



complete the payment. In addition, customers can not sign the purchase invoice and enter the PIN code when making small purchases (from 1,000,000 VND or less). This applicability is good for the epidemic because customers can minimize direct contact and communication, thereby reducing the spread of disease in the community. In addition, commercial banks can ensure that contactless payment is still maximally secure and easy for customers to control and protect their accounts against losing money by connecting transaction information and notification function such as sited the location and time of each payment.

Moreover, banks can contact stores, supermarkets, and malls throughout Vietnam - where membership cards are issued and integrated into electronic banking, allowing customers to pay, so they do not have to carry too many cards when shopping. At the same time, E-banking can accumulate points and discounts for the next shopping according to the nature of the membership card^[1]. The results show that perceived security and privacy do not affect Gen Z's intention to use E-banking. However, when Gen Z is more mature, they will consider this issue more carefully. Commercial banks can predict and offer solutions by using fingerprint authentication, face recognition, scanning QR codes in their ID card, or verifying via personal email/phone number/ID number for each arising transaction. Banks can also provide warnings and instructions so that customers can be alert to the tricks of technology criminals and protect their accounts. Banks should consider and solve problems that may arise that affect the intention of Generation Z because, in HCMC, this generation accounts for 56.637% of the workforce and 23.1% of the population (World Population Magazine) is also a potential customer of E-banking. Generation Z is the next Vietnam consumer generation with a massive demand for online purchases, so Gen Z will significantly shape the country's future market and open up a new era of buying (Pradeep Mangain, 2021). For this reason, commercial banks should pay specific attention to serving their potential customers well. In addition, the research's results can support other service industries with app development and e-commerce channels with strong market effects, such as Shopee, Lazada, and Tiki, which can understand and identify customer needs from this research.

Conclusion

This study aimed to evaluate the proposed hypotheses and determine the relationship between the adoption of E-banking by Generation Z and the factors affecting their decision. E-banking is a service deployed and developed by commercial banks. It is a tool to replace traditional transactions at bank branches. It is rapidly improved to meet customers' increasing demand, especially during epidemics. E-banking provides an online payment platform for remote transactions, stimulating trade for the Vietnamese economy when the government imposes restrictions on movement and person-to-person contact during complicated diseases, and an indispensable condition for commercial banks to integrate globally. Using SmartPLS version 3.0, the results show that five out of six hypotheses (Perceived Ease of Use, Perceived Usefulness, Trust, Social Effects,



and Hedonic Motivation) have significantly and positively influenced the adoption of E-banking of Generation Z. That means Gen Z is ready to use E-banking if E-banking is very useful, easy to use and reliable.

Furthermore, Gen Z's enjoyment and their relatives, colleagues, or people they admire may influence the intention of E-banking. The study's findings indicate that aspects linked to usefulness substantially influence customers' satisfaction with E-banking services. Due to living in the 4.0 technology era, Gen Z requires practicality must come first when using technology products. The paradox is the hypothesis (H2) about online banking privacy and security, which does not prove a correlation between Gen Z's perspective and E-banking adoption. Two following reasons can explain this contradiction. Firstly, As tech-savvy individuals, Gen Z can evaluate and filter information about technology better than previous generations. Therefore, before using such a product or service, they will usually carefully consider the bank's reputation, comments, and feedback from prior users. Two, Gen Z clients are always alert to immediately contact their bank and inquire about the situation if they suspect their E-banking account to be risky. The reasons above show that Generation Z has not paid much attention to E-banking's privacy and security issues.

In summary, it shows that the attitude of Generation Z towards E-banking will be better when combining five factors: ease of use, usefulness, social impact, enjoyment promotion, and image of the bank. These are essential components affecting the willingness to accept E-banking services of Generation Z customers in the long term, especially during the COVID-19 era. People prefer E-banking to keep social distance due to the lockdown caused by a new coronavirus. If E-banking apps or websites can provide them with more utilities, lower fees, and well-promotional gifts, E-banking can attract more and more customers.

These outputs match the expected correlations in the conceptual research framework. Still, they also resemble findings from previous research on E-banking or online banking in other nations and territories, such as the United Kingdom, Jordan, Indonesia, India, and Malaysia. Because of that reason, this modified PLS model applies to the COVID-19 scenario in Ho Chi Minh City or other regions with the same conditions and features. The results supplement research, teaching, and learning materials for lecturers and university students of related majors such as finance, banking, marketing, and business administration. On the other hand, this study contributes to the growing range of evidence for giving banking institutions a broader understanding of the role of ease of use, perceived usefulness, and trust in client E-banking adoption decisions.

In this research, the authors elucidated many factors affecting the use of E-banking by Generation Z customers and using an alternative tool for direct transactions at branches of their bank. However, some limitations still exist in the study. The study only examines this topic in a relatively narrow scope - surveying HCMC university students. The authors have used the SmartPLS software to overcome that limitation. Although the number of samples collected during the survey is enough to run the PLS-SEM model on SmartPLS 3.0 software, the accuracy of the results may not be high. Because this study only focused on collecting samples from people born between 1997 and 2003, there was also a limit to the number of



surveyed people. For these reasons, future research may consider these relationships more comprehensively when social and financial conditions permit. In terms of orientation, subsequent analysis can expand the scope of study to the other provinces or even the whole country to see if the obtained results are duplicated or have something new. From there, the number of survey samples will increase, and the research will have higher accuracy, be suitable for many people, and improve applicability. Future research also can use the Judgment (Purposive) sampling method or Quota sampling method. Although not all proposed hypotheses are accepted, research shows that five proven hypotheses can explain up to 70%, so other influencing factors also need to be considered in subsequent studies, such as factors related to demographics (gender, age, occupation, country, ethnicity, religion, so on) in the subsequent study. Furthermore, research can simultaneously implement Electronic Word of Mouth (eWOM) on satisfaction and intention to use.

References

- Minh, Q. H. 2020. *Các nhân tố ảnh hưởng đến ý định của khách hàng sử dụng dịch vụ Agribank E-mobile banking tại thành phố Hồ Chí Minh*. Tạp chí Khoa học và Công nghệ. Số 46.
- Hoa, T. P., Nga, K. T. and Khôi, Q. L. 2020. *Yếu tố ảnh hưởng đến quyết định sử dụng dịch vụ smartbanking của khách hàng tại Ngân hàng TMCP Đầu tư và Phát triển Việt Nam chi nhánh Hậu Giang*. Tạp chí Nghiên cứu khoa học và Phát triển kinh tế Trường Đại học Tây Đô. Số 08.
- Trần Văn Dũng. 2021. *Phát triển dịch vụ ngân hàng điện tử ở Việt Nam hiện nay*. Tạp chí Tài chính Kỳ 2 - Tháng 11/2020.
- Ajzen, I. 1985. From Intentions to Actions: A Theory of Planned Behavior. J. Kuhl and J. Beckmann (eds.). New York: Springer-Verlag, Babbie: pp. 11-39.
- Ajzen, I. 1991, The Theory of Planned Behavior. *Organizational Behavior and Human, Decision Processes*. Vol. 50 No. 2, pp. 179–211.
- Alalwan, A. A., Dwivedi, Y., Rana, N. P., & Williams, M. D. 2016. Consumer adoption of mobile banking in Jordan: examining the role of usefulness, ease of use, perceived risk and self-efficacy. *Journal of Enterprise Information Management*, Vol. 29 No. 1, pp.118-139.
- Ali, Wan, Basel and Omar. 2016. Relationship between E-Banking Service Quality and Customer Satisfaction in Commercial Banks in Jordan. *American Based Research Journal*. Vol 5.
- Ayo, Charles k, Oni, Aderonke Atinuke, Adewoye, Oyerinde J, Ibukun O, Eweoya. 2016. E-banking users' behaviour: eservice quality, attitude, and customer satisfaction. *International Journal of Bank Marketing*. Vol. 34. <http://dx.doi.org/10.1108/IJBM-12-2014-0175>.
- Davis, F. D. 1989, Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*. Vol. 13 No 3, pp. 319–340.



- Hair, J. F, Risher, J. J, Sarstedt, M., & Ringle, C. M. 2019. When to use and how to report the results of PLS-SEM. *European Business Review*. Vol. 31 No. 1, pp: 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Husnil Khatimah, Universitas Pertamina, Perengki Susanto, Universitas Negeri Padang. 2019. Hedonic motivation and social influence on behavioral intention of e-money: the role of payment habit as a mediator. *International Journal of Entrepreneurship*. Vol 23, Issue 1.
- Heri Sudarsono, Rindang Nuri Isnaini, Nugrohowati, Yunice Karina, Tumewang. 2020. The Effect of COVID-19 Pandemic on the Adoption of Internet Banking in Indonesia: Islamic Bank and Conventional Bank. *Journal of Asian Finance, Economics and Business*. Vol.7, pp. 789–800. <https://doi.org/10.13106/jafeb.2020.vol7.no11.789>
- Kiran J. Patel, Hiren J. Patel. 2017, Adoption of internet banking services in Gujarat: an extension of TAM with perceived security and social influence. *International Journal of Bank Marketing*. <https://doi.org/10.1108/IJBM-08-2016-0104>
- Makoto Matsuo, Chieko Minami, Takuya Matsuyama. 2018. Social influence on innovation resistance in internet banking services. <https://doi.org/10.1016/j.jretconser.2018.08.005>
- Meola, A. 2017. Mobile Fintech is here to stay with banking and payment services. Retrieved from: <https://www.businessinsider.com/mobile-fintech-is-here-to-stay-with-banking-and-payment-services-2016-12>
- Mohannad A. M. Abu Daqar, Samer Arqawi, Sharif Abu Karsh. 2020. Fintech in the eyes of Millennials and Generation Z (the financial behavior and Fintech perception). *Banks and Bank Systems*. Vol 15 No. 3. [http://dx.doi.org/10.21511/bbs.15\(3\).2020.03](http://dx.doi.org/10.21511/bbs.15(3).2020.03)
- Pearson, A., Tadisina, S., & Griffin, C. 2012. The Role of E-Service Quality and Information Quality in Creating Perceived Value: Antecedents to Web Site Loyalty. *Information Systems Management*. Vol. 29 No. 3, pp. 201–215. <https://doi.org/10.1080/10580530.2012.687311>
- Poong, Y. S., Yamaguchi, S., & Takada, J. I. 2016. Investigating the drivers of mobile learning acceptance among young adults in the World Heritage town of Luang Prabang, Laos. *Information Development*. Vol. 1, pp.1-15. <https://doi.org/10.1177/0266666916638136>
- Pradeep Mamgain and Manoj Kumar. 2021. Influences of social media in virtual paradigms for z-gen shopping and integrated marketing communication (imc). *The journal of oriental research madras*.
- Priporas, C. V., Stylos, N., & Fotiadis, A. K. 2019. Generation Z consumers' expectations of interactions in smart retailing: A future agenda. *Computers in Human Behavior*. Vol. 77 No.1, pp. 374–381. <https://doi.org/10.1016/j.chb.2017.01.058>
- Salimon, M.G., Yusoff, R.Z.B. and Mohd Mokhtar, S.S. 2017. The mediating role of hedonic motivation on the relationship between adoption of E-banking and its determinants. *International Journal of Bank Marketing*. Vol. 35, pp. 558–582. <https://doi.org/10.1108/IJBM-05-2016-0060>



- Venkatesh, V., Morris, M., Davis, G., & Davis, F. 2003. User acceptance of information technology: Toward a unified view. *MIS Quarterly*. Vol. 27 No. 3, pp. 425–478.
- Venkatesh, V., Thong, J. Y., & Xu, X. 2012. Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS quarterly*. Vol. 36 No 1, pp. 157-178.
- Venkatesh, V., & Bala, H. 2008. Technology Acceptance Model 3 and a Research Agenda on Interventions. *Decision Sciences*. Vol. 39 No. 2, pp. 273–315.
- Wu, Y.L., Tao, Y.H., & Yang, P.C. 2012. Learning from the past and present: measuring Internet banking service quality. *The Service Industries Journal*. Vol. 32 No. 2, pp. 477–497. <https://doi.org/10.1080/02642069.2010.529434>.
- Yang, Z., & Fang, X. 2004. Online service quality dimensions and their relationships with satisfaction, *International Journal of Service Industry Management*. Vol. 15 No. 3, pp. 302–326. <https://doi.org/10.1108/09564230410540953>