

Understanding Gen Z payment culture

changes in Vietnam

Case Study: E-Wallet MoMo

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Abstract

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This study is conducted with the aim of getting a better understanding of the change in Vietnamese Gen Z's payment habits, especially the use of Momo e-wallet. Based on the TAM (Technology Acceptance Model) and UTAUT model (Unified Theory of Acceptance and Use of Technology), the behavioral intentions to use the Momo e- wallet are analyzed by five criteria such as perceived usefulness, perceived ease of use, social influence, mobility, and convenience. Moreover, the author employed the quantitative research method by creating a questionnaire with two main sections, con- sisting of general information and influence factors. The survey is collected from a sample size of 102 respondents and analyzed by a five-point Likert scale. Based on the research findings, Vietnamese Gen Z is gradually changing their payment method to digital payment, specifically the Momo e-wallet.				
Keywords				

E-wallet, Momo e-wallet, Gen Z, digital payment, payment culture

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1 Introduction

1.1 Research Background

The ongoing digital revolution, together with the widespread availability of the Internet, significantly enhances various aspects of our daily lives, making them more convenient in numerous ways. One of the changes that has taken place is in the payment habits of the Vietnamese. In the past, Vietnamese traditionally used cash or coins as payment methods, but with the emergence of central banks, financial institutions, and the explosion of technology, digital payments like e-wallets, credit cards, and bank transfers have become very popular. According to the Department of Telecommunication (of the Ministry of Information and Communication), by March 2022, 75,3% of Vietnamese adults used smartphones, equivalent to 93.5 million compared to the total current Vietnamese population now is 99 million. (MIC of Vietnam 2022.) The numbers show that it would be easier for Vietnamese to diversify their payment habits to other payment types, especially digital ones. On top of that, Deputy Prime Minister Le Minh Khai has signed Decision No.1813/QD-TTg dated October 28, 2021, approving the Scheme of Cashless Payment Promotion in Vietnam from 2021 through 2025. (MIC of Vietnam 2022.) The target of the Scheme is to grow e-commerce payments from 50 to 80%, and more than 25 times GDP non-cash payment methods. In addition, it is expected that over 80% of Vietnamese citizens above the age of 15 will own bank accounts, and there will be more than 450,000 locations accepting non-cash payment methods. Thanks to these promising opportunities, non-cash transactions have increased by 76 percent in guantity and 30.6 percent in values in the first 5 months of 2022 compared to the same period the previous year. In addition, 99 percent of enterprises in Vietnam use digital payments for paying taxes. (Huong Giang 2022.)

Generation Z also called Gen Z, iGen, or centennials is defined as people who were born between 1997 - 2012. This thesis focuses on studying Generation Z who is the generation that was born and raised with accessible technology everywhere. That is the reason why they are considered to be familiar with technology tools the most out of all generations. They have open-minded mindsets, young energies, creative ideas, etc. These characteristics might challenge many enterprises in updating and keeping up with new trends every day because Generation Z is their future potential customer. (Meola 2022.) According to a Visa study, 57% of Vietnamese users own more than 3 E-wallet apps on their phones, and 55% are those who use applications that could support them in implementing various transactions. Based on that signature of Generation Z's behaviors, many commercial banks are soon to build strategies or launch promotions with content aimed at this generation. Moreover, it is not difficult to see some Vietnamese Gen Z start asking such questions: "Can I pay by bank transfer/cards/QR code/?" before purchasing something. (Tienphong 2022.)

Even though cash is still currently the main payment method in Vietnam, digital payments are on their way to taking over as the main payment method in the near future, especially E-wallets. There are plenty of advantages for Vietnam to go cashless in the future such as reducing crimes, less physical contact, and being easy for the State Bank of Vietnam to track transactions to avoid omitting taxes or money laundering. (Vietnamplus 2022.) In contrast, the difficulties that Vietnam might face on the way to becoming cashless are undeniably huge. It is not easy for older people to use digital payments, especially with E-wallets or bank transfers. However, contactless cards would be promising for them to effortlessly use. Moreover, rural areas might be left vulnerable, mostly in mountainous areas, or areas that are poor at mobile and internet connesctivity. Additionally, people with low income might also find it easier to keep and use cash than open and own bank cards. Cybersecurity is also a challenging concern for the government as well because it can be avoided by physical thieves and robbers, but cyber-crimes are also threats to the community, particularly in this 4.0 digital world. (Morgan 2022.)

This thesis takes Momo company as a case study which is one of the fastest-growing Fintech companies in Vietnam, and the biggest E-wallet company in the Vietnam market. Momo E-wallet allows users to pay for a variety of goods and services by clicking on their application features such as buying movie tickets, paying electronic or water bills, topping up mobiles, plane tickets, etc. (Momo 2020.)

Many studies have been published on the intentions of Vietnamese to go cashless or the factors that affect their use of E-wallets. This study will primarily focus on understanding deeply how Vietnamese Generation Z starts to change their payment habits and behaviours towards E-wallet payment.

1.2 Thesis Objectives, Research Questions, and Limitations

Research objectives are one of the most important criteria in order to make readers clear about the author's thesis. These objectives represent the intention and direction that the author tries to convey in it. Following are the research questions which are also crucial to support to have a clearer view of the research objectives. (Saunders, Lewis & Thornhill 2009, 34.)

Even though the author has taken into consideration numerous research or studies about Vietnam going to go cashless, factors that affect Vietnamese using E-wallets, etc, there is

space left to investigate more in how Vietnamese Generation Z react and update to the new trend of payment habits in Vietnam. The author chooses Generation Z as the main target group because this is the demographic cohort that will be the next potential consumers in the future. The aim of this thesis is to study how Generation Z of Vietnam contributes to the slowly transformation of the country's payment habits.

The research questions express what your research is about and contribute as key points in the thesis. There are one or more than one research questions to answer the thesis's topic. (Saunders et al. 2016, 45, 60.)

The main research question of this thesis is:

- What factors affect Vietnamese Generation Z consumers moving from traditional payment methods towards cashless payment methods such as Momo E-wallet?

These four sub-questions below are generated in order to narrow down the information to reinforce the main one:

- What is E-wallet/online/mobile payment?
- Since when Vietnamese Generation Z started switching to cashless payment methods more than traditional ones.
- What is the stand-out advantages of an E-wallet that turn it into an explosion between a bunch of digital payments?

This thesis will limit its scope to e-wallet payment and the changes of Vietnamese Generation Z in their payment habits. Theoretical resources for this study are also limited to the Fintech industry, particularly e-wallet payments. Moreover, Momo E-wallet company was chosen as a highlight of the e-wallet in the market because Momo E-wallet is one of the factors that gain such a large increase in using E-wallet as the main payment method among Vietnamese Generation Z. However, the result of this study is conducted on 102 respondents, it basically does not represent the whole Vietnamese Generation Z, but a general overview of a certain Vietnamese Generation Z group.

1.3 Theoretical Framework

This thesis focuses on the Vietnamese Generation Z consumers' payment methods in the Fintech industry, especially the e-wallet method to provide a firm understanding of the current transformation to e-wallet payment among young Vietnamese. Through this theoretical framework, the author will divide it into two chapters: chapter 2, and chapter 3. In chapter 2, the author will drive the readers through general information about the Fintech industry,

then narrow down to the main payment method which is E-wallet. For chapter 3, the former will analyze factors that will make the latter have a deep understanding of why Vietnamese Generation Z started to use more cashless payment methods, instead of the famous one - cash. Chapter 4 studies about Momo E-wallet as an example of an outstanding E-wallet case study in Vietnam.

1.4 Research Methodology and Data Collection

According to C. R. Kothari (2004, 25): "Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it, we study the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them." There are two types of research approaches: deductive and inductive. According to Trochim (Trochim 2006), the inductive one will move reversely from specific observations to broader theories. This approach is also called as the "bottom-up" approach in an informal way. The author starts to observe and detect the data first, then formulates some hypotheses, then finally ends up with conclusions. The figure below illustrates how inductive approach work.

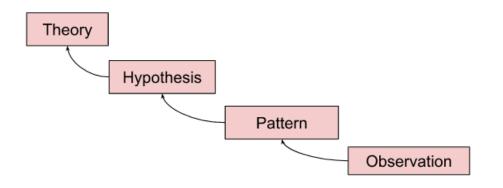


Figure 1. Inductive Approach Structure.

In contrast, the deductive approach goes from general to specific. This could be sometimes called a "top-down" approach, which is started with a theory, then narrows down to a specific hypothesis to test, further observe the result of the test, and finalize the conclusion with a confirmation stage. This thesis will be implemented in a deductive approach, the author will cover the theoretical foundations of the Fintech industry, and digital payment segment. Then, there would be a survey to analyze how Vietnamese Generation Z start not using cash as their main payment method. The figure below shows a clear structure of deductive approach.

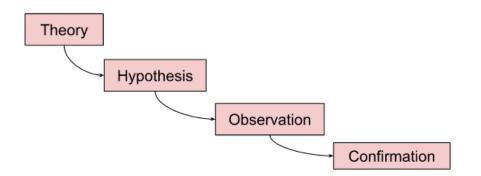


Figure 2. Deductive Approach Structure.

There are three popular research methods to approach such as quantitative research, qualitative research, and mixed research method. Quantitative research will collect numeric data to disprove the hypotheses based on some measured quantity tools such as surveys, records, or interviews. Qualitative research uses open-ended questions in order to gather various or deep insight information such as opinions, thoughts, feelings, and behaviors from the respondents. These methods are implemented through interviews, case studies, and targeted groups. The mixed research method is a combination of the two research approaches above. (Creswell & Creswell 2017.) The author decided to use quantitative research as a method to analyze factors that drive Vietnamese Generation Z to use more digital payment through a survey. The author decided to use a quantitative research method for this thesis by a survey that will be sent to Vietnamese citizens, especially targeting the Generation Z group.

For data collection, the author chooses to process data with two types of data: first-hand data or also called primary data, and secondary data. Primary resources are direct, first-hand sources of information or data. On the other hand, secondary resources will discuss, interpret, analyze, or rework the information of the primary resources. To be more specific, if the data comes from an individual or entities that directly implement or share their knowledge by verbal communications, written documents, or experiments. This could be counted as the primary resource. In other ways, if the data is reviewed, or collected from some first-hand articles, research, or reliable sources, which are called secondary resources. (Purdue University 2021.) For first-hand data, the author will execute an online survey to find out the Vietnamese Gen Z behaviors on changing their payment habits or factors that affect them in using digital payments. Articles, literature, research, studies, or reliable internet sources will be collected in this thesis as secondary data.

1.5 Thesis Structure

The figure below shows the thesis structure following this flow. Each chapter will be explained particularly in this sub-chapter as well.

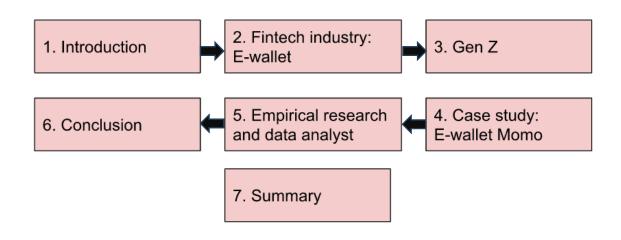


Figure 3. Thesis Structure

The thesis starts with Chapter 1 which is the Introduction. This chapter presents an overview of the thesis's topic and a clear thesis's structure. This chapter will include 5 sub-chapters: research background, thesis objective, research questions, limitation, theoretical framework, research methodology, data collection, and finally thesis structure. The theoretical groundwork will be covered in chapters 2 and 3. Chapter 2 provides general information about the emergence and development of the Fintech industry in Vietnam, and especially focus on the main digital payment - E-wallet. Chapter 3 analyzes Vietnamese Generation Z behaviors towards payment habits, and factors that affect them on using digital payments. Case study about the Momo E-wallet company will be written in chapter 4 as an example to support information for the two chapters above. Chapter 5 is the empirical part, which includes research approach consisting of theoretical parts for the conceptual framework and model of factors, data collection process, and data analysis results. Chapter 6 discusses the result of the data and the conclusion of the analysis through answering research questions and sub-questions. The final chapter is chapter 7 which basically summarizes information of all aforementioned chapters.

2 Fintech industry: E-wallet

2.1 The development of the Fintech industry in Vietnam

Thomas Puschmann (2017, 70) stated that "Fintech" is a word shortened and combined between financial and technology. This term was doubtlessly first mentioned in the early 1990s by Citicorp's chairman John Reed. Fintech is also referred to as a term used for companies or start-up companies which provide innovative financial services or products enabled by IT. Moreover, the definition of Fintech is considered to have various meanings in some other sources. Leong and Sung (2018, 75) declared Fintech as "a cross-disciplinary subject that combines Finance, Technology Management, and Innovation Management." or "any innovative ideas that improve financial service processes by proposing technology solutions according to different business situations, while the ideas could also lead to new business models or even new businesses." in a further development meaning. The history of financial technology (Fintech) started with the emergence of checks as a means of payment in 1945, then the birth of the first credit card was produced by the Bank of America in 1958, the genius invented ATM machine appearance in 1967, following with the development of the Internet in the 1990s, the Internet banking was launch. In the 2000s, Fintech had more growth in various sectors such as mobile payments and crowdfunding, recently, the explosion of virtual currency or cryptocurrency with the iconic representation - Bitcoin. This history of development shows how fast the Fintech industry has been growing. Fintech includes six business models: insurance services, crowdfunding, payment, lending, wealth management, and capital markets. (Suryono et al 2020.)

The United States has always been an ideal destination for Fintech startups to scale up their size, get wealth of talent, access to capital, and have political stability. However, the current situation seems to switch to Europe and Southeast Asia (SEA). Moreover, SEA relatively has a lower rate of exit in the average of Fintech startups compared to the United States and Europe. (Nguyen 2022). In the ASEAN region, Singapore topped Fintech funding numbers with 44 percent of the total amount in 2021, following Singapore's position was Indonesia accounting for 26%, and the third one was Vietnam with 11%. Though compared to Singapore and Indonesia, Vietnam still has a long way to improve the Fintech industry. (Van Phuoc Nguyen 2022) According to statistics from the State Bank of Vietnam, the Vietnamese Fintech market has expanded dramatically about four times in the number of Fintech companies. That Vietnam started with 39 Fintech companies in 2015 to 188 companies in year-to-date 2021. Vietnam also received many deals in 2021, two large of which could be listed as VNPay with 250 million USD and Momo with 100 million USD in the Series D fundraising round. In addition, the top four sectors in the Vietnamese Fintech industry

which account for 77% of the whole industry are payments, investment tech, cryptocurrencies, and alternative lending. (Lang 2022.) These numbers show how promising the Fintech industry is in Vietnam now. That would be a steppingstone for the country to lift up to the next level on its way to popularize digital payments.

At this moment, cash is still the most common payment method in Vietnam with 90% of Vietnamese who choose to pay cash on delivery when purchasing on e-commerce or online shopping. However, digital payments in Vietnam have been growing rapidly, especially over the past five years with a huge jump of 144 percent in mobile banking purchases. In addition, around 80% of Vietnamese adults own smartphones as well. This could simply help to spread out the usage of digital payments more throughout the country. (Nguyen 2022.)

2.2 The definition and type of e-wallet

Digital wallet is defined as an electronic wallet that serves as a platform to keep users' card details for cardless transactions (Pahwa 2021). E-wallet is known as an electronic card or an app that allows users to purchase online transactions through mobile devices such as smartphones, laptops, or tablets (The Economic Times 2018). People might be confused slightly between these two terms, however, based on the aforementioned definitions the author declares that an e-wallet is also a form of digital wallet which is functioned in different ways. While a digital wallet allows users to register, save, and validate their card information, an e-wallet has a function that requires users to top-up and store their money in advance in order to conduct online or offline transactions through the use of a mobile app. Masterpass, Google Wallet, and Apple Passbook are well-known examples of digital wallets. Momo E-wallet, Zalo Pay, Viettel Pay, and Airpay are popular examples of e-wallets in Vietnam. (Ramli and Hamzah 2021.)

According to Ramli and Hamzah (2021), e-wallets are classified based on themes such as accessibility, and technology-based. In terms of accessibility, e-wallets have three different types, closed e-wallet, semi-closed e-wallet, and open e-wallet. Closed e-wallets are wallets that companies issue for their customers making payments towards the purchase of their products or services. Hence, the stored money in the wallet can only be used to transact with only specific e-wallet providers. In addition, the users are also able to receive refund money if there were cancellations or returns of products or services. (Gurme 2019.) Semiclosed e-wallets allow the users to purchase goods or services from merchants who have signed contracts to be partners with the e-wallet providers. In contrast, open e-wallets allow users to conduct transactions in stores, apps, or websites, plus this type of wallet is only issued by banks or in partnership with banks. Basically, the function of open e-wallet is the same as semi-open e-wallet, however, the former can withdraw cash at ATMs or banks.

With regards to technology-based, Near Field Communications (NFC) and Quick Response (QR) codes are the technologies that are widely applied in e-wallets. NFC-based technology works through radio frequencies and communicates with merchants' payment terminals. While QR code-based works through scanning QR printed or displayed images. (Ramli and Hamzah 2021.) The picture below shows how a coffee store in Vietnam executing Momo's payment by QR code.



Figure 4. The picture of a café store in Ho Chi Minh using Momo e-wallet's QR code payment. (Hoang 2021.)

2.3 The origin and the emergence of e-wallet in Vietnam

The origin of digital payment can be traced back to 1994 when Sting's Ten Summoner's Tales CD marked the first online payment with \$12.48 on NetMarket. Then, Coca-Cola, which served cokes, installed two vending machines in Helsinki that accepted payment via text message in 1997. Afterward, one after another PayPal launched its first electronic money transfer service in 1999, Alibaba launched Alipay in China in 2003, M-PESA with its first payments system for mobile phones in 2007, the emergence of the first decentralized payment network in the world - bitcoin in 2009, Tencent run WeChat Pay in 2013, and recently Apple Pay in 2014 with over \$2 trillion of mobile payment transactions by now. (Neufeld 2020.) This timeline shows how strong the ground and the advancement of digital payments are compared to the current e-wallet transactions that the users can use their smartphones to purchase tickets, food, or hotel accommodation bookings.

The first Vietnamese e-wallet was launched in 2008 in the conditions of the explosion of the e-commerce industry. The Vietnamese e-commerce industry was looking for many payment methods in order to diversify their ways of payment besides the traditional payment - cash of delivery to fasten the purchasing process between buyers and sellers. According to the statistics from Appota in 2018, there were 72% of the Vietnamese population owns smartphones, and 68% of them use smartphones to access the internet. Based on the survey from PwC, the rate of Vietnamese consumers using e-wallets as their payment method increased from 37% in 2018 to 61% in 2019, which was recorded as the highest rate among the Southeast Asian countries in the survey. (Nguyen et al 2020.) According to the State Bank of Vietnam, the Vietnamese e-wallet market has about 43 e-wallet providers with the three-leading e-wallets - Momo, Moca, and Zalo Pay which account for 90% of the market. The number of e-wallet providers has increased dramatically by 7 times in 2022 compared to the number in 2015. (Mic.gov.vn 2022.) This shows how much potential Vietnamese market is and also how much competitive there is. The scenario is actually challenging for businesses who are in the market or are going to jump into the market, yet it is benefiting Vietnamese consumers. Hence, the businesses themselves have to instantly improve their products with innovative functions, attractive discount deals, widespread payment terminals, etc in order to keep the retention rate stable. In addition, Vietnamese consumers are the ones who benefit the most in the market, which easily explains for one of the reasons why there is a high surge in using e-wallets among Vietnamese, in specific Vietnamese Gen Z.

2.4 The advantages and disadvantages of e-wallet

There are plenty of advantages of the e-wallets, however, the author decides to list out some noticeable ones. Firstly, convenience, e-wallets offer consumers a convenient way to store, manage, and use their money without bringing their cash or physical bank cards. All they need to do is hold their mobile devices near the payment terminal or scan a quick response code to make their purchases. In addition, they also allow consumers to conduct transactions for instant money transfers in minutes with lower amounts of transaction fees compared to the traditional banks. Secondly is the security, the e-wallets use advanced security measures such as encryption and biometric authentication to protect users' personal and financial information. This will help the users to reduce the risk of fraud or the worry of identity theft or at least give them a firm peace of mind when making transactions through a third-party provider. Thirdly, accessibility, e-wallets can be used by anyone with a smartphone and internet connection, plus, it also connects with many other business partners to offer incentives, rewards, or specific discounts to encourage the consumers to use

e-wallets. This makes them a powerful financial payment tool for consumers besides traditional payments. Finally, the various functions and features from e-wallets also keep the consumers stay with this payment application. Some e-wallet applications allow users to manage their budget through the function such as tracking their spending habits, or to buy plane tickets or pay internet, water, and electrical bills. (Gaille 2018.)

Everything has its own two sides, both advantages and disadvantages, so e-wallets are not an exception. Technical issues are one of the challenges that e-wallets are dealing with. Because the application relies on technology, users will most likely experience system glitches or outages, or even shutdown. This would cause some difficulties for the consumers if they brought only their mobile devices to use e-wallets as a payment method for their purchases. Despite the widespread internet's use of Vietnamese and smartphone ownership plus the strong growth of consumers using e-wallets, there are still many limited acceptances for the e-wallets. For example, the e-wallet payment terminals mostly appear more in urban areas than rural areas where the sellers and buyers tend to use cash as their main payment method. About the data privacy concerns, even though e-wallet applications have high protection on users' private information, there are still risks that the data could be misused or stolen. This concern could raise some questions about who would take responsibilities if the stolen or misused information scenario happened. However, in the author's positive point of view, those e-wallet companies would non-stop evolve their data protection in order to make their application more trustworthy to consumers. In addition, according to Raenu Kolandaisamy and Kasthuri Subaramaniam (2020), some people shared that e-wallet could make them spend their money more recklessly though some applications have a budget management function. Consumers state that the money somehow does not feel real for them as it is intangible. This could explain why their spending is most likely to disappear in a quick way.

3 Gen Z: How Gen Z is slowly changing to e-wallet payment

3.1 Gen Z

Generation Z or Gen Z is the generation that was born in the world of Internet-connected technology. Some authors, researchers, or journalists state that Gen Z is regarded as those who were born after 1995 or 1997 or even after the year 2000. Most of them are young people who are still in primary or high school, while the oldest members of this generation turn over 25 years old in 2023. (Szymkowiak et al 2021.) Hence, the author considers Gen Z as the generation which is born between the latest 1990s and early 2010s.

One of the key traits of Gen Z is their technology savviness. They are the generation that has never seen the world without the Internet. This really has had a significant impact on their purchasing habits because they are able to purchase not only offline but also online. In addition, they have more advantages in searching for information about the quality of the products or how trustworthy the sellers are. One of the platforms that affect their online purchase behaviors the most is social media. They tend to rely on reviews and recommendations from their friends, micro-influencers, or celebrities. (Guitierrez 2021.) According to Vietnam Insider, Vietnamese Gen Z is expected to reach 25% of the total workforce in Vietnam by 2025 (Vietnam Insider 2020). The ratio percentage could easily explain that Gen Z would become a potential consumer in the future. One of the highlight examples for their tech-savviness is the payment method. Gen Z has brought online payment, mobile payment or more specifically e-wallets to the forefront. According to Thesaigontimes.vn (2022), it is not difficult to see some authentic Gen Z who adhere to the "cashless" philosophy at coffee shops, clothing stores, supermarkets, etc, or even street food vendors. They mostly come up with familiar expressions such as "May I make a payment via card or transfer?", "Is payment via QR code a viable option?", and "Does this establishment accept Samsung Pay?".

Moreover, other noticeable characteristics of Gen Z are independent, entrepreneurial, and outcome-oriented mindsets. (Chillakuri 2020.) They do share some qualities of Millenials, however, Gen Z has some characteristics that differ from them. Gen Z loves working together with studying as they are considered to be good at learning and earning at the same time. Due to Lidia Varbanova (2014), 72% of Gen Z wants to start their own businesses. In addition, 70% of Gen Z believe that businesses should take an active role in addressing social and environmental issues (Center for Generational Kinetics 2017). This desire for purpose-driven entrepreneurship is reflected in the rise of socially responsible startups, which are founded on the principles of sustainability, ethical production, and social impact.

Although Gen Z has many positive entrepreneurship traits, they still have to deal with many challenges. For example, they are more likely not good at saving and tend to have more debts than other previous generations or they might not have enough experience or network in the business world. (National Bureau of Economic Research 2018.) However, with the digital networks, and their creative mindsets, Gen Z would seek to find financial funding solutions through peer-to-peer lending or crowdfunding. Moreover, they can take advantage of the power of social media by developing their businesses through online platforms.

According to Nielsen, Gen Z is the most optimistic and the least wary demographic, which can be explained by how they are raised. Vietnamese Gen Z came of age during a period of financial prosperity in the country. Hence, they not only care about essential needs such as food, water, clothing, sleep, and shelter like previous generations, but they are also concerned about other social issues namely, corporate responsibility, environmental concerns, and gender equality. The word "world citizen" or "globalization" seems familiar to Gen Z thanks to the explosion of technology. This young generation can easily find many free/paid online courses or platforms to learn such as Coursera, YouTube, Pinterest, Udemy, etc. Some of them could become a chef, a software engineer, or a music producer simply by patiently learning those online courses. Compared to previous generations, this experience sounds difficult and luxurious for them, because of the lack of internet. Gen Z is not only raised in a technology world, but they also grow up in a world, in which many social issues become a common problem. Same-sex marriage no longer seems weird to them. Acts on discrimination about skin colors, races, and religions will be undoubtedly condemned everywhere. Therefore, the view of diversity and difference is highly respected among Gen Z. (Sparks & Honey 2015, 46.)

3.2 Factors that affect Vietnamese Gen Z consumer behavior in using e-wallet payment method.

According to Kotler and Armstrong (2017), the intention in purchasing of consumers is strongly influenced by these four characteristics: cultural, social, personal, and psychological. Whereby, each characteristic is also analyzed in detail which is described in the figure below.

Cultural	Social	Personal	Psychological
CultureSubcultureSocial class	 Groups and social networks Family Roles and status 	 Age and life-cycle stage Occupation Economic situation Personality and self-concept 	 Motivation Perception Learning Beliefs and attitudes

Table 1. Characteristic influence on consumers' behaviors. (Kotler and Armstrong 2017.)

Culture, subculture, and social class are three criteria that belong to cultural factors. It is stated that culture is the most fundamental cause of a person's needs and behaviors. It contributes a deep influence on consumer behaviors. It is easy to tell the difference between children who grow up in the West and will mostly not act the same as children raised in the East. It is even different when they come from the same country but different cities or areas. For example, South Vietnamese more likely to purchase more than those in the North. Moreover, each culture also contains smaller subcultures, which are groups of people who share a value system based on common lifestyles or experiences. Gen Z will be more likely to adopt technological products or services effortlessly better than Millennials or Gen Y. In addition, Gen Z and Millennials are also the generations that get the Fear of Missing Out (FOMO) the most, they do not want to leave behind the trend. This leads to the effect on their behaviors towards using social media or especially their purchasing behaviors or intention to use new tech products. (Kotler and Armstrong 2017.)

Groups and social networks can have a direct or indirect influence on a person's behavior. People are often influenced by reference groups that do not belong (Kotler and Armstrong 2017.) For instance, a trainee from an entertainment company will hope someday to become a singer superstar like Justin Bieber. Social networks also play a vital role in shaping consumers' behaviors, especially online social networks. Vietnamese Gen Z spends a lot of their time on social media channels such as TikTok, Facebook, Instagram, YouTube, etc. Thanks to the popularity of these social media channels, there are more and more "digital jobs" created, for example, KOL (key opinion leaders), micro-influencers, reviewers, etc. Before purchasing or having the intention to use new products or services, Gen Z will likely look for information from these apps, instead of searching in Google only. They will come to reliable reviewers or reference micro-influencers who are not related to them in reality but have a huge effect on their purchasing behaviors. Family members also have strong influences on buyers' behaviors. Roles between parents and children or wives and husbands or brothers and sisters might have different influences on each other. For instance, Gen Z children may be influenced by the preferences or habits of their Millennial or Gen Y parents and choose certain products or services following their family's values and beliefs. In addition, people usually choose to buy the products according to the appropriate of their roles and status. Taking a working Gen Z son role as an example, he will have to buy clothes that be elegant and suitable for his office environment when he is an employee. Then, he will likely buy comfortable clothes when he is at home with his family as a son. (Kotler and Armstrong 2017.)

Personal factors such as age and life-cycle stage, occupation, economic situation, personality and self-concept. People's occupation affects their behaviors toward purchasing goods and services. For example, white-collar are likely to buy cases with attractive decorations while workers who work in the construction and heavy industries tend to purchase cases with high-quality durability (Pham et al 2021.) About age and life-cycle stage, people tend to change their buying habits over time. Every event of the stage of their life such as graduation, marriage, having children, purchasing a home, divorce, children going to schools, changes in personal income, etc also has an influence on the ways they purchase new products and services. Young Gen Z who is the most tech-savvy generation is recorded to use their smartphones and purchase online shopping the most. This shows how age affects consumers' purchasing behaviors. Gen Z will be unlikely to buy things in physical stores compared to older generations (Pham et al 2021.) Economic situation and lifestyle affect a person's buying decision as well. It is apparent that if you had the strong economic capability and you had a luxury lifestyle, you will intend to purchase products and services with higher prices and more quality. Sometimes besides buying the products or services because of their quality or decorations, the consumers also decide to buy those because of their lifestyle stories. An inspiring start-up story or a meaningful purpose of creating friendly environmental products also affects consumers' purchasing decisions. (Kotler and Armstrong 2017.)

The four key psychological factors such as motivation, perception, learning, and belief and attitudes also change consumers' behaviors (Kotler and Armstrong 2017). Sigmund Freud stated that people are mostly unaware of how unintentional psychological forces shape their behaviors. He assumed that subconscious motives might affect a person's purchasing behaviors which leads to the event that people buy products without knowing the real reason why they buy them. For example, certain Vietnamese Gen Z share that they possibly buy silly or unneeded things on e-commerce channels when they stay up late. Learning describes the changes in the thinking of consumers' beliefs and attitudes in deciding to buy new goods and services. Supposed that if a married couple looked for a family car and fortunately the husband had had an exceptional experience with the Volkswagen brand before,

he would tend to persuade his wife to buy a Volkswagen this time. In addition, he also might recommend his friends, relatives or circle networks to buy Volkswagen cars based on his experience. (Kotler and Armstrong 2017.)

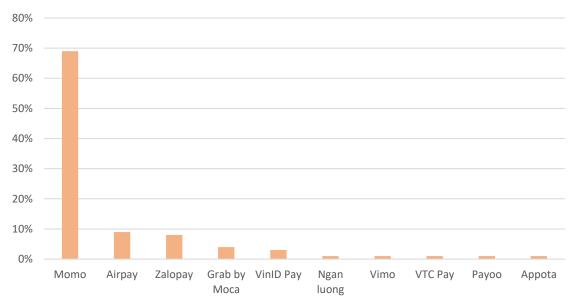
4 Case Study: Momo Company

4.1 Overview of Momo Company

According to Momo's website, Momo e-wallet is a Vietnamese-based mobile payment and digital wallet that offers various services such as online purchases, money transfers, mobile recharge, movie tickets, and bill payments. The platform is developed by the Online Mobile Services Joint Stock Company (M_Service). It is a user-friendly platform that allows users to perform financial transactions by using their smartphones. M_Service was established in 2007, but it slowly switched as a Fintech startup company that developed digital wallet applications for iOS and Android devices in June 2014 since it started launching Momo E-wallet (Mobile Money). Afterward, it has grown to become a notable mobile payment service provider, partnering with 24 domestic banks and major foreign payment organizations such as Standard Chartered, JCB, Mastercard, and Visa. (Momo Website 2020)

Momo e-wallet is unquestionably the leader in the Vietnamese e-wallet market, which claims to have 31 million users in the end of 2021, \$14 billion worth of transactions, and 60% of Vietnam's mobile payment market. In addition, Momo is also the one and only in the Vietnamese e-wallet market to receive capital from US investors like Warburg Pincus and Goldman Sachs which are considered as big investors with long-term investment and global vision. (Suzuki & Hoang 2021). In the middle of giant techs in Asia such as Tencent's WeChat, Indonesia's Go-Jeck, and Singapore's Grab, Momo still manages to bloom dramatically not only as a e-wallet but also as a super app that provides mobile payment services for entertainments, utilities, etc. Moreover, Momo team also acquired some of recognitions throughout time include the following:

- Highest rank software application in Apple Store Vietnam (2 times) (2019)
- Top FinTech100 according to KMPG 2018
- Top 3 financial applications for Android 2014
- Best Mobile Product of The Year 2012, 2013, 2014
- The most favourite e-wallet in Vietnam 2019



The most favorite e-wallet in Vietnam in 2019

Figure 5. Ranking of the most favourite e-wallet in Vietnam in 2019.

According to Statista (Nguyen 2023), Momo e-wallet takes the crown as the most used ewallet app in 2022 with 46%, followed by Zalo Pay as the runner-up with 19%, and third place belongs to Shopee Pay (Airpay) with 10%. In addition, Momo e-wallet also develops its partner network with 10,000 merchants in various fields such as consumer financing, insurance, bank transfer, transaction, entertainment, e-commerce, shopping, transportation, foods and beverages, etc. It also achieves 100,000 payment points in Vietnam. Momo e-wallet ranks first place in Android system as the most popular finance application and also becomes one of the most downloaded finance applications in the iOS system. (Thanhnien.vn 2019.) Following with its achievement, Momo is the only Vietnamese representative in top 50 of the "Leading Global Fintech Innovators" positioned at 36th. This is the ever first time Vietnamese company has been listed in this group. (AgileTech Vietnam 2020.)

4.2 Momo SWOT Analysis

According to Anthony C. Danca (2023), the SWOT analysis is shortened combination of Strengths, Weaknesses, Opportunities, and Threats. It is a simple yet fundamental model that helps companies to develop their marketing plans by evaluating strengths (what they can do) and weaknesses (what they cannot do), as well as potential opportunities (beneficial conditions) and threats (unfavorable conditions). Basically, the role of the SWOT analysis is to take the information from the environmental analysis, then analyze it into internal and external issues which are favorable or unfavorable. By doing this analysis, the organizations

or the companies would support them to determine the information whether they should take advantage of those strengths and opportunities or avoid obstacles that need to be overcome or minimized so that they would be able to grow stronger. The table below will show an overview SWOT of Momo company:

Strength	Opportunity
 Over 500 services for users to make transactions "One touch payment" feature. Outstanding marketing campaign for seasons or holidays Various vouchers, rewards, discount or gift cards for loyal and new users 	 Receiving huge support from the Viet- namese government regarding to fintech market or e-wallet market in specifically The Covid-19 pandemic has accelerated the shift away of cash payment. E-wallet market in Vietnam is promising to grow stronger in the future.
Weakness	Threat
 Available for smartphone users with Internet connection only. Not widespread for the whole citizens in Vietnam, only popular among Vietnamese who live in metropolitan areas. 	 Market with a lot of competitors Cash payment culture stands strongly among Vietnamese. Data breaches and cyber-attacks.

Table 2. Momo e-wallet SWOT.

Strengths:

Momo e-wallet has provided over 500 services for users to make transactions in various fields. As aforementioned in those chapters above, the e-wallet application is aiming to become a super app that users can use it to make payments for activities such as paying utility bills, buying cinema, concerts, or flight tickets, transferring money, or topping up mobile money, etc. It is also the first application that applies "one touch payment". In addition, Momo e-wallet runs many advertising promotion campaigns including discount codes, stimulating points to receive rewards, etc. One of the outstanding marketing campaigns that helped Momo e-wallet reach to a wider range of users was "Lac Li Xi". It was a campaign wherein users have to "shake" their phones to receive rewards such as money, gift cards, or discount vouchers. (Nguyen 2021.)

Weaknesses:

E-wallet is listed as one of the products developed by the Fintech industry, so fundamentally people must own a smartphone that can connect to the internet to implement transactions or other digital services through the application. In a developing country like Vietnam, this might be a huge disadvantage for the company because Internet connectivity is relatively unstable. This weakness would lead to the reason why Momo's points of payment are mostly limited to metropolitan areas where users could find it easy to make payments through the e-wallet. Besides the more stable Internet connectivity in metropolitan areas, people in these areas also have higher education than in rural areas. Many small businesses or street vendors in urban areas are said to easily adopt this payment than those in rural areas.

Opportunities:

The e-wallet market is now comparatively potential market to grow in Vietnam. According to a report by Google, Temasek, and Bain & Company, Vietnam's e-commerce market is expected to grow to \$52 billion by 2025, and digital payments are expected to play a significant role in this growth. Because there are more and more Vietnamese consumers shift away from cash payment, the demand for digital payment solutions is on the rise, which poses a promising opportunity for Momo e-wallet to expand a significant share of this juicy market. (Google, Temasek, and Bain & Company 2020.) Not only the Momo e-wallet but also the whole Fintech market is receiving huge support from the Vietnamese government with their new policies. The government has taken several measures to promote the adoption of digital payments, such as the issuance of new policies and regulations. The State Bank of Vietnam has started a project to push non-cash payments more, as well as encourage merchants or businesses to accept digital payments. Thanks to the supportive environment for digital payment solutions from the government, Momo has gained more trustworthy among its users by setting partnerships with large and reliable banks or financial institutions to strengthen its credibility and increase its reach. The COVID-19 pandemic has accelerated the shift away from cash payments, as consumers seek out contactless payment solutions to minimize the risk of infection. This has led to a surge in demand for e-wallets, which has benefited Momo and other digital payment providers. This habit also lasted until after the pandemic when consumers find it more convenient for them to make transactions as they can pay anything, anywhere. (State Bank of Vietnam 2021.)

Threats:

With the support of modifying policies from the government, it leads to the increased competition in the e-wallet market. There have been many new e-wallet providers emerging in Vietnam recently such as GrabPay, AirPay, ZaloPay, etc. These new players have dramatically gained a huge range of users by offering various payment options and more modern features than ever before. Momo e-wallet might be threatened by the growth of its competitors if they do not keep innovating its product. The deeply entrenched cash payment habit is also one of the noticed threats to Momo's e-wallet. Despite of the increasing popularity of e-wallets and the encouragement to change to digital payments from the government, cash still remains the dominant payment method in Vietnam. Vietnamese have the perception that cash is more secure and reliable than digital payments due to its tangibility. In order to deal with this Momo continues promoting the benefits of e-wallets as well as educating consumers about the advantages of switching to digital payments. Another big threat that many technology companies also get in the nerve is data breaches and cyber-attacks. (Nguyen 2021.) To overcome this challenge, Momo must continue to promote the benefits of e-wallets, such as convenience and security. The app has already launched several campaigns to educate consumers about the advantages of digital payments. Momo has also partnered with merchants and service providers to encourage the acceptance of e-wallet payments, which has helped to increase consumer confidence in the app. To cyber-hackers, e-wallets application in specific or fintech applications, in general, is the "potential land" for them to break into the vulnerable wall. The reason why many hackers aim at e-wallet applications is that users have to leave much sensitive personal information and financial data in the application. Fortunately, Momo has been taking action to mitigate this risk by implementing several security measures, including multi-factor authentication (taking photos of ids and bank cards) and data encryption. In addition, they also educate and warn users about how to protect their personal data from their sides. (Vietnam Briefing 2021.)

5 Empirical research and data analysis

5.1 Research approach

Models of factors that accept new technological products or services.

With the purpose of having a better understanding of human behaviors, researchers in the technology industry created some models to predict user actions that lead to positive outcomes. Davis (1989) introduced the Technology Acceptance Model which includes the influence of perceived ease of use (PEU) and perceived usefulness (PU). The TAM model was originally created based on the psychological theory of reason actions, which explains well for human behaviors. The intention to use new technology products can be influenced by factors such as perceived ease of use and perceived usefulness. When individuals believe in the huge benefits of e-wallets according to their own perception, together with the uncomplicated of using the e-wallet. The individuals' attitudes will become more optimistic in adopting e-wallets. The Technology Acceptance Model (TAM) is a specific framework used to study the usage patterns of a system or to study the intention of customers toward new technology or to get a deep understanding more about customers' behaviors. However, it has limitations in its applicability to specific technologies and time periods, which can alter the relationships between its components. Various investigations across different disciplines and topics have revealed inconsistencies. TAM typically overlooks the social context in which a new technology is adopted (Shin 2009). Figure 2 will show a clearer view of the structure of the TAM model.

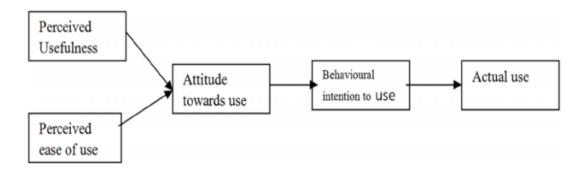
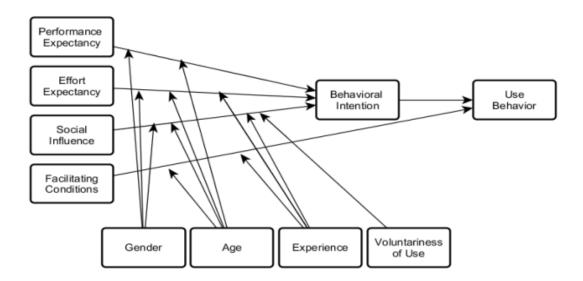
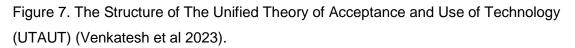


Figure 6. The structure of TAM model (Davis 1989).

The Unified Theory of Acceptance and Use of Technology (UTAUT) is a comprehensive theoretical framework that aims to understand and predict individuals' acceptance and use of technology. The UTAUT model was introduced by Venkatesh as an extension of previous technology acceptance models. It aimed to integrate and synthesize various existing theories to provide a more comprehensive understanding of technology acceptance. The

development of UTAUT involved a rigorous process of literature review, analysis of existing models, and empirical validation. (Venkatesh et al 2023). There are 8 previous theoretical models which are the conceptual foundation of building the UTAUT model such as the Theory of Reasoned Action (TRA), the Theory of Planned Behavior (TPB), the Diffusion of Innovation (DOI), the Motivational Model (MM), Model of PC Utilization (MPCU), the integration of TPB and TAM, the Technology Acceptance Model (TAM), and finally the Social Cognitive Theory (SCT). In addition, the UTAUT model also holds four main constructs: Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Facilitating Conditions (FC). The four factors include gender, age, experience, and voluntariness of use playing key roles in tightening the concrete hypothesis. All of the relationships between those aforementioned factors, constructs, and models will affect the usage intention and behaviors. Figure 1 below will describe the UTAUT model and how its related components relate to each other. (Venkatesh et al 2023.)





Perceived Usefulness

"Perceived usefulness is the degree to which a person believes that his/her performance would become more efficient by using a particular system" (Davis 1989.) Many studies investigated the behavior of consumers in using electronic payment services provided by banks showed the positive correlation between user's perception of services and user consumption behaviors. For example, as the user's perception of the services or products' usefulness is optimistic, users also show more positively consumed behaviors toward the services or the products. (Dam Thi Phuong Thao, 2015; Le Chau Phu & Dao Duy Huan,

2019). Tandon et al. (2017) suggest that people assess how a mobile wallet, a technological product, will enhance their job or task performance. In addition, based on this cognitive consideration, they will decide to whether adopt or reject it. In the midst intense of e-wallet market, and the strong competition between each fintech company in general or companies majoring in e-wallets in specific, they have to enhance their products perceived usefulness to attract more and more new users. Furthermore, Fonchamnyo (2013) conducted research that applied an extended technology acceptance model (TAM) in India and Cameroon, showing that perceived usefulness is one of the important criteria that influence users on the adoption or rejection of a mobile banking app. Based on the aforementioned research, the author presents the following hypothesis referred to as H1 for perceived usefulness.

H1: The higher the perceived usefulness, the more positive effects on Gen Z users' behavioral intention to use Momo e-wallet.

Perceived ease of use

According to Davis (1989), perceived ease of use refers to "the degree to which a person believes that using a particular system would be free of effort." Previous studies conducted by To & Trinh (2021) and Karim et al. (2020) concluded that perceived ease of use had positive and notable effects on behavioral intention. Moreover, another study by Venkatesh et al. (2002) also showed an optimistic correlation between perceived ease of use and behavioral intention to use technological products or services. There is also a study about undergraduate students who perceived that using web service technology is easy and user-friendly has an optimistic influence on perceived usefulness and behavioral intention. (Al-Maroof & Al-Emran, 2018.) Another study's result from Mun and Hwang (2003) proved that the relationship between perceived ease of use and behavioral intention to use information systems or technological products is terrifically strong. Theoretically, if Momo e-wallet optimizes and builds its application's interface easy-to-use and user-friendly, plus the users find it simple to execute orders through the application, the behavioral intention of users to use Momo e-wallet will increase more. Hence, in the context of this thesis, it is crucial for Momo e-wallets to design a user-friendly interface as well as an interface that is simple enough for every type of user to use from tech-savvy to lowtech people. Based on previous study results, together with the topic of this subject, the author decides to offer the hypothesis below:

H2: Perceived ease of use positively affects Gen Z behavioral intention to use MOMO ewallet in Vietnam.

Social Influence

Deriving from the UTAUT model, social influence is a factor or social norm in which the users' behavioral intention to use new technological services or products is based on the influence of their social relationships such as family, friends, relatives, colleagues, etc. According to Venkatesh et al. (2003), social influence is "the degree to which an individual thinks they should use the new system - in this case, an electronic wallet". Social influence from family members, friends, relatives, etc. has been identified as a crucial factor in studies about customers' behaviors. Groups and social networks also have a direct or indirect influence on a person's behavior. In this thesis's context, a Gen Z's buying or intention to use a technology product or service might be affected by his or her parent, blood siblings, friends, relatives, etc. Apart from closed relationships, non-related people, for example, celebrities, micro-influencers, experts, etc. also have a strong influence on users in accepting to use the technological products. Moreover, a study by Rahman et al., (2020) showed that the more positive viewpoints towards the usage of digital wallets, the more users decide to use digital wallets. The author adapts the hypothesis as the following:

H3: Social influence positively affects Gen Z's behavioral intention to use MOMO e-wallet in Vietnam.

Mobility

Kalinic and Marinkovic (2015) stated that mobility is the ability to access the service and successfully implement the financial transaction at anytime, anywhere. A mobile commerce platform is being developed for various types of mobile devices, enabling the exchange of data through wireless internet connectivity, such as Wi-Fi, or cellular data networks. This feature offers users the advantage of flexibility in terms of time and location, allowing them to securely transmit and receive time-critical payment data. The significance of such transactions relies on the prompt application of the transmitted information (Wang & Li 2012). According to Amberg et al. (2004), he claimed that one of the most outstanding benefits of mobile payment is that it allows users to utilize the services. They let the users make transactions whenever they want virtually anywhere. This is the advantage of mobile payment compared to others. As previously mentioned in Chapter ..., with the dramatic increase of Vietnamese using mobile phones, especially, smartphones, it is promising to have a positive attitude towards using mobile wallets as a new payment compared to others. Explaining that matter, most people find the idea of paying through their mobile phones helps them a lot in cases in which they might forget to bring their

physical wallets, or they might not feel comfortable bringing much cash with them. As a result, the author finds there will be a relationship between mobility and the intention of using e-wallets among Vietnamese Gen Z - the generation of technology so the author decides to adapt the related hypothesis as below:

H4: The more positively the mobility has, the more behavioral intention to use MOMO ewallet among Vietnamese Gen Z.

Convenience

According to Berry, Seiders, and Grewel (2002), an individual's preference for convenient products or services is the explanation for the term convenience. They chose the time and effort-saving are the main criteria to determine whether those products or services are convenient or not. In addition, there are many studies or research proposing different dimensions of convenience in terms of analyzing the perceived of convenience factor. For example, Brown (1989, 1990) stated that he broke down convenience into five dimensions to analyze such as time, place, acquisition, use, and execution. On the other hand, Yoon and Kim (2007) analyzed convenience terms in their wireless LAN study by two dimensions which are acquisition and use. Technology also brings many benefits to people's daily life according to how convenient it is and how easier it is to reduce the difficulty of common tasks. To, Liao, and Lin's results from their study also showed that convenience had effects on consumers' shopping intentions. (To et al 2007) Furthermore, Gupta and Kim (2006) also revealed that convenience had a positive impact on people about online shopping intentions in their study result. Convenience is also defined based on how easy and comfortable it is when using products or services. (Sharma and Guiterrez 2010). Based on the previous definition as well as the results provided above, the author believes that convenience criteria are a combination between time and place. The positive effect of perceived ease of use and perceived usefulness from the TAM model is also found in convenience at the same time. Regarding e-wallets, successfully completing financial transactions anywhere, anytime, or how fast it is to make transactions or how easy it is to access to use the services, or how flexible it is to support consumers in dealing with difficulties. These strengths of the e-wallet are considered to be listed in the convenience factor. Thus, the author decides to develop the hypothesis below:

H5: The more convenient it is, the more people will accept and use Momo e-wallet in Vietnam.

Behavioral Intention

According to Alahrbi and Drew (2014), behavioral intention is a behavior in which one is expected to continue using technology in the future, and it strengthens the acceptance of technology as well. Moreover, behavioral intention is also defined as "a person's subjective probability that he will engage in a given behavior". The more intention to use a technological product one has, the higher probability that s/he will have the behaviors to purchase and use it in the future. (Fishbein and Azjen 1975.) Later in 1991, Azjen noted in his research on the Theory of Planned Behavior that an intermediary precursor to behavior, and studies focusing on the intention to use have proven to be effective predictors of actual usage behavior. (Ajzen 1991.)

The author chooses the theme of two models The Technology Acceptance Model (TAM) and The Unified Theory of Acceptance and Use of Technology (UTAUT) to analyze the adoption of e-wallet payment among Vietnamese Gen Z. In addition, these models are the firm bridge in the relationship between behavioral intention and other criteria from those two. For example, if the perceived of trust positively increases, the behavioral intention to accept and use the technological product from the consumers also increases. This shows the proportional growth between them, in which criteria from those models can be considered as variable values and behavioral intention will be considered as a constant value.

Conceptual framework

With the explosion of consumers in using e-wallets in Vietnam, especially the most mentioned all over internet generation – Gen Z, the author attempts to determine the impacts of various factors from the aforementioned models above such as Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT) model. The conceptual framework of this thesis is to explore the behvaior intention of Vietnamese Gen Z and how they accept to use e-wallet Momo more based on the influence of five factors such as Perceived Usefulness, Perceived Ease of Use, Social Influence, Mobility, and Convenience. The figure below will show the relationship between these factors and the behavior intention:

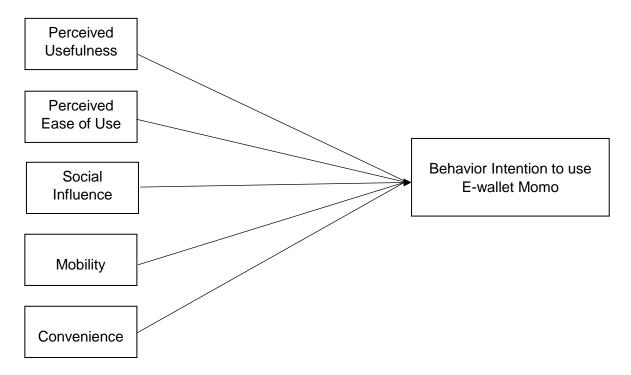


Figure 8. The conceptual framework of this thesis created by the author.

Based on the conceptual framework and theoretical framework of this thesis, the author proceeds the survey by two factors from Technology Acceptance Model (TAM) such as perceived usefulness and perceived ease of use. In addition, the three independent factors from Unified Theory of Acceptance and Use of Technology (UTAUT) model also play huge parts in analyzing the behavior of Vietnamese Gen Z in using e-wallet Momo. Together with those factors, demographic information includes age, gender, working status, region, etc also powerfully strengthens the reliable of this thesis's survey.

According to the conceptual framework, the following hypotheses tested can be listed as:

Hypothesis 1 (H1): The higher the perceived usefulness, the more positive effects on Gen Z users' behavioral intention to use Momo e-wallet.

Hypothesis 2 (H2): Perceived ease of use positively affects Gen Z behavioral intention to use MOMO e-wallet in Vietnam.

Hypothesis 3 (H3): Social influence positively affects Gen Z's behavioral intention to use MOMO e-wallet in Vietnam.

Hypothesis 4 (H4): The more positively the mobility has, the more behavioral intention to use MOMO e-wallet among Vietnamese Gen Z.

Hypothesis 5 (H5): The more convenient it is, the more people will accept and use Momo e-wallet in Vietnam.

5.2 Data Collection

The table below describes the timeline of the data analyzing process in each stage in detail.

Date	Action
15 th May 2023	Building draft survey form
22 nd – 29 th May 2023	Posting survey forms social media plat- forms to gather participants' responses
30 th May 2023	Analyzing the survey results

Table 3. Timeline of the data collecting

The process of data collection for this study is implemented in the middle of May 2023. The author started building the draft and constantly editing the survey in order to fulfill the answers from the sub-questions, research question of this study. The survey was conducted based on the sub-questions and research question theme, and the five hypothesises. The survey was collected anonymously in the second week of May 2023 by using Google Form platform and distributed to online channel such as Facebook and Instagram. The author chooses to post survey link in those social medial platforms because of its popularity among Vietnamese Gen Z. Moreover, it is also apparent that the survey can be reached to more the target respondents through social media platforms. The survey was stopped collecting forms after one week from the launching week and recorded with 102 responses, which exceeds the initial target – 100 ones. The questionnaire was built with two main sections such as General Information and Influence Factors. The first section included eight demographic and filter questions such as age, gender, working status, location, monthly income, etc to get an overview about the respondents' information as well as their attitude toward ewallet, especially Momo e-wallet. The next section featured with 21 questions in multiple choices to examine the attitude and actions of the participants based on several driving factors from TAM and UTAUT models. All the data information from the participants was recorded only for analyzing this thesis with the purpose of having a better understanding about the acceptance and attitude of Vietnamese Gen Z in using Momo e-wallet.

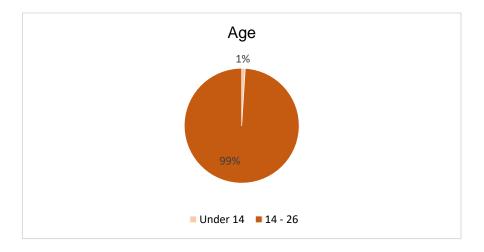
5.3 Data Analysis

The purpose of this survey is to gather a standard samples of Vietnamese Gen Zs behaviours toward the digital payment, specifically e-wallet Momo. According to the limitation of this thesis, the survey focuses on Gen Z in Vietnam who are using or are going to use in the future. There were 102 valid responses that could be used for the analysis of this thesis. The survey is divided into two sections: the first section is General Information which collects basic information about the respondents, the second section is Influence Factors which is used for analyzing five proposed hypotheses in the conceptual framework above.

General Information section includes eight questions: age, gender, region in Vietnam, working status, monthly income, current payment, the respondents know Momo e-wallet from which channels, and their purpose of using this e-wallet. About Influence Factors section, it includes five hypotheses: Perceived Usefulness, Perceived Ease of Use, Social Influence, Mobility, and Behavior Intention. Therein, the first three hypotheses consist of five statements each, while the last two hypotheses embrace three statements each.

5.3.1 General Information

This section describes the respondents' demographic information, the purpose of using Momo e-wallet, and how they know about Momo e-wallet.

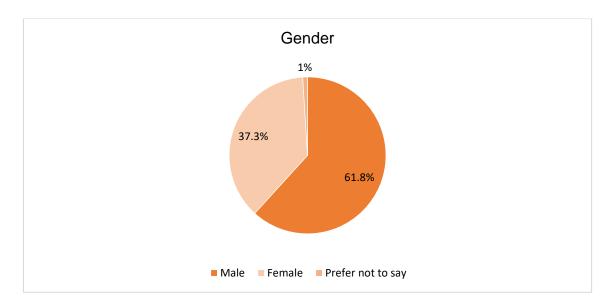


The first question is about the age of respondents which is shown in the Figure 9 below.

Figure 9. Age of the respondents

Since this study focuses on Gen Z so the age of the respondents should be from 14 - 26 years old or below 14 years old. The survey receives 102 responses in which 99% (101 responses) of the respondents are in the age from 14 - 26 years old, and 1% (1 response) belong to age group Under 14 years old. The author has filtered the participants from the beginning of the survey, so if the participants did not belong to these two age groups, they could skip this survey.

The second chart for demographic information displays the gender of these valid respondents. The chart is shown in Figure 10





It is shown in the figure 10 that 61.8% of the respondents are male, 37.3% defines themselves as female, and only 1% accounts for the option "Prefer not to say".

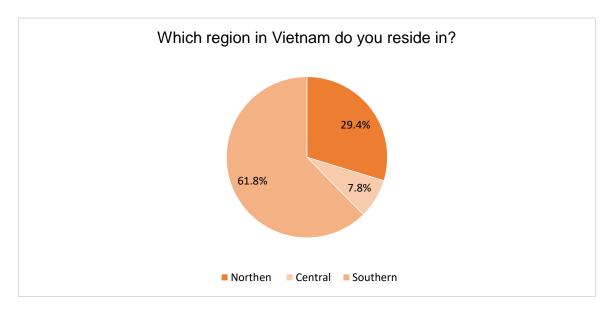


Figure 11. Respondent's residential region

Figure 11 shows the region in Vietnam of the respondents. More than a half of the respondents are from the South of Vietnam (62.4%), while 29.7% of the respondents are from the Northen region. Moreover, based on the chart, the region which has the least respondents (7.9%) is belong to the central of Vietnam.

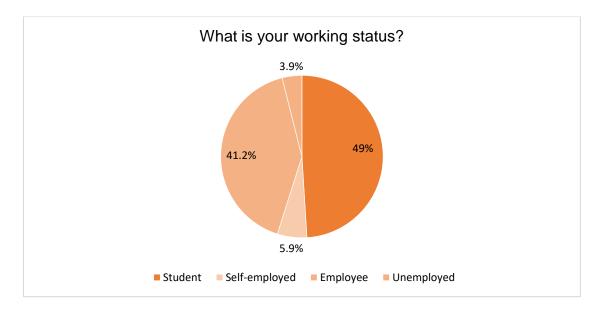


Figure 12. The working status of respondents

According to Figure 12 above, respondents who are students have the highest percentage of the survey's working status question (49%). Following the student answer is the employee one which is accounted for 41.2%. While 5.9% and 3.9% of the respondents are the self-employed and unemployed. This question will provide more insights about consumers' backgrounds which shows that the Momo e-wallet is mostly well-known or used among student or employees.

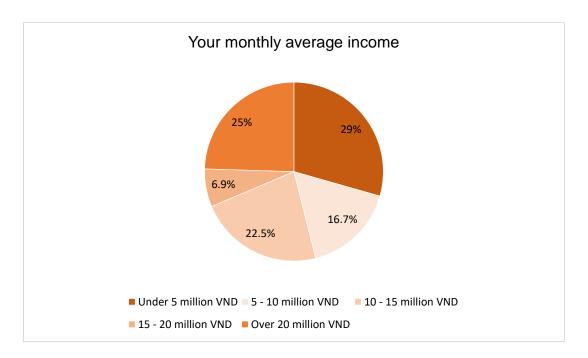
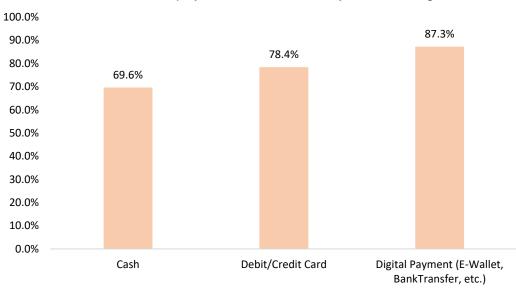


Figure 13. Monthly average income of respondents

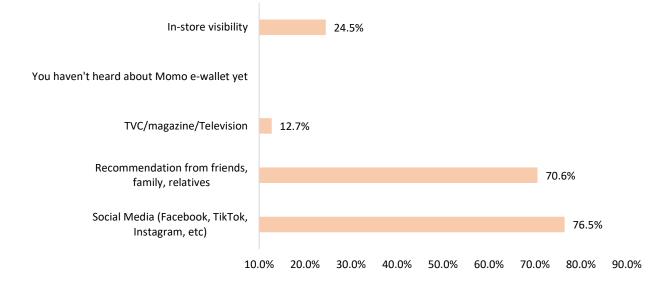
Corresponding to the Figure 13, the group of respondents who earn under 5 million VND per month (under 190 euro) has the largest percentage among all monthly average income answers with 29.4%. The second place which accounts for 24.5% belongs to the group of respondents who earn more than 20 million per month (over 764 euro). The following is the group of respondents has monthly average income in the range from 10 to 15 million VND (382 – 573 euro), accounting for 22.5%. The proportion of respondents represented by 5 to 10 million VND (193 – 385 euro) cohort is 16.7%, while 6.9% of the respondents represented by 15 to 20 million VND (573 – 764 euro) cohort. This data shows the insights of respondents' spending capacity and purchasing power.



What kind of payment methods that you are using?

Figure 14. Current payment methods of respondents

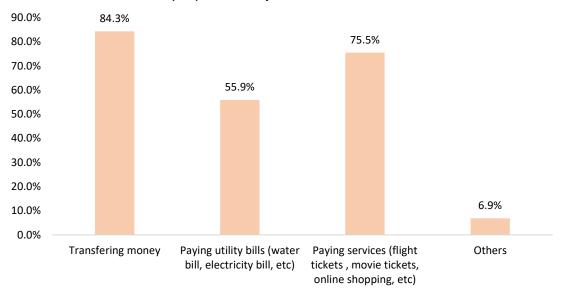
This question focused on the payment methods that respondents are using at the moment. Moreover, the respondents can choose more than one listed option. Based on the figure 14, 87.3% of the respondents chooses digital payments (e-wallet, bank transfer, etc.) as their payment method, while debit/credit card accounts for 78.4%. Followed those two payment services above is cash payment with 69.6%.



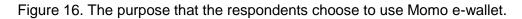
From which channels that you hear about Momo e-wallet

Figure 15. Channels that respondents discover Momo e-wallet.

The purpose of this question is that the author can collect information on which communication channels the respondents reach to Momo e-wallet. There are five options in this question such as in-store visibility, social media, recommendation from friends, family, relatives, TVC/television/magazine, and have not heard about Momo e-wallet yet. The respondents can also choose more than one option in this question. The results from figure 15 show that social media (Facebook, TikTok, Instagram, etc) received the most vote from the respondents, accounting for 76.5%. 70.6% of the respondents choose recommendation from friends, family, relatives as their option that they heard about Momo e-wallet, while 24.5% of them discover the e-wallet through in-store visibility. Followed by 12.7% of TVC/magazine/television and 0% for You haven't heard about Momo e-wallet yet.



The purpose that you use Momo e-wallet



The intention of creating this question was that the author could categorize which services from the Momo e-wallet that respondents use the most. According to Figure 16, the results show that the option with the most vote from the respondents was Transferring money, accounting for 84.3%. The second option was paying services (flight tickets, movie tickets, online shopping, etc) with 75.5%. Followed by 55.9% of the vote from the respondent's response that they use Momo e-wallet to pay for their utility bills (water, electricity bills, etc). Final option was Others which accounts for 6.9%. In addition, the respondents also note more various options when they chose this option, for instance donating for charity or topping up game cards or playing game.

5.3.2 Testing adapted hypotheses

In order to answer the main research question which is identifying factors that affect Vietnamese Gen Z in switching from traditional payment method to Momo e-wallet payment, the author implemented statements related to the adapted factor and the respondents had to rate the degree of agreement. This belongs to Section Influence Factors in the survey, the author chooses Likert as a measurement scale, which has the range from 1 to 5 corresponding to Strongly disagree to Strongly agree.

 Hypothesis 1: Perceived Usefulness - The higher the perceived usefulness, the more positive effects on Gen Z users' behavioral intention to use Momo ewallet.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Saving time when using Momo e-wallet	1,96%	0,98%	23,53%	47,06%	26,47%
Paying and transferring money faster when using Momo e-					
wallet	1,96%	3,92%	22,55%	45,10%	26,47%
I find it easier to pay through Momo e-wallet	1,96%	1,96%	23,53%	43,14%	29,41%
I find it more useful to use Momo e-wallet than others	2,94%	7,84%	23,53%	47,06%	17,65%

Table 4. Percentage of overall opinion toward the perceived usefulness of Momo e-wallet.

This table aims to clarify the usefulness of Momo e-wallet toward to customer's behavioral intention. Aforementioned in 5.1.2, if a person believes that the usefulness of Momo e-wallet had made their life better in personally or professionally ways, that person might have a positive behaviour intention to use Momo e-wallet in the future. With the first statement, 47.06% of the respondents agree that using Momo e-wallet will save their time, while 26.47% of them strongly agree with the statement. "Neutral", "Disagree", and "Strongly disagree" respectively account for 23.53%, 0.98%, and 1.96% of the respondents voted for the first statement. This result can imply that most of the respondents found Momo e-wallet useful if it saved their time.

Regard to the second statement, the percentage proportion of "Agree" and "Strongly agree" from the respondents account for 45.10% and 26.47%. 22.55% of the respondents have the neutral attitude to the second statement which is paying and transferring money faster when using Momo e-wallet. Moreover, 3.92% and 1.96% of the respondents disagree and strongly disagree with the second statement. This could implicitly show the respondents believe that Momo e-wallet will be useful if it is fast when it comes to paying and transferring money.

Next, 43.14% of the respondents agree that it is easy to pay through Momo e-wallet; another 29.41% of them strongly agree with the same idea. The proportion of respondents choosing "Neutral", "Disagree" and "Strongly disagree" for the third statement was 23.53%, 1.96%, and 1.96% individually. The result indicates that majority of the respondents find Momo e-wallet useful if it is easy to pay through it.

In the fourth statement, a total of 64.71% of the respondents agree that the Momo e-wallet is more useful than others, therein respectively, with 47.06% agreeing and 17.65% strongly agreeing. 23.53% of the respondents have neutral attitude toward this statement. Only

7.84% and 2.94% of them disagree and strongly disagree with the fourth statement. In addition, the percentage of respondents who chose disagree option in this statement was greater than other three statements. However, overall, the result positively agree with the statement because most of the respondents agree with the idea that Momo e-wallet is more useful than others.

•	Hypothesis 2: Perceived Ease of Use - Perceived ease of use positively affects
	Gen Z behavioral intention to use MOMO e-wallet in Vietnam.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
It is easy to use Momo e- wallet	1,96%	0,98%	21,57%	51,96%	21,57%
Using Momo e-wallet requires minimal effort and is user- friendly	2,94%	3,92%	23,53%	50,00%	17,65%
It is simple to execute an order in the app	1,96%	3,92%	28,43%	47,06%	16,67%
The interface is easy to understand and use	1,96%	3,92%	23,53%	52,94%	15,69%

Table 5. Percentage of overall opinion toward the perceived ease of use of Momo e-wallet

In this hypothesis, the author will clarify the positive effect of the perceived ease of use of Momo e-wallet on the behavioral intention to use it in the future of Vietnamese Gen Z. In the first statement, more than half of the respondents (51.96%) agree that it is easy to use Momo e-wallet; another 21.57% of them dramatically agree with this statement. While 21.57% of the respondents chose "Neutral" option for the first statement, only 0.98% and 1.96 of them disagree and strongly disagree with the idea of using Momo e-wallet easily. Overall, it is presenting the positive result because most of the respondents agree that they found it is not difficult to use Momo e-wallet.

Regarding the second statement, half of the respondents concur that they exert minimal endeavours in utilizing the e-wallet and perceive the application as user-friendly. Furthermore, a notable subset of the participants, comprising 17.65% strongly agrees with the sentiment, emphasizing their inclination towards effortless utilization of the e-wallet and the user-friendly interface of the application. It is shown from the table that "Neutral", "Disagree", and "Strongly disagree" respectively account for 23.53%, 3.92%, and 2.94% of the respondents voted for the second statement. Based on the result, the author believes that the majority of the respondents have a positive attitude toward the idea that using the Momo e-wallet requires minimal effort and is user-friendly.

The third statement posits that executing an order in Momo e-wallet application is a simple process. In order to assess that statement, the author will go through the results from the table 3. A substantial majority, encompassing 47.06% of the respondents express that they agree with the third statement, implying that they find the Momo e-wallet manageable when using it. Moreover, 16.67% of the respondents strongly agree with the notion that it is simple to make an order in Momo e-wallet application. In contrast, merely 1.96% of the respondents express a strong disagreement with the statement, and similarly, a small segment, accounting for 3.92%, show their disagreement with the idea of ease in executing an order. Notably, another group of respondents, comprising of 28.43%, adopts a neutral stance toward this statement. Hence, the result shows that most of the respondents believe that it is simple to execute an order in the app.

For the fourth statement, the largest segment of the respondents, accounting for 52.94%, indicate their agreement signifying their recognition of the interface's simplicity and ease of use. Moreover, a significant of the respondents, consisting of 15.69% totally agree with this statement. Remarkably, 23.53% of the participants adopt a neutral perspective that the interface is easy to understand and use. On the contrary, only 3.92% and 1.96% of the respondents disagree and strongly disagree with the fourth statement. The result strongly implies that Momo e-wallet application's interface is straightforward to understand and use.

• Hypothesis 3: Social Influence - Social influence positively affects Gen Z's behavioral intention to use MOMO e-wallet in Vietnam.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My friends and colleagues have influence in my intention to use Momo e-wallet	1,96%	5,88%	21,57%	44,12%	23,53%
Family affects my intention to use Momo e-wallet	10,78%	25,49%	39,22%	15,69%	6,86%
I feel left-out if I didn't use Momo e-wallet	15,69%	22,55%	30,39%	22,55%	6,86%
The advertisements affect me in using Momo e-wallet	6,86%	27,45%	32,35%	21,57%	9,80%

Table 6. Percentage of overall opinion toward the social influence of Momo e-wallet.

This hypothesis aims to clarify the favorable impact of the social influence of the Momo ewallet on the behavioral intention of Vietnamese Gen Z to use it in the future. According to the first statement, a majority of the respondents (44.12%) expressed agreement with the notion that their friends and colleagues have influenced their intentions to use Momo ewallet, with an additional 23.53% strongly endorsing this viewpoint. While 21.57% of the participants remained neutral on the matter, only 5.88% and 1.96% disagreed and strongly disagreed, respectively, with the idea of the intentions to use Momo e-wallet have been shaped by the influence of their friends and colleagues. The finding demonstrates a positive outcome with the first statement.

The second statement poses that the intention to use Momo e-wallet is influenced by family. To assess this statement, the author examines the results from Table 3. A large of respondents, accounting for 39.22%, express a neutral attitude towards the second statement, indicating that they believe their family has an impact on their intention to use the Momo e-wallet. Furthermore, 25.49% and 10.78% of the respondents disagree and fully disagree with this notion, asserting a stronger conviction regarding the influence of family on their decision. In contrast, only a minimal percentage of respondents, merely 6.86%, express a strong agreement with the statement, indicating that a few respondents firmly reject the idea of family affecting their intention to use the e-wallet. Similarly, 15.69% of the participants, show their agreement with the notion of family influence. The result demonstrates a diverse range of responses concerning the influence of family on the intention to use the Momo e-wallet. The substantial percentage of neutral responses underscores the complexity of familia influence in this context.

Concerning the third statement, approximately 30.39% of the participants adopt a neutral position, revealing a lack of definitive agreement or disagreement regarding the notion of feeling excluded in case of non-usage of Momo e-wallet. Particularly, a considerable segment, accounting for 22.55%, expressed disagreement with the statement, with a notewor-thy subset of 15.69% strongly declaring their disagreeing perspective. Reversely, another sizeable group, consisting of 29.41% of respondents, expressed agreement, signifying that they do feel left out if they don't use Momo e-wallet. Moreover, a small portion, encompassing 6.86% of the respondents, strongly agreed with this sentiment, suggesting a heightened belief in the emotional impact of using the e-wallet. The finding provides valuable insights into the emotional aspect of e-wallet usage, indicating that a significant proportion of respondents with a total of 38.24% of disagreement do experience a sense of being left out if they momo e-wallet.

In the fourth statement, when being asked if the advertisements affect the respondents in using Momo e-wallet, most of them provide neutral stances to this statement, accounting for 32.35%. Notably, the percentage of respondents who disagreed with the statement (27.45%) is relatively close to those who agreed with it (21.57%). Furthermore, another subset, comprising 9.80% of the respondents, strongly agrees that advertisements affect their usage of Momo e-wallet, while 6.86% strongly disagree, indicating a remarkable contrast in opinions within this subset. The results reveal a diverse range of attitudes towards

the influence of advertisements on the adoption of Momo e-wallet. The considerable proportion of neutral responses indicates the complexity of this relationship, with respondents exhibiting varying degrees of impact from advertisements on their usage intentions.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I can use Momo e-wallet anywhere and anytime	2,94%	6,86%	20,59%	47,06%	20,59%
As long as I carry my phone that connected to Internet, I can use Momo e-wallet	1,96%	5,88%	8,82%	55,88%	25,49%
I can use Momo when I'm travelling	4,90%	7,84%	19,61%	45,10%	20,59%

• Hypothesis 4: Mobility - The more positively the mobility has, the more behavioral intention to use MOMO e-wallet among Vietnamese Gen Z.

Table 7. Percentage of overall opinion toward the mobility factor of Momo e-wallet.

Hypothesis 4 aims to indicate the positive relationship between the mobility factor and the behavioural intention. In relation to the first statement, most of the respondents (47.06%) expressed agreement with the notion that they can use Momo e-wallet anywhere and anytime. Moreover, 20.59% of the participants also conveyed a strong agreement with this sentiment, endorsing the idea of the easy mobility of Momo e-wallet. While 20.59% of the respondents show neutral attitude to the first statement, conversely, a relatively small proportion of respondents, comprising 6.85%, show disagreement, indicating a minority view that holds reservations about the ease of using Momo e-wallet in various locations and at any time. Additionally, 2.94% of the respondents strongly disagree with the first statement. Based on Table 4, a total of 67.65% of the agreement and strongly agreement with the result, which can demonstrate valuable insights for informing targeted strategies to enhance the accessibility and usability of Momo e-wallet to cater to the needs of the Gen Z demo-graphic.

In the second statement, more than half of the respondents (55.88%) agree that if they carry their phone that is connected to the Internet, they can use Momo e-wallet. Similarly, 25.49% of them strongly agree with the notion that they have convictions in the portability and accessibility of Momo e-wallet service. In contrast, a minor proportion of the respondents such as 5.88% and 1.96% voted that they disagree and totally disagree with the second statement. In their opinion, they believe that even if their phones are connected to the Internet, they still could not use Momo e-wallet. In addition, 8.82% of the participants have neutral when it comes to the second statement. Compared this with the first statement, the proportion of the respondents choose neutral option is much lower with 11.77% gap between them. However, the result of the second statement still shows that most of the respondents

have a positive attitude toward the notion that as long as they bring connected Internet phones, they can use Momo e-wallet anytime and anywhere.

Regarding the final statement in this hypothesis, 45,10% of the respondents agree that they do use Momo e-wallet when traveling. Additionally, 20.59% of them respond that they strongly agree with the idea of using Momo e-wallet when they go travel. Notably, another group of respondents, comprising 19.61 %, adopts a neutral stance toward this statement. On the contrary, only 7.84% and 4.90% of the respondents disagree and strongly disagree that they can use the wallet when traveling. Among the three statements in hypothesis 4, the final statement has the highest percentage of disagree and strongly disagree numbers. Nevertheless, the overall result of this statement implies that most of the participants choose Momo e-wallet as their payment method when they are on trips.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I can use Momo e-wallet to pay for my electrical bill, water bill,	2,94%	0,98%	18,63%	47,06%	26,47%
I use Momo e-wallet payment for online shopping	2,94%	3,92%	13,73%	47,06%	28,43%
I use Momo e-wallet to pay for my basic daily expense	2,94%	5,88%	16,67%	50,00%	20,59%

• Hypothesis 5: Convenience - The more convenient it is, the more people will accept and use Momo e-wallet in Vietnam.

Table 8. Percentage of overall opinion toward the convenient factor of Momo e-wallet.

The purpose of hypothesis 5 is that the author can find the relationship between the convenient factor and the behavioral intention to use Momo e-wallet more if the convenient factor increases. The first statement declared that the respondents could use Momo e-wallet to pay for their electrical bill, water bill, etc. According to Table 5, 47.06% of the respondents agree with the first statement. In addition, 26.47% of them also strongly agree that they use Momo e-wallet to pay for the utility bills. The percentage number which takes over the third place is Neutral option, 18.63% of the respondents have neutral stance for this statement. On the other hand, merely 0.98% of the participants disagree and 2.94% of them strongly disagree with the idea of using Momo e-wallet to pay for their electrical bill, water bill or internet bill, etc. Despite this, majority of the respondents still believe in using Momo e-wallet to pay for their monthly bills, for example: utility bill.

According to the second statement from Table 5, the proportion of survey participants, constituting 47.06% of the total, express agreement with utilizing the Momo e-wallet as their preferred payment method for online shopping activities. Furthermore, 28.43% of the participants totally agree that they would love to use Momo e-wallet when shopping online. While a neutral stance was adopted by 13.73% of the participants, a mere 3.92% and 2.94% expressed disagreement and strong disagreement, respectively, regarding the notion that they are not willing to use Momo e-wallet as their e-commerce payments. However, the agreeing percentage proportion holds the most elevated position among all rates presented within this second statement. Hence, the outcome underscores a favorable disposition toward the hypothesis 5's statement.

In the context of the third statement, which explores the extent to which respondents employ Momo e-wallet for their fundamental daily expenditures, it is observed that a notable half of participants (50%) expressed agreement with this assertion, affirming the utility of the e-wallet for such purposes. A sizeable proportion (20.59%) strongly agreed with this view-point, underscoring a robust conviction regarding the practicality of using Momo e-wallet for basic daily expenses. In contrast, a modest percentage of respondents, consisting of 5.88%, expressed disagreement, indicating a minority perspective that holds reservations about the suitability of Momo e-wallet for covering essential daily costs. Furthermore, 2.94% of participants strongly disagreed, representing a distinct and contrasting viewpoint within this final statement. Significantly, another group of respondents, comprising 19.61%, adopts a neutral stance toward this last statement. However, the percentage of respondents who agree with the third statement accounts for a total of 70.59%. With the result that most of the participants tend to use Momo e-wallet to pay for their basic daily expenses.

• Hypothesis 6: Behavioral Intention

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I have intention to use Momo e-wallet for the next 6 months	1,96%	4,90%	24,51%	39,22%	25,49%
I plan to use more Momo e-wallet services in the future	1,96%	7,84%	22,55%	36,27%	27,45%
I will use Momo e-wallet to purchase shopping online more in the future	2,94%	5,88%	22,55%	41,18%	24,51%

Table 9. Percentage of overall opinion about behavioral intention of Vietnamese Gen Z toward Momo e-wallet.

Based on the first statement from Table 6, the percentage of the respondents who have the intention to use Momo e-wallet for the next six months accounts for a total of 64.71% therein 39.22% of them vote for the "Agree" option, and 25.49% choose "Strongly agree" option. Regarding other options, 24.51% of the participants choose to stay neutral with the idea of using Momo e-wallet for the next six months. Moreover, a small percentage from the respondents choose "Disagree" option for this first statement, accounting for 4.90%, while 1.96% of them show strongly disagree to the thought of having intention to use the Momo e-wallet in the upcoming six months.

For the next statements, the respondents have huge intentions in using Momo e-wallet services more in the future, not only using the services of the e-wallet, but also use the e-wallet to shop online. According to the second and the third statement from Table 6, majority of the respondents agree or totally agree to use Momo e-wallet more in the future. This can account for a total percentage, 63.72%, which can be easily viewed that more than half of the respondents in this survey agree on the second statement idea. In addition, 65.69% is the total percentage of the respondents who agree and strongly agree that they will use Momo e-wallet more in the future when shopping online or shopping through e-commerce platforms. On the contrary, merely 7.84 % of the participants disagree and 1.96 % of them strongly disagree that they will use Momo e-wallet services more in the future. However, the percentage of the respondents who disagree in this second statement has the highest percentage rate compared to others. While 5.85% and 2.94% of the respondents actively vote the "Disagree" and "Strongly disagree" for the third statement of the Hypothesis 6. Both statements gain the same percentage of respondents (22.55%) who express their neutral attitude towards the idea of using Momo e-wallet more in the future, especially with their own services or their connected services with third parties. In the short conclusion, the overall result of these statements implies that most of the participants stay positively with their intention of to use Momo e-wallet in the next six months or even in the near future.

6 Conclusion

6.1 Answers for Research Questions

After analyzing the data, this part aims to answer main research question and four related sub-questions. According to the charts and tables above, the author could fully understand the influence of these factors: perceived usefulness, perceived ease of use, social, mobility, and convenience on the behavioural intention to use Momo e-wallet of Vietnamese Gen Z.

Sub-question 1: What is E-wallet/online/mobile payment?

Aforementioned in chapter 2, E-wallet is known as an electronic card or an application that allows users/consumers to execute online transactions, payments through mobile devices such as smartphones, or tablets (The Economic Time 2018).

Sub-question 2: Since when Vietnamese Generation Z started switching to cashless payment methods more than traditional ones.

With the ongoing and relentless development of technology, the e-wallet market in Vietnam is steadily advancing towards achieving more remarkable milestones. Simultaneously, in 2019, the Vietnamese government also enacted several policies or measurements that benefit the Fintech industry in general, and the E-wallet market specifically. In addition, the significant impacts from the Covid-19 pandemic that emerged around the beginning of 2020, Vietnamese Gen Z's payment habits have gradually changed. During the pandemic time, the government encouraged the local to minimize the in person engaging of buying and selling activities, which increased the idea of using online payment or e-wallet payment to make transactions. Direct transactions have slowly shifted towards online platforms, hence, the utilization for electronic wallets has become an effective solution for both sellers and buyers. The point is that e-wallet/online payment still stands strongly after the Covid-19 era. Because this payment method caters to the needs of the Internet users in the context of rapid e-commerce development, offering diversity, convenience, simplicity in transactions, and the ability to execute payments anywhere and anytime. Notably, 87.4% of the respondents from the survey indicated their preference for digital payments, marking it as the predominant choice among all the mentioned payment methods. In conclusion, it is the consonance between the effect of the pandemic and the attractive and correct timing policy from the Vietnamese government makes the Vietnamese Gen Z dramatically shifts to e-wallet payment method more instead of loyally staying with cash payment only in bygone eras. (State Bank of Vietnam 2021.)

Sub-question 3: What is the stand-out advantages of an E-wallet that turn it into an explosion between a bunch of digital payments?

As discussed in SWOT Analysis of Chapter 4, Momo e-wallet is the first e-wallet app in Vietnam to apply "one touch payment". The e-wallet also aims to become a "super app" which can help users to make payments for many activities in daily life from paying utility bills, movie, concert, festival tickets, flight tickets, topping up mobile, or transferring money. With those huge advantages, Momo e-wallet indirectly educates its users that if they want to make any online transactions from those services above, Momo e-wallet will the first e-wallet that pop-up in their minds. Moreover, interesting advertising campaigns or up-to-date marketing trends tremendously contributes to the explosion of Momo e-wallet specifically, or the whole e-wallet market generally between a bunch of competitive digital payments. (Nguyen 2021.)

Main research question: What factors affect Vietnamese Generation Z consumers moving from traditional payment methods towards cashless payment methods such as Momo E-wallet?

Based on the results of above hypotheses, other previous studies, and the completion of three sub-questions, the author believes that there are five factors that affect Vietnamese Gen Z consumers moving from cash payment to Momo e-wallet payment according to TAM and UTAUT models, consisting of perceived usefulness, perceived ease of use, social influence, mobility, and convenience. All these factors have the impacts on the behavioral intentions to use Momo e-wallet of Vietnamese Gen Z.

Regarding of perceived usefulness factor, it shows how useful Momo e-wallet is to the users. In addition, it also shows how positively the users react to the usefulness of the Momo e-wallet. All the reasons from saving time when making transactions, transferring money faster, finding easier to pay are apparently prove that the factor genuinely have optimistic influence on the behaviours of the Vietnamese Gen Z in using Momo e-wallet more.

In the forces driving Vietnamese Gen Z to adopt Momo e-wallet, factors such as social influence, mobility, and convenience play huge contributions in creating the explosion of using this e-wallet among Vietnamese, especially Gen Z cohort. In this digital age, social influence from family, peers, or colleagues holds such substantial sway over behavioral intention. With the dynamic, fear-of-missing-out, bold, youthful characteristics of young generation – Gen Z, they are more likely to adopt new technology products or platforms that allow them to share the experiences with friends and family. About the mobility factor, with the ubiquity of smartphones and the widespread availability of internet connectivity, Momo e-wallet truly leverages this factor. The ability to make payments on the go, seamlessly and

securely, aligns with the fast-paced lifestyle of Gen Z. With Momo e-wallet, users can make payments for a variety of services, such as transportation, food delivery, and online shopping. The convenience of not needing physical cash or cards while commuting resonates well with Gen Z's preference for streamlined experiences. Regarding to convenience factor, it is a key driver for Gen Z's choice of digital services, including e-wallets. Momo e-wallet addresses this through its user-friendly interface, simplified payment processes, and diverse service offerings. Gen Z users value efficiency, and Momo e-wallet caters to this by centralizing various transactions in a single platform. The convenience of managing bills, transferring funds, and even making online purchases contributes to the appeal of Momo e-wallet. Additionally, features like QR code payments and seamless integration with partner merchants enhance the overall user experience. All the factors combine with the positive attitude of Vietnamese Gen Z users enhancing the possibility to use Momo e-wallet more in the future. Jumping to the conclusion, it also explains the reasons why Vietnamese Gen Z gradually switch from traditional payment like cash payment to digital payment, for example e-wallet payment.

6.2 Validity and Reliability

Reliability and validity are critical aspects of any empirical research study because their dependability and robustness toward collecting data. While validity evaluates the correctness and suitability of the instruments in measuring the target variables, reliability refers to the consistency and stability of measurements. The higher the reliability and validity in an empirical research study, the stronger credibility and generalizability it gets.

The author has employed two ways to approach data was primary and secondary data for this thesis. For reliability, the author used the secondary data from previous research's results about adopting or accepting technological advancement by customers to reinforce the assumptions. Hence, it is qualified and reliable enough to build a strong foundation for the questionnaire of the survey from those assumptions. Regard to validity, the author uses primary data method to collect the data. The survey was posted and shared in various groups in Facebook to reach a wide range of Vietnamese Gen Z respondents from all over Vietnam. This also showed that the respondents had no or little connections with the author hence it would minimize the bias answers from them. In addition, before officially collecting the data, the author decides to send the survey to three people consisting of the author's friend who is the same age with the author, old colleague who is older than the author, and one random stranger for feedbacks with the purpose of improving the survey.

6.3 Suggestion for Future Research

This study provides an overview of how Vietnamese Gen Z starts using Momo e-wallets more than cash payments, according to five factors that affect their behavioral intention to use the e-wallet in the future.

As mentioned in the limitations section of Chapter 1, with limited sample size, period of time in collecting data, and the use of quantitative method only, are the main limitations of this study. Therefore, the author suggests that other researchers should focus more on the time of collecting data, or analysis of other sample sizes, for example, the older generation – Gen X or Baby Boomers or utilize both quantitative and qualitative techniques to collect more in-depth responses from the target respondents about how the older generation reacts to the new technology finance products or services. This could give an interesting and novel perspective insight into the diversity of e-wallet's customers.

Overall, the author expects that this study will give constructive insight to readers concerning the current payment situation in Vietnam, and how the current young generation – Gen Z has a powerful influence in changing Vietnamese payment habits. With the revolution and unstoppable evolution of the digital payment market generally and e-wallet specifically, it is promising to see that Vietnam will come closer to a cashless society.

7 Summary

The purpose of this study is to have a better understanding of Vietnamese Gen Z's changes in payment method, especially in using Momo e-wallet. In order to prove the main topic of this study, a main research question was created together with four sub-questions. Moreover, to have the answer to these questions, five factors from TAM and UTAUT models are used to analyze the study.

The first chapter introduces the main topic, the overview topic, the structure of this study, and the theoretical framework. Next, the general information about the Fintech industry is introduced and later narrowed down to the emergence of e-wallet and its function. Chapter 3 focuses on the target group of this thesis which is Vietnamese Gen Z and the factors that affect the Vietnamese Gen Z's behavioral intentions to use Momo e-wallet. The case study of Momo company is analyzed clearly in Chapter 4 which readers can easily find the overview information about Momo e-wallet company, and SWOT analysis of this e-wallet. Chapter 5 covers the empirical research and data analysis of this thesis. In addition, chapter 5 also presents the survey result, which is analyzed by quantitative method. Chapter 6 is the conclusion which focuses on answering the main research question and sub-questions. In addition, there is also a discussion on whether this thesis is valid and reliable or not, together with the limitations of this thesis and suggestions for future researchers with related topics. Finally, this study is summarized in chapter 7.

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Appendix 1: Questionnaire

Understanding Gen Z payment culture change in Vietnam. (Momo E-wallet)

Hello everyone!

I am Tam Vu, an undergraduate at LAB University of Applied Science. I am implementing this survey to have a better understanding how Vietnamese Gen Z switch from cash to digital payments, especially the Momo e-wallet.

This survey is part of my Bachelor's thesis. It will take you no more than 7 minutes to complete. Your personal information will not be gathered, and the response will be used only for the purpose of this thesis. In addition, all the responses will remain anonymous.

Thank you.

General Information

Description (optional)

General Information

Age *	
O Under 14	
0 14-26	
Gender *	
O Male	
O Female	
O Prefer not to say	
O Other:	

What kind of payment methods that you are using?
Cash
Debit/Credit Card
Digital Payment (E-Wallet, Bank Transfer, etc.)
Other:
From which channels that you hear about Momo e-wallet? *
Social Media (Facebook, TikTok, Instagram, etc)
Recommendation from friends, family, relatives
TVC/magazine/Television
You haven't heard about Momo e-wallet yet.
In-store visibility
The purpose that you use Momo e-wallet *
Transfering money
Paying utility bills (water bill, electricity bill, etc)
Paying services (flight tickets , movie tickets, online shopping, etc)
Other:

Influence Factors

Please indicate your opinion about the following statement by using the below assessment:

- (1) = Strong Disagree
- (2) = Disagree
- (3) = Neutral
- (4) = Agree
- (5) = Strong Agree

Perceived Usefulness *

	Strong Disagree	Disagree	Neutral	Agree	Strong Agree
Saving time when using Momo e-wallet	0	0	0	0	0
Paying and transfering money faster when using Momo e-wallet	0	0	0	0	0
l find it easier to pay through Momo e-wallet	0	0	0	0	0
I find it more useful to use Momo e-wallet than others	0	0	0	0	0

Perceived Ease of Use *

	Strong Disagree	Disagree	Neutral	Agree	Strong Agree
It is easy to use Momo e- wallet	0	0	0	0	0
Using Momo e-wallet requires minimal effort and is user- friendly	0	0	0	0	0
It is simple to execute an order in the app	0	0	0	0	0
The interface is easy to understand and use	0	0	0	0	0

Social Influence *

	Strong Disagree	Disagree	Neutral	Agree	Strong Agree
My friends and colleagues have influence in my intention to use Momo e-wallet	0	0	0	0	0
Family affects my intention to use Momo e- wallet	0	0	0	0	0
I feel left-out if I didn't use Momo e-wallet	0	0	0	0	0
The advertisements affect me in using Momo e- wallet	0	0	0	0	0

Mobility *					
	Strong Disagree	Disagree	Neutral	Agree	Strong Agree
l can use Momo e- wallet anywhere and anytime	0	0	0	0	0
As long as I carry my phone that connected to Internet, I can use Momo e- wallet	0	0	0	0	0
l can use Momo when I'm travelling	0	0	0	0	0

Convenience *

	Strong Disagree	Disagree	Neutral	Agree	Strong Agree
l can use Momo e- wallet to pay for my electrical bill, water bill,	0	0	0	0	0
I use Momo e- wallet payment for online shopping	0	0	0	0	0
I use Momo e- wallet to pay for my basic daily expense	0	0	0	0	0

Behavior Intention *

	Strong Disagree	Disagree	Neutral	Agree	Strong Agree
I have intention to use Momo e- wallet for the next 6 months	0	0	0	0	0
I plan to use more Momo e-wallet services in the future	0	0	0	0	0
I will use Momo e- wallet to purchase shopping online more in the future	0	0	0	0	0
Submit Clear for					Clear form