FACTORS INFLUENCING CONSUMERS PURCHASE INTENTION THROUGHT TIKTOK OF CHANGSHA, CHINA RESIDENTS

Dr. Changhan Li
Dr. Lu Zhu
Asst. Prof. Dr. Thanawan Phongsatha
Assumption University
Bangkok, Thailand

Email: lee4231966@gmail.com

Abstract

The purpose of this study was to identify the factors influencing Changsha residents' purchase intention through TikTok short video platform. The variables used in this research framework including trust, perceived media richness, perceived price fairness, perceived convenience, and perceived host interaction. Purposive sampling technique was employed to recruit 200 respondents in Changsha City to participate in the study. The Multiple Linear Regression analysis was implemented as the statistical analysis. The results revealed that Perceived Media Richness was the most influent factor affecting consumers' shopping through TikTok short video platform for consumers in Changsha District. As a result, it was evident that the online store owners whose marketing their products via TikTok short video platform should emphasis on perceived media richness factor to enhancing consumers' purchase intention.

Keywords: *Perceived media richness, Perceived price fairness, Perceived host interaction, Purchase intention, Tiktok*

1. INTRODUCTION

A growing number of smartphones and other Internet-enabled devices via its applications and services are making the Internet more accessible and more productive. This has led to a huge increase in online shopping especially since the global COVID-19 pandemic in 2019, which has been increased the level of competition in the Internet market (Vazquez and Xu, 2009; Limbu et al., 2012). Compared with bricks-and-mortar shopping, where consumers must go to stores to buy goods, online shopping creates opportunities for different businesses to directly reach consumers around the world (Laohapensang, 2009; Al-Maghrabi et al., 2011).

TikTok, a social software for short videos of music creativity, was launched by the Chinese company ByteDance on September 20, 2016. It is a social platform for short videos for all

ages, and it is essentially a youth-focused community of short music videos, where users can select songs, pair them with short videos and create their own compositions (TikTok, n.d). In November 2017, ByteDance purchased Musical.ly and merged it with TikTok in 2018. With over 176 million downloads in the third quarter of 2019, TikTok was the second most downloaded Android app worldwide and the fifth most downloaded app worldwide from the Apple store (Business of Apps, 2020; Priori Data, 2020a; b).

With the unique character of the application, which allows people to consume content at the short period of time, TikTok has been widely used not only for entertainment, but is adapted for marketing as well. Due to its ability to host short videos and live streaming, the content especially the advertisements are conveniently broadcast to majority of people.

1.1 Purpose of the study
The purpose of this study is to identify factors influencing Changsha residents' towards purchase intention through TikTok short video platform.

2. LITERATURE REVIEW
2.1 Perceived media richness
Media richness refers to the ability to carry and deliver information in varying amounts of content through the media. The Media Richness Theory is very practical in analyzing the media options of consumers and has been widely used in marketing, mobile commerce, information systems and e-learning, producing good results (Lee et al., 2009). This theory originated in the early 1980s (Daft & Lengel, 1984). Daft and Lengel (1986) emphasized that the most critical problem in this theory is the complexity of information processing behavior in organizations. According to the Media Richness Theory, Koo et al. (2011) determined that the key to improving communication is to match media attributes with task characteristics. Two forces that shape information processing in organizations have been identified—uncertainty and ambiguity (Lim and Benbasat, 2000). Therefore, Daft and Wiginton (1979) concluded that the standard for measuring media richness was mainly based on the number of clues in the communication media, the instantaneity of feedback, linguistic diversity and individualization.

2.2 Perceived price fairness
Perceived price fairness refers to consumers' evaluation and related sentiment on whether the difference between seller's price and relative price is reasonable, acceptable, or reasonable (Xia et al., 2004). Maxwell and Comer (2010) emphasized price research that maximizes seller's profit from a managerial or quantitative perspective (such as pricing strategy and price model). Just as dynamic pricing is so prevalent in e-commerce, so is the uproar over consumer complaints about perceived price inequity (Cox, 2001). The perception of unfair prices can lead consumers to be dissatisfied, reduce consumption, spread negative information, or engage in other actions that worsen the reputation or trust of sellers (Kannan & Kopalle, 2001; Suter

& Hardesty, 2005). Therefore, for the harmonious coexistence between consumers and merchants, researchers should pay more attention to the issue of price fairness (Kung et al., 2002), which is not only helpful to overcome the negative emotional reactions of consumers caused by dynamic pricing, but also the most important condition for dynamic pricing to function (Reinartz, 2001).

2.3 Perceived convenience

The concept of convenience is crucial to explain why customers may shop electronically (Lai and Chang, 2011). Research by Seiders et al. (2000) shows that the convenience of shopping is related to the speed and convenience of shopping. Morganosky (1986) believes that time is a limited and precious resource for consumers. Therefore, investment purchase time is another type of transaction cost (Brown, 1990). In order to reduce the cost associated with time and energy, people can do online shopping at home, which greatly reduces the waste of customers' time. In general, while TikTok streams last a certain amount of time, usually 30 minutes or an hour, consumers can order goods at any time. If the item sells quickly, the program can notify the consumer that the item will be sold out before a predetermined time.

2.4 Perceived host interaction

Host interaction is defined as the interactive relationship between a TikTok live host and an online audience. Liaw et al. (2007) believe that broadcast hosts try to stimulate the audience's interest in goods, thus increasing consumers' purchase intention. Park and Lennon (2004) pointed out that if the audience had a good impression on the host, they would be inclined to buy goods. Therefore, the perceived host interaction can stimulate the audience to make purchases (Lystig, Fritchie & Johnson, 2003). Burgess (2003) believes that the program host can personally use the information that the product is considered to be more or less risky during the live broadcast to alleviate the uncertainty before and during the purchase. Reducing risk perception will increase consumers' trust in products or services (McKnight et al., 2002). An excellent TV host may have a "halo effect", increasing consumers' trust in retailers, and thus increasing the willingness to buy TV shopping. Therefore, people may have a positive willingness to buy the products or services introduced by their favorite presenters and the stores they can trust (Gefen, 2002). Perceived host interactions lead to a greater purchase intention among customers who trust the store than those who do not. Therefore, in TV shopping, the better the synergy between trust and perceived host interactions is, the higher the purchase intention will be.

2.5 Trust

Trust can be defined as the willingness of one party to feel vulnerable to the conduct of another party based on the expectation that the other party will perform a particular act that is important to the principal (Mayer et al., 1995). In the context of the prevalence of online shopping, previous studies have highlighted the importance of trust as a key predictor of individuals'

buying attitudes and intentions (Hassanein & Head, 2007; Lin, 2011; Hsu et al., 2013). Live shopping is considered to have a relatively high risk for consumers (Pavlou et al., 2007). This means that live-streaming shoppers' attitudes towards products or services are mainly influenced by perceived trust (Van Der Heijden et al., 2003). In this context, Lin (2011) reveals that the increasing uncertainty and dynamics in cyberspace make online trust a key determinant of online shopping attitude. Trust is a key influencing factor of e-commerce and live shopping (Abbad et al., 2011).

2.6 Purchase intention

Hsu (1987) pointed out that purchase intention refers to a kind of exchange behavior generated by consumers' overall evaluation of a product. It is a perceptual response to a person's attitude towards an object. In other words, consumers' evaluation of products or attitudes toward brands combine with external stimulus factors to form purchase intention. Dodds et al. (1991) believe that purchase intention represents the possibility of consumers to purchase products. Engel et al. (2001) proposed that buying intention involves subjective judgment of future behavior. According to Shao et al. (2004), purchase intention refers to an attempt to purchase a product or visit a store that offers a service. According to the research of Kahneman et al. (1986), consumers' purchase intention is determined by their perception of price fairness. Based on the previous results by Kahneman et al. (1986), the same positive correlation between perceived price fairness and purchase intention under dynamic pricing environment.

3. METHODOLOGY

The current research on factors influencing Changsha residents' purchase intention through TikTok short video platform is a quantitative research. The online questionnaires were employed as a tool for data collection. Referring to theories, literature reviews and various related researches, the research framework and methodology developed as follow.

3.1 Research Framework

The conceptual framework was adapted from *Exploring the synergy effect of trust with other beliefs in television shopping* by Yen (2019), which explored consumers' purchase intention through television shopping.

The independent variables comprised of trust, perceived media richness, perceived price fairness, perceived convenience, and perceived host interaction. The dependent variable is purchase intention as shown in figure 1.
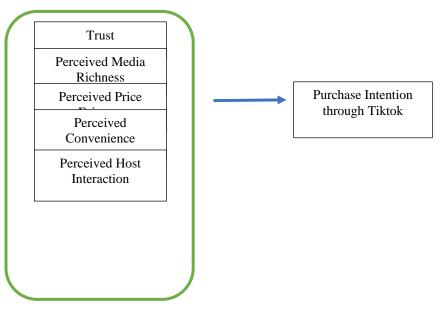
Figure 1: Conceptual framework

From the conceptual framework, the hypothesis was framed as follows.

H_0: Trust, Perceived media richness, Perceived price fairness, Perceived convenience, and Perceived host interaction do not statistically significant influence on consumers' purchase intention through TikTok.

H_a: Trust, Perceived media richness, Perceived price fairness, Perceived convenience, and Perceived host interaction statistically significant influence on consumers' purchase intention through TikTok.

3.2 Population and sample

This study needs to analyze impact of purchase intention toward consumers through TikTok. The population are residents of Changsha city, China who have experiences in TikTok Shopping. The online questionnaire survey was employed as the research instrument to collect data from 200 samples with the purposive sampling strategy.

3.3 Pilot test

In order to ensure the reliability of the questionnaire, the internal consistency reliability was employed. The pilot test was conducted with 30 target respondents. According to Sekaran (1992), the Cronbach's alpha must be greater than 0.6 to ensure the reliability of the instrument. As shown in table 1, the Cronbach's alpha value of all variables studied are above 0.6, indicating the reliability of the questionnaire.

Since the questionnaire was adopted from the previous research, it is evident that the content validity has been proven. Therefore, it is indicated that the questionnaire is valid.

Table 1: Internal Consistency Reliability of the Pilot Test (n=30)

Variable	Cronbach's Alpha	Number of Items
Perceived Media Richness	.88	5
Perceived Price Fairness	.75	4
Perceived Convenience	.76	4
Perceived Host Interaction	.76	4
Trust	.67	5
Purchase Intention	.61	3

4. RESULTS AND DISCUSSION

The results of the study analyzed and tested the factors influencing customers' purchase intention through TikTok video platform by employing Multiple Linear Regression as the statistical analysis.

4.1 Demographic Information

Descriptive analysis was used to describe data from 200 respondents. Table 2 shows the demographic information. According to the screening method, 100% of the respondents were Changsha residents who had TikTok shopping experience. The majority of the respondents were female (n=126), which was contributed 63% of respondents, while male was 74 (37%). The majority of the respondents was in the age range of 18 and 39 years old (n=166), which was contributed 83% of the total respondents. Another 12.5% (n=25) was in the age range of 40 and 59 years old. The other 2.5% and 2% were at the age of over 60 years old (n=5), and under 18 years old (n=4), respectively. As far as the average income, 42% (n=84) of respondents reported that they earn less than 3,000 RMB per month, while 33.5% (n=67) earned between 3,000 and 5,000 RMB. Another 13.50 % (n=27) earn between 5,000 and 8,000 RMB, and 11% (n=22) earn over 8,000 RMB. The majority of respondents were students, which was accounted for 43.50% (n=87), while 42% (n=84) reported that their occupations were others, which were not listed in the question. There were 9% (n=18) business owners, while 5.5% (n=11) were civil servants. The demographic information also asked about the frequency of using TikTok for shopping. The majority 66%, n=132 of the respondents reported that they used the application for at least once a month, while 23% (n=46) reported that they use TikTok weekly. The rest 9% (n=18) reported that they used TikTok more than 3 times a week, while 2% (n=4) reported that they used TikTok daily.

4.2 Inferential Statistics

In this research, the Multiple Linear Regression (MLR) method was used to analyze the hypothesis whether Trust, Perceived media richness, Perceived price fairness, Perceived convenience, and Perceived host interaction significantly influence consumers' purchase

intention through TikTok short video platform. The results are shown in the table 2: Model Summary of Hypothesis Testing.

Table 2: Model Summary of Hypothesis Testing

Model Summary			
R	R Square	Adjusted R Square	Std. Error of the Estimate
0.65	0.43	0.41	1.31

From table 2, the result of Multiple Linear Regression (MLR) analysis tested relationship between the dependent variable which is purchase intention (PI) for Tiktok shopping in Changsha city and independent variables of Trust, Perceived media richness, Perceived price fairness, Perceived convenience, and Perceived host interaction. The result showed that R Square value is 0.43, which means that the independent variables (TR, PMR, PPF, PC, and PHI) can be explained by the dependent variable (PI) for 42.9%.

Table 3: ANOVA Statistics of Hypothesis Testing

ANOVA					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	249.01	5	49.8	29.16	0.00
Residual	331.37	194	1.71		
Total	580.38	199			

Note: Dependent variable is PI. Independent variables are TR, PMR, PPF, PC, and PHI

From table 3, the F-test result showed that sig. value (P-value) is 0.00 which is less than 0.05 significant level. It is evident that the regression model is statistically significant. As the result, Trust, Perceived media richness, Perceived price fairness, Perceived convenience, and Perceived host interaction statistically significant influence the purchase intention through TikTok shopping in Changsha city, China.

Table 4: Coefficient Values of Hypothesis Testing

Coefficients			
Variable	Unstandardized Coefficients(β)	Sig.	VIF
Trust	0.07	0.02	1.25
Perceived media richness	0.16	0.00	1.62
Perceived price fairness	0.16	0.00	1.42
Perceived convenience	0.11	0.05	1.34
Perceived host interaction	0.13	0.02	1.47

Note: Dependent variable is purchase intention for TikTok shopping in Changsha city, China

From table 4, when considered each independent variable separately, the Perceived convenience (PC) did not show statistically significant (p=0.05). It exaplained that if the researcher considered this variable alone, the Perceived convenience contributed the least influence to purchase intention (B). The Unstandardized Coefficient Beta showed that the level of effectiveness of significant variables that the strongest were Perceived media richness (0.16) and Perceived price fairness (0.16), Perceived host interaction (0.13). In addition, variance inflation factors (VIF) also were investigated in term of multi-collinearity problem and found that VIF value of Trust, Perceived media richness, Perceived price fairness and Perceived host interaction are 1.25, 1.62, 1.42 and 1.47 respectively which all less than 5 therefore the multi-collinearity problem is considerable and not a critical issue in this regression analysis (Johnston et al., 2018).

5. CONCLUSION

This study takes TikTok shopping as the product and citizens of Changsha City as the research samples to conduct an empirical study on TikTok shopping. The factors of Tiktok shopping considered in this study is: Trust, Perceived Media Richness, Perceived price fairness, Perceived Convenience and Perceived Host Interaction. However, there are some limitations to the study. The results generated by only 5 independent variables may not be the real influencer of TikTok shopping purchase intention. It is possible that other factors may also affect TikTok shopping intention, which should be investigated. However, the results of this study will help those who own businesses and TikTok shopping better understand and understand how to increase their sales through TikTok.

The purpose of this research was to study the factor that impact on Tiktok shopping purchasing intention by using multiple linear regressions. The conceptual framework is adapted from Exploring the synergy effect of trust with other beliefs in television shopping by Yen (2019). The result of this model can explain the dependent variable by 41.4% with Perceived media richness factors is the highly-influence factor toward Tiktok shopping purchasing intention (β = 0.16).

The results show that, by improving TikTok shopping, Perceived Media Richness has a significant impact on enterprises' TikTok purchase intention. Therefore, we must pay attention to Perceived Media Richness. Secondly, factors such as Perceived Price Fairness and Perceived Host Interaction are the secondary and third factors affecting firm performance. Tiktok shopping must develop from Perceived Media Richness, Perceived Price Fairness and Perceived Host Interaction of the platform to attract more consumers. And that leads to the probability of buying.

The study was conducted only in Changsha city. In addition, further research can be more effectively extended to survey areas in other Chinese cities. In addition, other factors should

be added to improve the reliability of the study results, as well as other demographic factors to carefully examine the relationship with TikTok shopping intention. It is suggested that the study would be more effective if it could be conducted in more other areas.

REFERENCES

Abbad, M., Abbad, R., & Saleh, M. (2011). Limitations of e-commerce in developing. countries: Jordan case. *Education, Business and Society: Contemporary Middle Eastern Issues, 4*(4), 280-291, doi: 10.1108/17537981111190060.

Brown, L.G. (1990). Convenience in services marketing. J*ournal of Services Marketing*, *4*(1), 53-59.

Burgess, B. (2003). A comparison of TV home shoppers based on risk perception. *Journal of Fashion Marketing and Management*, *7*(3), 259-271.

Cox, J. L. (2001). Can differential prices be fair? J*ournal of Product & Brand. Management*, *10*(5), 264-75.

Daft, R. L., & Lengel, R. (1984). Information richness: a new approach to managerial. behavior and organization design. In Staw, B. M. and Cummings, L. L. (Eds), *Research in Organization Behavior,* (Volume 6), JAI Press, Greenwich, CT, pp. 191-233.

Daft, R. L., & Lengel, R. (1986). Organizational information requirements, media. richness and structural design. *Management Science*, *32*(5), 554-571.

Daft, R. L., & Wiginton, J. C. (1979). Language and organization. *Academy of. Management Review*, *4*(2), 179-191.

Dodds, B. W., Monroe, K. B., & Grewal, D. (1991). Effect of price, brand, and store. information on buyer's product evaluation. *Journal of Marketing Research*, *28* (3), 307-19.

Engel, J. F., Blackwell, R. D., & Miniard, P. W. (2001). *Consumer Behavior*. South-Western, Division of Thomson Learning, Cincinatti, OH.

Gefen, D. (2002). Customer loyalty in e-commerce. *Journal of the Association for. Information Systems*, *3*(1), 27-51.

Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1986). Fairness as a constraint on profit. seeking: entitlements in the market. *American Economic Review*, *76*(4), 728-41.

Kannan, P. K., & Kopalle, P .K. (2001). Dynamic pricing on the internet: importance and. implications for consumer behavior. *International Journal of Electronic Commerce*, *5*(3), 63-83.

Koo, C., Wati, Y., & Jung, J. J. (2011). Examination of how social aspects moderate the. relationship between task characteristics and usage of social communication technologies (SCTs) in organizations. *International Journal of Information Management, 31*(5), 445-459.

Kung, M., Monroe, K.B., & Cox, J.L. (2002). Pricing on the internet. *Journal of Product & Brand Management*, *11*(5), 274-87.

Hassanein, K., & Head, M. (2007). Manipulating perceived social presence through the. web interface and its impact on attitude towards online shopping. *International Journal of Human Computer Studies*, *65*(8), pp. 689-708, doi: 10.1016/j.ijhcs.2006.11.018.

Hsu, C. L., Lin, J. C. C., & ChiangSen, H. (2013). The effects of blogger. recommendations on customers' online shopping intentions. *Internet Research*, *23*(1), 69-88, doi: 10.1108/ 10662241311295782, Emerald Group Publishing.

Hsu, S. C. (1987). English of Management. *Tunghua Publishing, Taiwan*.

Johnston, R., Jones, K., & Manley, D. (2018). Confounding and collinearity in regression analysis: a cautionary tale and an alternative procedure, illustrated by studies of British voting behavior. *Qual Quant, 52*(4), 1957-1976.   doi:10.1007/s11135-017-0584-6

Laohapensang, O. (2009). Factors influencing internet shopping behaviour: a survey of consumers in Thailand. *Journal of Fashion Marketing and Management*, *13* (4), 501-513.

Lee, B. C., Yoon, J. O., & Lee, I. (2009). Learners' acceptance of e-learning in South. Korea: theories and results. *Computers & Education, 53*(4), 1320-1329.

Lai, J. Y., & Chang, C. Y. (2011). User attitudes toward dedicated e-book readers for. reading: the effects of convenience, compatibility and media richness. *Online Information Review*, *35*(4), 558-580.

Business of Apps. (2020). Number of downloads of TikTok app worldwide from 1st. quarter 2017 to 3rd quarter 2019 (in millions). Retrieved January 5, 2020, from http://www.statista.com/statistics/1078692/china-tiktok-worldwide-downloads-quarterly/

Liaw, S. S., Huang, H. M., & Chen, G. D. (2007). Surveying instructor and learner. attitudes toward e-learning. *Computers & Education*, *49*(4), pp. 1066-1080.

Lim, K. H., & Benbasat, I. (2000). The effect of multimedia on perceived equivocality. and perceived usefulness of information systems. *MIS Quarterly*, *24*(3), 449-471.

Limbu, Y. B., Wolf, M., & Lunsford, D. (2012). Perceived ethics of online retailers and. consumer behavioral intentions: the mediating roles of trust and attitude. *Journal of Research in Interactive Marketing*, *6*(2), 133-154.

Lin, H. F. (2011). An empirical investigation of mobile banking adoption: the effect of. innovation attributes and knowledge-based trust. *International Journal of Information Management*, *31*(3), 252-260, doi: 10.1016/j.ijinfomgt.2010.07.006.

Lystig Fritchie, L., & Johnson, K. K. (2003). Personal selling approaches used in. television shopping. *Journal of Fashion Marketing and Management: An International Journal*, *7*(3), 249-258.

Maxwell, S., & Comer, L. (2010). The two components of a fair price: social and. personal. *Journal of Product & Brand Management*, *19*(5), 375-380.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of. organizational trust. *The Academy of Management Review Academy of Managemen*t, *20*(3), 709-734, doi: 10.2307/258792.

McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust. measures for e-commerce: an integrative typology. *Information Systems Research*, *13*(3), pp. 334-359.

Morganosky, M. (1986). Cost- versus convenience-oriented consumers: demographic, lifestyle, and value perspectives. *Psychology and Marketing*, *3*(10), 35-46.

Park, J. H., & Lennon, S. J. (2004). Television apparel shopping: impulse buying and. parasocial interaction. *Clothing and Textiles Research Journal*, *22*(3), 135-144.

Pavlou, P. A., Anderson, A. G., Liang, H., & Xue, Y. (2007). Understanding and. mitigating uncertainty in online exchange relationships: a principal-agent perspective. *MIS Quarterly*, *31*(1), 105-136.

Reinartz, W. J. (2001). Customising prices in online markets. *European Business. Forum*, *6*, 35-41.

Priori Data. (2020a). Leading Android apps in the Google play store worldwide in. November 2019, by number of downloads (in millions). Retrieved January 3, 2020, from http://www.statista.com/ statistics/693944/leading-android-apps-world wide-by-downloads/

Priori Data. (2020b). Leading iphone apps in the Apple app store worldwide in. November 2019, by number (in millions). Retrieved January 3, 2020, from http://www.statista.com/statistics/695791/top-iphone-apps-worldwide-by-number-of- downloads/

Seiders, K., Berry, L. L., & Gresham, L. (2000). Attention retailers: how convenient is. your convenience strategy? *Sloan Management Review, 49*(3), 79-90.

Shao, C. Y., Baker, J., & Wagner, J. A. (2004). The effects of appropriateness of services. contact personnel dress on customer expectations of involvement and gender. *Journal of Business Research*, *57*, pp. 1164-76.

Suter, T. A., & Hardesty, D.M. (2005). Maximizing earnings and price fairness. perceptions in online consumer-to-consumer auctions. *Journal of Retailing*, *81* (4), 307-17.

TikTok. (n.d). Baidu.Baike.com. Retrieved January 3, 2020, from https://baike.baidu.com/item/抖音 /20784697?fr=aladdin

Van Der Heijden, H., Verhagen, T., & Creemers, M. (2003). Understanding online. purchase intentions: contributions from technology and trust perspectives. *European Journal of Information Systems*, *12*(1), 41-48, doi: 10.1057/palgrave.ejis.3000445.

Vazquez, D., & Xu, X. (2009). Investigating linkages between online purchase. behaviour variables. *International Journal of Retail and Distribution Management*, *37*(5), 408-419.

Xia, L., Monroe, K. B., & Cox, J. L. (2004). The Price Is Unfair! A conceptual. framework of price fairness perceptions. *Journal of Marketing*, *68*(4), 1-15.

Yen, Y. S. (2019). Exploring the synergy effect of trust with other beliefs in television. shopping. *Management Decision.*