table 4: Collinearity Tolerance and VIF

assessed in this study to test the multicollinearity. Based on the rule of thumb, collinearity tolerance and VIF should be more than 0.1 and less than 10 respectively (Senaviratna & A-Cooray, 2019). Based on Table 4, the results show that each of the variables has a low collinearity tolerance and variance inflation factor value which ranges between 0.424 to 0.571 and 1.751 to 2.360 respectively. From the statistics below, it is concluded that the data in this study is free from collinearity issues.

REGRESSION

Firstly, the first hypothesis (H1) gives a p-value of 0.025, which is significant and indicates that there is experience with the product having a 17.3% positive significant impact on online customer satisfaction among Millennials. The experience with products includes, (i) clear product range; (ii) complete product portfolio; and (iii) attractive price point. Given that the mega trends of individualisation and consumerism are getting more prominent, especially among the Millennials, e-commerce provides a good platform to address the consumer pain (difficulties to purchase the product which fulfilled their needs) (Vidili, 2021). Hence, this enhances the online customer satisfaction which helps to improve the value proposition of the e-commerce industry. Besides, having favourable experiences with products harness the megatrends of convenience on today's consumer market (Kumar, 2022). Given that time is crucial for convenient consumers (especially among the Millennials who are struggling in multitasking work-life priorities), a highly efficient solution that drives convenience via wide product assortment in e-commerce enhances online customer satisfaction (Angus, 2021).

Secondly, H2: Experience with online information has a positive significant impact on online customer satisfaction among Millennial generates a p-value of 0.34, with beta value of 0.08. This means that experience with online only gives 8% of impact on online customer satisfaction among Millennials, and therefore the

hypothesis is being rejected. Online information experiences comprise information received from e-commerce platforms is in-the-know, sufficient, and complete (Pham & Ahammad, 2017). From the result, this hypothesis is being rejected because positive experience with online information does not give a positive online customer satisfaction. Given the salient demand in e-commerce among the Malaysia Millennial (online penetration of 90%), online product information has shifted, in particular cognitive elements (especially in online information) have changed to become expected delivery from online platforms (Department of Statistics Malaysia, 2021a). The technology savvy characteristic of Millennial is expected to be more prominent among MBA students (Thompson, 2023). In the era where e-commerce is less mature, Millennials who are technology savvy means that they just need to know the basis of the way around e-commerce (Bubanja & Vidas-Bubanja, 2022). A seismic shift is in progress in the expectation of technology savvy Millennials in e-commerce nowadays. Today, Millennials are expecting e-commerce industry players to continuously raise the bar by fulfilling more emotional elements to enhance online customer satisfaction (Pradeep & Vakayil, 2022). Consistent with the law of diminishing marginal utility theory, Millennials treat experience with online information as fundamental and to enhance online customer satisfaction, it is expected to go beyond giving positive experience with online information.

Thirdly, experience with service has a positive significant impact on online customer satisfaction among Millennials (H3) bounces 0.005 p-value. This gives a significant relation of independent and dependent variables in which experience with service has 23.3% positive significant impact on online customer satisfaction among Millennials in Malaysia. The scope of experience with service consists of efficient post-delivery support, proactive customer services, and prompt delivery services (Cao, Ajjan & Hong, 2018). In the digital era today, technology enables convenience and empowers online consumers with control across

all areas of their lives, including online shopping experience. Hence, the age of on-demand translated the pool of Millennials with high expectations on online customer experience, especially in post-purchase online experience with services (Tanniru & Peral, 2021). This means that Millennials in Malaysia are expecting online experience with services to be fulfilled at anytime and anyplace with frictionless experiences. Linking to experiential learning theory, as online penetration maturity increased among the Millennials in Malaysia, willingness to pay a premium are getting more prominent with a high demand in value in-depth e-retailers engagement (Grabiwoda & Mróz, 2022). This includes seamless end-to-end solutions which includes 24-hours customer care services, exceptional delivery services with flexible delivery and return options and more (Kantar, 2021). Besides, the online consumer pain in the fear of heightened counterfeits risk in e-customer to customer (eC2C) segment in Malaysia, experience with services such as convenient and seamless return process will elevate online customer satisfaction (Yusoff et al., 2020). In conclusion, similar to past research findings, positive experience with services is moving in tandem with online customer satisfaction, and therefore the hypothesis is supported. 0.005 p-value 0.025

Lastly, this research developed less than 0.001 p-value in H4, in which experience with e-platform has a positive significant impact on online customer satisfaction among Millennials. From Table 5 experience with service creates 41.5% positive significant impact on online customer satisfaction among Millennials in Malaysia. The findings in this research originate that the experience with e-platform has the highest beta value among the four independent variables. Rita, Oliveira, and Farisa (2019) categorised experience of e-platform into two main categories, namely website design and search engine excellence. COVID-19 has taught everyone (especially among the Millennials) to value a well-balanced priority in life. Since pandemic, routines have been reimagined and Millennials are more determined than ever to find

a balance of that. As lives are getting busier than ever, online shopping experiences that provide solutions that eliminate the pressure from their chorus will enhance online customer satisfaction (Shneiderman, 2022). Particularly, positive experience with e-platform is an enabler and acts as a pain reliever to Millennials in Malaysia. In the eC2C segment which is categorised by wide and messy product assortments with multiple price points of a similar product, positive experience with e-platform (such as search engine, product comparison tools) will enhance online customers satisfaction (Yalan & Wei, 2021). Besides, an

Hypotheses	Beta coefficient	Significant (P<0.05)	Decision
H1 Experience with product has a positive significant impact on online customer satisfaction among Millennials	0.173	0.025	Accept
H2 Experience with online information has a positive significant impact on online customer satisfaction among Millennials	0.08	0.34	Reject
H3 Experience with service has a positive significant impact on online customer satisfaction among Millennials	0.233	0.005	Accept
H4 Experience with e-platform has a positive significant impact on online customer satisfaction among Millennials	0.415	<0.001	Accept

Table 5: Summary of Hypothesis Testing

e-platform with an effective website design will enhance online customer satisfaction. This is aligned with the perceived value theory of which online consumer will assess the utility of a product or service based on the observations of what is received and what is provided (Lin, Wang & Huang, 2020). Enhanced experience with e-platform (including aesthetic and quality information in the website design) will act as a beacon to attract customers and generate favourable online customer satisfaction (Khatib et al., 2019).

DISCUSSION AND RECOMMENDATION

From the research results, experience with online information is the only independent variable that has insignificant impact on online customer satisfaction whereas the other three shows significant impact. Consequently, this study concluded that experience with product; experience with services; and experience with e-platform have significant positive impact on online customer satisfaction. Experience with e-platform is tested to have the most significant positive impact on online customer satisfaction at the p-value of less than 0.001. This reveals that the e-retailers should priorities in enhancing experience with e-platform

in order to generate positive online customer satisfaction. Followed in a sequential manner, experience with e-platform (with p-value of 0.005) and experience with product (with p-value of 0.025) both has a significant positive impact on online customer satisfaction.

In general, online shopping experience is pivotal in influencing the online customer satisfaction among the Millennial in Malaysia (Pham & Ahammad, 2017). Given the salient growth in Malaysia ecommerce industry and shirking cash outlay among the Millennials in the era of inflation today, understanding the determinants of online shopping experience and online customer satisfaction are becoming more prominent in order to create a unique selling proposition which stands up in the hyper-competitive e-commerce industry today (Kotabe & Helsen, 2022).

IMPLICATION

Firstly, to e-retailers, by understanding the determinants of online shopping experiences that positively impact the online customer satisfaction, e-retailers can improve the business performance by focusing on enhancing the online shopping experiences that are relevant to online customer satisfaction. To create and implement effective business strategy, it is imperative to have a thorough understanding of the strategic customer base in e-commerce in Malaysia (in this case the Millennials) (Mohd-Satar, Dastane & Ma'arif, 2019). E-retailers who prioritises values beyond the fundamental online customer experiences cultivate lasting customer loyalty and setting a good base for commanding a premium in the online market-place (Kantar, 2021). Hence, the research findings are crucial to reduce business risk by investing in areas which are crucial in enhancing online customer satisfaction and therefore improve business profitability. This also helps in enhancing customer-centric marketing plans that creates competitive advantage (Madhani, 2019). For example, an e-retailer should focus on investing in providing seamless end-to-end solutions to online customers using AI and excellent customer

services given that Millennials in Malaysia valued efficient-based solutions which is lacking in the e-commerce industry.

Secondly, the knowledge from the study aids the human resource department in the e-commerce industry. The research outcome helps the human resource department to shape an integrated human resource strategy in the company (Azizi et al., 2021). This includes provision of guidance in recruiting the right talent that drives positive online customer satisfaction in a company, such as recruiting talents with core skills in having empathic skills, upright communication, and problem-solving skills (Merkert & Hoberg, 2022). Also, it also helps to design and develop the key performance indicators which is crucial in a business. With that, it helps in providing clearer guidance on a talent's development areas which aid in provision of training throughout the organisation and practicing the value is perceived positive in generating online customer satisfaction, especially in the element of experience with product, services, and e-platform (Chien et al., 2020).

Lastly, this study is crucial to academicians to enhance their existing knowledge on online shopping experience and online customer satisfaction. It also provides a good foundation of knowledge for future researchers to develop an in-depth study on the similar topic via focusing on a diverse focus group or sample frame and expansion of sample size for formation of a reminiscent conclusion.

LIMITATION OF THE STUDY

This study holds a few inherent limitations. Firstly, in terms of data collection, this study has scoped in a focus group for measurement of perception on online shopping experience and online customer satisfaction, namely from MBA students in Universiti Malaya (UM) and Universiti-Malaya-Wales (UM-Wales) with online shopping experience in the past. Hence, the research findings might not be representative of the population since users who fall outside the sampling frame

in this study might have different determinants of online shopping experience and online customer satisfaction. Secondly, given that this study adopts a purposeful sampling method, opponents believe that this method is susceptible to errors and biased opinions. Lastly, this is quantitative research captures an effective response by solely relying on a five-point Likert scale questionnaire, especially this is a social science topic.

FUTURE STUDY RECOMMENDATIONS

To address the limitations in this study, it is important to expand the sample size to a larger diverse group. It is important to broaden the research scope and cross-validate the findings with the current sample frame in an ideal context. This gives a good opportunity for future research given that multi-demographic characteristic helps to provide robust research findings. Besides, future researchers can consider utilising a mixed-method research design with an inclusion of systematic interviews and questionnaires to form a more exhaustive insight.

REFERENCES

- Angus, A., & Westbrook, G. (2021). 10 global consumer trends 2021. *Euromonitor International*.
- Azizi, M. R., Atlasi, R., Ziapour, A., Abbas, J., & Naemi, R. (2021). Innovative human resource management strategies during the COVID 19 pandemic: A systematic narrative review approach. *Heliyon*, 7(6), e07212. <https://doi.org/10.1016/j.heliyon.2021.e07212>
- Briedis, H., Moore, K., Pennington, A., & Raman, M. (2020). *Consumer sentiment: The experience economy gets personal*. McKinsey & Company.
- Bubanja, I., & Vidas Bubanja, M. (2022). Managing trade transactions in the COVID era: The rise of e-commerce. *Journal of Engineering Management and Competitiveness*, 12(1), 20–34.
- Bushe, B. (2019). The causes and impact of business failure among small to micro and medium enterprises in South Africa. *Africa's Public Service Delivery and Performance Review*, 7(1), 1–26.

- Cao, Y., Ajjan, H., & Hong, P. (2018). Post purchase shipping and customer service experiences in online shopping and their impact on customer satisfaction. *Asia Pacific Journal of Marketing and Logistics*, 30(2), 400–416.
- Chen, S. J., & Chang, T. Z. (2003). A descriptive model of online shopping process: Some empirical results. *International Journal of Service Industry Management*, 14(5), 556–569.
- Chien, G. C., Mao, I., Nergui, E., & Chang, W. (2020). The effect of work motivation on employee performance. *Journal of Human Resources in Hospitality & Tourism*, 19(4), 473–495.
- Department of Statistics Malaysia. (2021a). ICT use and access by individuals and households survey report. <https://www.dosm.gov.my>
- Department of Statistics Malaysia. (2021b). Malaysia e-commerce income soared 17.1 per cent to RM279.0 billion in Q3 2021. <https://www.dosm.gov.my>
- Duggal, E., & Verma, H. V. (2022). Offline to online shopping: Shift in volition or escape from violation. *Journal of Indian Business Research*, 14(3), 339–357.
- Gao, W., & Xu, X. (2021). Technology touchpoints in digital commerce. *Journal of Business Research*, 134, 1–10.
- Gjoni Karameta, A., Fejzaj, E., Mlouk, A., & Sila, K. (2021). Qualitative characteristics of financial reporting. *Academic Journal of Interdisciplinary Studies*, 10(6), 35–47.
- Gligor, D. M., & Maloni, M. J. (2022). More is not always better: Value co creation fit and customer satisfaction. *Journal of Business Logistics*, 43(2), 209–237.
- Grabiwoda, B., & Mróz, B. (2022). *The economics of digital shopping in Central and Eastern Europe*. Cambridge University Press.
- Guan, J., Lau, Y. Y., Yang, H., & Ren, L. (2022). To buy or not to buy: Young consumers and smart products. *Young Consumers*, 23(1), 90–111.
- Gupta, D. (2023). *Checkpoint sociology: A cultural reading of policies and politics*. Routledge.
- Hageman, M. (2022, August 12). Southeast Asia e-commerce market projected to grow 18% in 2022. *eCommerce News Asia*. <https://ecommercenews.asia>

- Herring, H. (2019). Connecting generations. *Rowman & Littlefield*.
- Hoque, K. E., Kenayathulla, H. B., Subramaniam, M. V., & Islam, R. (2020). Relationships between supervision and teachers' performance. *SAGE Open*, 10(2). <https://doi.org/10.1177/2158244020925501>
- Indartoyo, I. (2021). Consumer selection of e marketplace type. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(1), 322–332.
- Kantar. (2021). Winning omnichannel Asia: Riding the e commerce wave. *Kantar Group*.
- Karim, M. W., Haque, A., Ulfy, M. A., Hossain, M. A., & Anis, M. Z. (2020). Factors influencing e wallet usage. *Journal of International Business and Management*, 3(2), 1–12.
- Khatib, S. M., Seong, L. C., Chin, W. S., & Tze, H. K. (2019). Factors of e service quality among millennials. *International Journal of Economics & Management*, 13(1), 1–15.
- Kotabe, M., & Helsen, K. (2022). *Global marketing management* (8th ed.). Wiley.
- Kumar, S. (2022). Sustainability premium: Review of sustainable bonds. *Academy of Accounting and Financial Studies Journal*, 26(2), 1–18.
- Lin, K. Y., Wang, Y. T., & Huang, T. K. (2020). Antecedents of mobile payment usage. *Online Information Review*, 44(1), 299–318.
- Madhani, P. M. (2019). Building a customer centric supply chain strategy. *IUP Journal of Business Strategy*, 16(2), 28–42.
- Merkert, R., & Hoberg, K. (2022). Future skills in logistics. In *Global logistics and supply chain strategies for the 2020s* (pp. 1–27). Springer.
- Milioti, C., Pramataris, K., & Zampou, E. (2020). Delivery methods in e grocery. *International Journal of Retail & Distribution Management*, 49(2), 281–298.
- Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests. *Annals of Cardiac Anaesthesia*, 22(1), 67–72.
- Mofokeng, T. E. (2021). Online shopping attributes and customer satisfaction. *Cogent Business & Management*, 8(1), 1968206.
- Mohd Satar, N. S., Dastane, D. O., & Ma'arif, M. Y. (2019). Customer value proposition for e commerce. *International Journal of Advanced Computer Science and Applications*, 10(2), 454–458.
- Nanda, A., Xu, Y., & Zhang, F. (2021). COVID 19 and acceleration of e commerce. *Journal of Urban Management*, 10(2), 110–124.
- Olsen, L. M., Vogt, C., & Andereck, K. (2018). Motivations to volunteer. *Tourism Recreation Research*, 43(1), 68–81.
- Pham, T. S. H., & Ahammad, M. F. (2017). Online customer satisfaction. *Technological Forecasting and Social Change*, 124, 332–342.
- Poitras, I., et al. (2019). Validity of wearable sensors. *Sensors*, 19(7), 1555.
- Pradeep, E., & Vakayil, S. (2022). Predicting repurchase dynamics. *Academy of Marketing Studies Journal*, 26(2).
- Rita, P., Oliveira, T., & Farisa, A. (2019). E service quality and satisfaction. *Heliyon*, 5(10), e02690.
- Rose, S., Clark, M., Samouel, P., & Hair, N. (2012). Online customer experience. *Journal of Retailing*, 88(2), 308–322.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (5th ed.). Pearson.
- Saylikhanov, S. (2019). Factors influencing customer satisfaction toward Lazada. IIUM.
- Senaviratna, N. A. M. R., & Cooray, T. M. J. (2019). Diagnosing multicollinearity. *Asian Journal of Probability and Statistics*, 5(2), 1–9.
- Shneiderman, B. (2022). *Human centered AI*. Oxford University Press.
- Sneader, K., & Singhal, S. (2021). The next normal arrives. *McKinsey & Company*.
- Subramaniam, P. (2022, March 9). Millennials reshaping asset management. *The Edge Markets*. <https://www.theedgemarkets.com>
- Taber, K. S. (2018). The use of Cronbach's alpha. *Research in Science Education*, 48, 1273–1296.
- Tanniru, M., & Peral, J. (2021). Digital leadership in education. Emerald.
- Thompson, J. (2023, May 10). Tech savvy millennials at work. *Business.com*. <https://www.business.com>
- Tyrväinen, O., Karjaluoto, H., & Saarijärvi, H. (2020). Personalization and hedonic motivation. *Journal of Retailing and Consumer Services*, 57, 102233.
- Vidili, I. (2021). Customer experience as competitive advantage. IGI Global.
- Yalan, Y., & Wei, T. (2021). Deep logistic learning for e commerce. *Arabian Journal for Science and Engineering*.
- Yusoff, H., Alomari, M. A., Latiff, N. A., & Hamzah, W. M. A. F. W. (2020). Customer satisfaction in e commerce. *International Journal of Engineering Trends and Technology*, 32–37.