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THE IMPACT OF THIRD-PARTY PAYMENT ON ONLINE BANKING AND SMEs IN CHINA

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Abstract

In the recent past, China has undergone rapid developments that have impacted various sectors of its economy. Various technological innovations have led to the emergence and progress of TPP platforms that significantly affect conventional payment operations. In this study, the author aimed at establishing the impact of these TPP platforms on SMEs and online banking. The study also aimed at showing the current and future risks towards SMEs from TPP platforms and the Chinese regulatory framework governing TPP activities. The study used Alipay, the largest TPP platform in China, to attain its study objectives. The study used a mixed-method approach where the author analysed qualitative and quantitative data from the sample. The study had a sample of 261 people that utilise online banking and SMEs goods and services via TPP platforms. The modified motivation theory of information technology guided the study. The study established that TPP platforms influence online banking by lowering its incomes and increasing competition to acquire customers who want money transfer services. The study further demonstrated that most SMEs have begun to TPP platforms because they increase their access to various customers and increase cooperation with other business entities, including banks and TPP organizations. The study further established that market, credit, policy, regulation, and safety regulations are the main risks that discourage consumers from utilising TPP platforms. The research findings implicate the Chinese administration to establish a sophisticated legal framework to help govern TPP platforms operations, including registration of users and protection and sharing of user information.

Keywords: TPP platforms, SMEs, China, legislation, online banking, and Alipay.

Declaration

I declare that the work in this dissertation titled " The Impact of Third-Party Payment on Online Banking and SMEs in China" has been carried out by me. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this dissertation was previously presented for another degree at this or any other institution.

Zak Griffith 14/08/2021

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List of Abbreviations

SMEs – Small and Medium Enterprises

TPP – Third-Party Payment

B2B – Business to business

EPC - European Payments Council

SEPA - Single Euro Payments Area

IT – Information Technology

SBA – Small Business Association

ICT – Information, Communication and Technology

CFA - Confirmatory Factor Analysis

EFA - Exploratory Factor Analysis

B2C – Business to Consumer

PKI - Public Key Infrastructure

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Chapter 1: Introduction

This chapter presents the background information, problem and purpose statement, study aims and objectives, research questions, study significance and definition of basic concepts, limitations, and delimitations of the study. The chapter also provides a general overview of the entire investigation.

Background

Modern business operations have been transformed by technological innovations, most notably the internet (Zhao, Li, and Xue, 2016). In the last two decades, the e-commerce market has grown at a breakneck pace in tandem with the global expansion of the internet (Wang et al., 2008, p. 558). China's banking and small and medium enterprises (SMEs) sectors are not exceptions. The phenomenal modifications in the payment systems in recent years, beginning with the digital era, have led to significant developments in these industries. Initially, the Chinese SMEs used cash as the sole payment medium for the exchange of goods and services, but the trend has changed with the emergence and prevalence of third-party payment (TPP) platforms (Xia, 2018, p. 190). For instance, mobile internet enables purchasers to make purchases anytime and from any location. Therefore, the payment reform efforts have progressively increased the efficiency, convenience, and security of payment patterns, especially in the digital accountancy and commerce markets.

The majority of SMEs have adapted TPP payment methods, purchasing, and selling because it is inexpensive, simple, and flexible, and it fosters a conceptual correlation between customers and business (Cheng, Hsu, and Lo, 2017, p. 254). For instance, buyers are concerned that the commodity will not meet their expectations, while sellers are concerned that they will not receive funds after sending out goods. The principal impediments to e-commerce are credit threats among consumers and sellers, identity fraud, deceitful cards, and online fraud (Cheng et al., 2017, 255).

TPP, characterized by its rapidity, low cost, and high security, is exploding and spreading rapidly in China (Xia 2018, p. 190). Zheng et al. (2020) define TPP systems as the "digital transaction of funds between systems via digital sites that are accessible via an internet access" (p.475). The payment technique evolved due to rapid technological advancements, changes in the corporate environment, the robustness of the educational system, and an organized strategy of conducting business. For example, China, one of the fastest-growing economies based on modern business adoption and structural policy formulation, has transformed various payment systems, particularly in the new century, into an electronic payment system known as E-Commerce (Montes and Cruz 2020, p.16). Electronic commerce (E-Commerce) has achieved phenomenal accomplishments due to the rapid growth of advanced internet connections, particularly in China (Howue and Bashaw, 2020). Sibanda t al. (2020) further asserted that SMEs that utilize TPP had experienced rapid developments in China from 12% output in 2019 to 75% in 2020, where customers and SMEs could conduct commerce remotely during the COVID-19 pandemic (p. 183).

TPP has become a significant part of China's online banking sector. According to a 2018 iResearch survey, TPP transfers in China in 2016 totalled 58.8 trillion, or roughly 70% of the country's gross domestic product. In 2013, Alibaba confirmed that Alipay surpassed 300 million registered users and $150 billion in digital payments. The Chinese fintech product quickly surpassed Paypal to become the world's largest TPP platform (Heggestuen, 2014). Tenpay, formerly known as Wechat pay, is a payment system integrated into a widely used messaging app with over 200 million enrolled users operated by Chinese tech conglomerate Tencent. Tenpay is catching up to Alipay regarding market share and is currently the country's second-largest mobile transaction framework. For a lengthy period, cash dominated the Chinese banking industry, but in recent years, more individuals opt to bill

through mobile phones, thus increasing the dominance of online banking (iResearch Survey, 2018). There is no handset necessity for online banking, and SMEs access is much easier than with cash or credit cards. Unlike the conventional banking system, the TPP transaction does not directly connect to the banking system but can transfer funds between bank accounts and integrates with a broad range of monetary facilities. Therefore, due to these assumptions and the advancement of modernisation and commercial interests, this study assessed the impact of third-party payment on internet banking and SMEs in China.

Problem and Purpose Statement

In the past decades, China has pursued an extensive and zealous policy response to economic sector modifications (McKibben, 2019). However, most of these initiatives have proved ineffective due to extortion and the excessive growth of value-added taxes (VAT) on goods and service industries (Xia 2018, p. 193). The proliferation of these reforms has had a significant impact on SMEs' decline and perceptual growth (Yagci 2018, p.530). However, in 2001, the People's Bank of China (PBOC) devised an administrative, legislative, and control measure non-financial payment method (Guan and Ren, 2019). Government policies regulated price during the period, preferring to be determined by industry forces of demand and supply. According to Kaplan (2016), the PBOC, in collaboration with China's Round Number Two, established an institutional approach to monitor and control TPP services, particularly for SMEs. The whole system encompassed all perceptual and unusual transactions involving non-financial transactions and payment institutions (RBIs) (Yuchi, 2019). In this case, TPP platforms such as Alipay became China's primary online payment method. It meant that most SMEs utilized these platforms as an easy digital payment technique for their commercial enterprise.

Two factors contributed to the concern in this research problem—the first stems from personal experience and research into literary payment works. Advanced electronic payment

trends such as third-party desktop and mobile banking have increased global focus and adoption. The United States' PayPal (1998), the United Kingdom's Skrill (2001), China's Alipay (2004), and Japan's Line pay (2014) are renowned third-party payment conglomerates. PayPal, founded in 1998, was one of the first corporations to partake in a direct-to-consumer digital transaction (Williams, 2007). PayPal's founder, Thiel, asserted that PayPal is a digital wallets corporation, not a bank, since PayPal does not engage in variable reserve banking (Thiel and Levchin, 2004). It conforms to the Chinese idea of TPP. Kahn, Rivadeneyra, and Wong (2019, p. 16) demonstrated that as TPP providers in the United States such as PayPal, Apple, and Google develop a strong correlation with the consumers over convenience, banks' businesses get impacted by the expansion of online payment in third-party firms.

Alipay and WeChat pay are pioneering TPP in the Chinese market. Desktop payment has a comparatively deep history and a moderately steady growth rate, whereas mobile payment has a relatively rapid development rate. Xia. (2018) established that the number of e-commerce money transfers via third-party payment providers is more significant than transfers through banks (p. 191). However, the average cost of a TPP transaction is significantly less than that of a bank transaction (Xia, 2018, p. 191). It indicates that while banks continue to be the prevalent payment method, TPP has a more excellent prospective acceleration as more people adopt it. TPP is reshaping banks' revenue in both direct and indirect ways. Therefore, the purpose of this research is to assess the impact of third-party payment on online banking and small and medium-sized enterprises in China and the platforms' efficacy.

Study Aims and Objectives

The primary aim of this study was to analyse the impact of TPP platforms on online banking and SMEs in the Chinese context. The investigation also aimed to establish the regulatory framework of TPP activities while focusing on transaction sizes, profitability, and

demographics. An objective is a purpose or intent that the investigator wishes to accomplish at the conclusion of the study. However, because the majority of the research objectives are difficult to analyse statistically, the author breaks them down into manageable goals (Barbosa-Povoa, da Silva and Carvalho, 2018, p.411). For example, this study's broad objective is to assess the impact of third-party payment platforms on Chinese SMEs, with a particular emphasis on Alipay's development. However, because evaluating the general goal is statistically impossible, the author has developed three more clear objectives for assessment:

1. To establish the impact of TPP systems on online banking and SMEs in China.
2. To analyse the existing and potential positive and negative risks that TPP systems pose online banking and SMEs in China.
3. To assess the effectiveness of TPP payment systems using the modern modelling of mobile systems.
4. To assess the regulatory framework governing TPP platforms in China and their influence on SMEs and online banking activities.

Research Questions

A research question is a proclamation of inquisitiveness posed by the investigators to aid in their comprehension of the research study's dynamics (Bradshaw, Atkinson, and Doody, 2017, p.23). The question directs the study's trajectory, methodology, and overall structure. In this study, the primary purpose is to establish the impact of TPP platforms on online banking and SMEs in the Chinese context, and the following questions will guide and direct the study:

1. What impact do TPP platforms have on Chinese SMEs and the online banking system?

2. What are the current and future risks associated with TPP platforms in China's SMEs and economy?
3. To what extent are TPP platforms efficient in the corporate world, particularly in the Chinese online banking system?
4. Do the Chinese TPP laws and regulations influence its adoption and efficiency among digital banking users and SMEs?

Significance of the Study

The findings of this research will be of great significance to the current and potential SMEs and banking operators in China. The study will establish the influence and effectiveness of TPP platforms on these sectors, thus giving these investors adequate knowledge of investing and potential risks. The study will also add valuable insights to the economic discipline where authors have conducted several investigations on TPP platforms, SMEs, and banking. The study will become unique since it focused on online banking and SMEs, thus enabling future investigators to lay and expanding their research incentives. The research will also help the Chinese government and other administrators govern and implement the relevant policies for better working of TPP platforms in the corporate world.

Definition of Terms

Small and medium enterprises (SMEs). The World Bank defines an SME as a business setting with less than ten employees on the micro scale, 10-50 employees on a small scale, and 50-200 employees on a medium scale. However, the World Bank has altered the definitions several times due to economic developments.

Online banking. It is the automated provision of new and conventional banking services and facilities to clients via participatory digital communication networks (Daniela, Simona, and Dragos, 2010, p. 672). It also refers to systems that enable clients, whether

people or businesses, to connect accounts, close transactions, and acquire products and services details via a public or private network, including the internet (Daniela et al., 2010, p. 672).

TPP platforms. Zheng et al. (2020) define TPP systems as the "digital transaction of funds between systems via digital sites that are accessible via an internet access" (p.475).

E-commerce, in a broader sense, refers to business transactions initiated via digital equipment. In the narrowest sense, it entails the various commercial operations conducted over a computer system, including behaviours of all involved entities, such as suppliers of goods and services, advertisers, consumers, and intermediary traders (Reynolds, 2004).

Online Shopping: It is the process by which products are transported via the web from vendors to specific customers (consumers). Throughout the entire process, as long as the Internet is used to facilitate cash flow, logistics, or information sharing, the activity is referred to as online shopping (Flick, 2009).

Overview of the Research Structure

The project has five chapters. Chapter 2 provides an analysis of the current and previous literature materials on the effects of TPP platforms on SMEs and online banking in the Chinese and global contexts, their effectiveness, and risks to the business world. Chapter 3 focused on the research methodology guiding the investigation, the project design, sample, data collection, analysis procedures, and ethical considerations. Chapter 4 presents the project findings, analysis, and representation. Chapter 5 includes discussing the project findings, including their relationship with the available literature on TPP platforms, online banking, and SMEs. In the final chapter, the study will provide recommendations for containing the impact of TPPs and their regulations on SMEs and digital banking in China.

Chapter 2: Literature Review

This chapter includes the author's assessment of previous literature materials regarding TPP, online banking, and SMEs in the Chinese context. The author identified the previous literature on this subject by examining previous books, peer-reviewed journal articles, practice enhancement studies, seminar reports, and evidence-based investigations about the influence of TPP on internet banking and SMEs. The study also sought further information using the references presented in the examined literature materials. The online databases the principal investigator used to identify extant literature included: Researchgate, ABI Collection, Business Source Complete, Emerald, Google Scholar, JSTOR, ScienceDirect, and Scopus. The keywords used in these searches included "third party payment," "online banking," "China," "TPP regulations," "Alipay," and "online banking in China." The chapter introduces TPP platforms, SMEs, and online banking, then spreads to history, regulations, developments, and potential advantages and delimitations in China. The chapter then discusses associated literature on the impact of TPP platforms on SMEs and online banking. The last sections provide the theoretical foundations guiding the study and the conclusion of the chapter.

TPP Platforms

TPP platforms are a relatively new sociocultural and financial phenomenon that arose due to specific business variables (Mukkamala et al., 2018, p.305). China's corporate culture is progressive, robust, and adaptable to contemporary adjustments, which aided in developing payment platforms. For example, China is one of the world's largest and most populated nations with rapid corporate ventures combined with a digital presence and a business-friendly political situation. Further, the platforms grew in popularity, productivity, and modifications due to the ballooning of sufficient monetary counterparties that provided digital payment and approval (Kaplan, 2016). For example, Kaplan (2016) noted that in 2014,

the Chinese market attracted over 27,000 deposit-taking organizations interested in enhancing their processes and activities through an online payment. The assertion bolstered the growth of TPP platforms and their popularity, adaptability, and inclination to participate in operational activities (Chu, Wang, and Lai, 2019).

Additionally, these operating systems, particularly Alipay, grew due to acceleration by privately - owned corporate entities such as interbank companies, which facilitated check clearance, check settlement, and harmonizing credit information transactions across the Chinese market (Chu, Wang, and Lai, 2019). TPP platforms emerged due to state initiatives through cognitive policy advancement, the issuance of trade regulation parameters, and the advancement of corporate finance frameworks that intellectually stabilized and established online payment operations, including those associated with government initiatives.

Chinese scholars have also conducted extensive investigations on the risks associated with TPP in economic literature. Che (2015) asserted that the threat posed by TPP frameworks was primarily external and internal. External risks included institutional laws, legislation, initiatives, and the credit risk of the economy. Internal risks were mainly determined by the security of funds and the conformance of technologies and operational processes. Xie (2010) proposed that encouraging and assisting TPP agencies in gaining access to interbank transaction and settlement structures could expedite the sector's supervision and management. Zhang (2011) used Alipay as an example to address the matter surrounding TPP platform deposit interest ownership. Wu, Yu, and Wang (2010) emphasized the importance of monitoring online transactions, establishing a digital trading database to track financial data, and analysing the information to mitigate the associated risks on the anti-money racketeering scheme efficiently. Since the Nets Union was established in China for the first time in 2017, there has been little research on the subject domestically and

internationally. Therefore, this study sought to bridge the academic gap by providing valuable insights after assessing TPP platforms and their impacts on SMEs and online banking.

TPP Platforms in China: Alipay

Since establishing the first TPP platform in Chin in 1997, several organizations have established these transactional services, including Alipay, Tenpay, Baifubao, ChinaPnR, and Yeepay. Alipay presently has over 900 million registered users. Each day, it has nearly 60100 million active users. Additionally, the investigator enquired about the distribution of Alipay users with the online service's staff. The following figure summarizes the data.

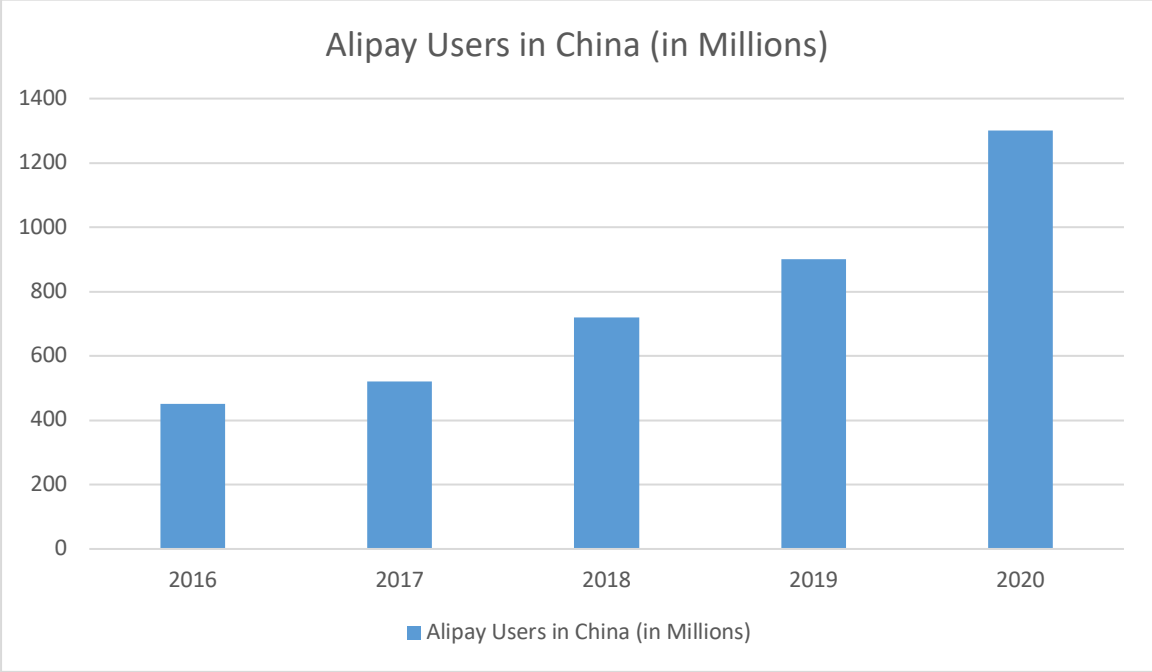

Figure 1. The Chinese user population of Alipay from 2016 to 2020. (Data acquired from Statistica.com)

Alipay was founded in 2004 by Jack Ma and is a subsidiary of Alibaba Group. The company's mission is to use electronic payments to make business easier in any location (Liu, 2015). Since 2014, Alipay has grown to become the most significant global internet and

mobile transaction framework. In China, Alipay is a TPP platform that mitigates the risk for digital customers by offering an escrow payment processor (Liu 2015).

Alipay, regarded as China's leading TPP solution, aims to provide a safe, simple-to-use, and secure method for millions of people and enterprises to send and receive electronic payments (Yang, 2017, p. 20). Alipay had over 550 million registered users as of December 2010 and processed 8.5 million transactions daily (Yang, 2017, p. 20). The number of external business people exceeds 500,000 because of Alipay's internet banking remedy in China. It is a primary provider for digital vendors, digital communication services, marketing operations, online gaming, airline ticketing, and other payment transaction. Additionally, it offers an ideal payment approach that enables businesses worldwide to sell their products to Chinese consumers directly and facilitates online transactions in 14 major foreign exchange markets (Yang, 2017, p. 22). Alipay has a large customer base, a unique concept, and is the first choice for digital merchant services for users, owing to its modern features (About Payments, 2017).

Alipay offers two types of account services: enterprise Alipay accounts and individual Alipay accounts. Ten years ago, many people could not fathom the development of digital retailing, but nowadays, online shopping is a common occurrence, as evidenced by the popularity of Taobao and eBay. Due to the manifestations of the capabilities for Alipay, which ensures the credibility of internet purchases, several Chinese consumers now appreciate the comfort and fun of online shopping (Yang 2017, p. 36). With the advancement of Alipay, more applications have become available, and for consumers, the most attractive feature of Alipay is the recent arrival of a more pragmatic, more humanitarian commercial enterprise.

Alternatively, Alipay poses an adverse impact on people's daily lives. Legal security remains a serious issue because China's internet legislation is incomplete, and there is a guarantee of payment security (Liu, 2015). Further, Alipay faces security concerns, and the Alipay service is closely related to that of commercial bank's online banking service, making it an easy target for counterfeiting and attack. Additionally, transaction disputes have a detrimental effect on people's daily lives. Even though Alipay is a viable credit mediator, once the customer pays for the particular product, the buyer's power to manage the funds is effectively lost (Yang, 2017, p. 38). In situations where buyers get involved in a transaction dispute, they can only have the right to request a refund; however, the seller retains financial management. Occasionally, if the user makes an error, such as sending money to the wrong user, the user cannot cancel the transaction (Liu 2015).

Alipay also influences e-commerce and banking activities. Alipay has developed a method of collaborating with various banks and offers reliable digital transactions for e-commerce (Yang, 2017, p. 40). For the Chinese customer, the bank serves as a guarantee of credibility and helps to mitigate the risk associated with online payment. When a user suffers a loss due to Alipay, they are entitled to a full refund. Additionally, this organization earned the trust of the majority of users because it provides value-added services such as real-time question resolution, payment framework evaluation, and timely and efficient reimbursement and payment services (Liu, 2015). Alipay maintains a record of all transactions between buyers and sellers. Additionally, it reduces the fees charged to many small and medium-sized businesses for developing and maintaining the gateway functionality.

Other popular third-party online payment systems

Tenpay is Tencent's integrated payment platform, launched to serve the company's 1.1 billion QQ users. Tenpay has developed to become one of the largest digital payment channels in China. Tenpay is committed to providing specialist and safe internet banking remedies to airlines, transportation, insurance, gaming, B2C businesses, and other business sectors. At the end of 2011, Tenpay had 190 million registered users (iResearch Global Group, 2018). Baidu established Baifubao, a pioneering provider of online payment platforms and services in China. Baifubao's mission is to develop an electronic payment credit system that is "simple and reliable." The corporation utilizes innovative product technology and robust server applications that enable them to provide a secure, reliable digital payment service to internet consumers and companies (iResearch Global Group, 2018).

ChinaPnR, founded in 2006, is a financial e-economic digital payment expertise. It has instituted collaborative relationships with domestic, financial institutions, and global credit card institutions, concentrating on the monetary payment industrial sector. Its competitive advantage is robust and efficient personalized payment strategies for business users and innovative research and innovation (iResearch Global Group, 2018). YeePay's innovative payment systems facilitate businesses and consumers to send and accept payments safely. YeePay specializes in vertical payment strategies that are built on operating systems that include industry-specific implementations and value-added facilities (iResearch Global Group, 2018). YeePay's clients include renowned internet and e-commerce companies and merchants in conventional industries, including internet shopping, online content, gaming, air and travel, telecommunications, insurance, and education. Prominent YeePay’s clients include Huawei, Lenovo, Air China, Nokia, and Motorola.

Growth and Development of TPP Platforms in China

In 1999, Shanghai HuanXun and Beijing Capita Science and Technology Companies conceived and initiated the words and utilization of TPP platforms in the China economy (Yang, 2017). The purpose of these two companies' entry into the Chinese market was to establish new technologies that would facilitate money flow, exchange, and credit in the country's ever-changing industry. One of the company's earliest operations was to agree with a business-to-business (B2B) system entrusted with improving digital money transfer between organizations (Liang, 2020). The activity denoted the start of the Chinese market's adoption of TPP platforms.

Prevalent utilization of TPP platforms in China did not occur until Alibaba CEO Jack Ma invested in the commercial activities and established Alipay to facilitate immediate money transfers from China to the rest of the globe (Jia and Winseck, 2018, p.32). PayPal was the only digital money transfer platform available at the time. It struggled in the corporate market, as it's primary demographic was middle-income earners with few consistent money transfer operations. Recognizing the difficulty, Jack Ma established a payment platform that would consider the needs of SME owners who require regular and real-time money transfers for service provision. It was a fundamental development. According to the report, in the second quarter of the 2014 fiscal year, Alipay and Chinese financial brokers recognized that TPP (Alipay) had achieved a significant 12% market share increase (Xu 2017, p.79). The expansion was credited to SME acceptance, and numerous financial institutions, including Alibaba and the Tata Company, boosted their interest in the business.

Although the phenomenal path of Alipay was realized in 2014, Alibaba asserted that in 2006, Alipay had handled dealings totaling more than 18 billion Yuan, nearly twice the amount operated by Walmart, which had a 9.9 billion Yuan profit margin in the same period

(Lu 2018, p.958). Raza, Shah, and Sharif (2019, p.706) claimed that the most significant collaborators to expanding these payments over the last 30 years had been the country's economic growth rate. The capital accumulation trajectory has also influenced the shipment industry's perceptual financial shift, luring domestic, foreign, and territorial investors to the Chinese inland. Electronic payments have simplified business operations. According to Raza et al. (2019, p.706), this has resulted in a significant improvement and development of protocols for smaller businesses, thereby increasing the consumers' purchasing power and sellers' bargaining power. For example, many SMEs struggled to price goods and services in the past because buyers swayed sellers to loosen up their restrictions and sell their products at the buyer's authority out of fear of embarrassment and market segregation (Kahrl, 2018). TPP platforms alleviated this limitation by allowing for the easy configuration of adaptable, comparable, and fixed prices, allowing buyers to pick the prices that matched their budgets.

Online Banking

The term 'online banking' is not yet established and mature; instead, it has a long and illustrious history spanning three decades (Mukhtar, 2015, p. 5). Since the 1980s, financial sector technologies have begun and are still progressing (Afshar, Siddiqui, and Seeja, 2009, p. 36). Online banking was initially utilised in the banking industry to refer to the process of obtaining financial services via an interface or computer connected to a phone system (Afshar et al., 2009, 41). Alternatively, the term 'home banking' is utilized to refer to the use of a keyboard to access internet banking services (Yuan, 2010, p. 3). Online banking services began in 1981 in New York, where four major banks, namely Chase Manhattan, Citibank, Manufacturers Hanover, and Chemical, began offering online banking services via the videotex program during the period (Mukhtar, 2015, p. 5). In France, the Videotex system failed, resulting in the inability to conduct online banking transactions (Afshar et al., 2009, p. 53).

Chang and Hamid (2010) defined online banking as the process by which consumers conduct banking transactions electronically rather than physically visiting banks (p. 40). In contrast, Alsajja and Dennis (2010, p. 958) defined online banking as the form of delivering banking services via technology without relying on banks' or clients' physical resources. The definitions demonstrate that digital banking consumes lesser bank and customer assets than conventional banking systems. Banks provide various services via internet banking, including bill presentation, funds transfer, investment purchases and sales, loan transactions, and checking bank statements.

Online banking in China began in 1997 when China Merchant Bank introduced online banking through digital payment systems (Kurnia, Peng, and Liu, 2010, p. 2). That system was suitable for viewing digital bank statements, paying bills, and transferring money via the internet. Essentially, this system was predicated on telephone models and provided clients with home link services. Other major bank institutions followed and introduced similar online payment systems between 1998 and 1991 (Kurnia, Peng, and Liu, 2010, p. 2). Therefore, consumers' growing understanding of digital technologies compelled them to utilize fast and efficient banking methods rather than conventional delivery services.

Between 1999 and 2001, online banking services with basic functionality such as electronic payments facilities and finance planning were progressively accessible to general merchandise and organizational clients (Osho, 2008, p. 18). As economies developed and e-commerce operations expanded, demand for additional e-banking features increased significantly, resulting in a new round of e-banking program planning among Chinese financial institutions around 2001 (CFCA, 2008). The second generation of e-banking, which highlights the growing need for inventiveness in corporate finance, added additional operations to enable financial processes such as the buying and selling stocks, currencies, and mutual funds (Osho, 2008, p. 19). Meanwhile, fundamental wealth management functions

such as bill payment and fund transfer were augmented for superb usability and accessibility (CFCA, 2008). In 2002, amid increased concern about the efficiency and safety of e-banking services, security precautions led to the implementation of a USB security key dubbed "U Shield"(Kurnia, Peng, and Liu, 2010, p. 3). Approximately 40% of bank customers in urban areas and about 62% of corporate account holders executed digital transactions in 2018 (Yang et al., 2018, p. 86).

Various investigators have addressed online banking in multiple ways, and as a result, it has a plethora of definitions. Internet banking provides numerous services by which account holders can access data and conduct most of their banking services via their smart devices and computers (Suriya, Mahalakshmi, and Karthik, 2012, p. 21). It is regarded as a critical component of e-commerce. It has been broadening and growing globally across various business sectors. Before evaluating the aspects of online banking, the study established that it was necessary to assess the various definitions postulated by various scholars. Digital banking appears to be a marriage of financial services and information technology. The web is a relatively recent medium for providing or disseminating internet services. Cheung and Lee (2006) asserted that banks can now provide customer care and other essential functions such as welfare payments and money transfers via the internet instead of investing in physical bank facilities (p. 486).

TPP Regulation and Legislative Issues in China

In contemporary China, the state and other administrative agencies, and stakeholders, have established a functional foundation and a fresh perspective in sophisticated payment methods (Jia and Winseck 2018, p.34). As a result, the government created initiatives to monitor and control the use of these payments to enhance sustainable growth, increase usage, and collect adequate taxes from the systems. For example, the People's Bank of China (PBOC-Beijing) established policies and procedures to guide individual businesses, SMEs,

and corporations to facilitate TPP operational activities (McDowell 2019, p.122). According to a recent report, one of the proposed rules enacted in 2013 required that all non-bank payment accounts to get registered in peoples' real names to guarantee their security, safety, and convenience of use. Similarly, these payments must be classified as non-bank payments, non-bank payment protocols, classes, and initiatives to ensure proper usage outside conventional banking dimensions (Nazneen and Dhawan 2018, p. 90).

Similarly, the government increased the annual payment limit from 200,000 to 400,000 Yuan in 2014. However, one of the most significant difficulties with these restrictions is that they extend to TPP frameworks and all non-bank payment platforms, lowering the effectiveness of these structures in the operational activities of SMEs and small companies. For example, in 2018, one of the SME merchants affirmed that when a payment surpasses the daily limit, the financial system ensures successful transfer of the service charge. The procedure is more expensive, slower, precarious, and bureaucratic, reducing the efficiency of TPP platforms.

Much of the existing scholarly materials on financial technology development focuses specifically on the TPP platform's legislative structure. Fung, Molico, and Stuber (2014) demonstrated that central banks are beginning to supervise the changing payment system as regulatory agencies. In the Canadian digital money industry, retail transactions are likely to involve third-party banking firms, posing current legislative implications for the central bank. According to the European Payments Council (EPC) survey, there is also a correlation between TPP providers and the legislative framework (Santamara, 2015, p. 410). According to Chiriac et al. (2018), the previously assimilated regulatory contracts in the Single Euro Payments Area (SEPA) were devoted to consumer safety and personal data protection. The modifications are disruptive to the mobile payment market, even though they safeguard EU citizens from fraud. The EPC contends that only by combining reliability and safety can

payment advancement be enhanced. Li et al. (2018) argued that the regulatory environment establishes the required conditions for financial stability and effectively constrains regulators to avoid structural problems and better understand the implications of the legislation on financial innovation. Dennehy and Sammon (2019, p. 52) also demonstrated the significance of mobile payment regulatory oversight through numerous studies.

A robust and reliable financial system entices regulatory agencies to assist governments in expanding banking services to under-banked populations. In contrast to the other cases, China is constantly liberalizing its financial industry, including interest rates, to promote the expansion of internet finance (Guo and Shen, 2016, p. 16). Alternatively, Chinese regulatory authorities have vastly underestimated the speed with which financial innovation is accelerating. Because the third-party transaction is "too small to regulate," the existing statutory framework lacks an interpretation and categorization for it (Yu and Shen, 2014, p. 8). For instance, an Alipay account will be categorized as an escrow account under the US law profession, where escrow regulation is super restrictive. However, as Yu and Shen (2014, p. 7) noted, there is no specific terminology for new financial products even in the Chinese language. Guo and Shen (2016, p. 16) argued that China's immediate priority should be to properly implement and control online financial services to avoid threat overspill from the nurture strategic approach. The authority's scope must be defined clearly, including access policies, vulnerability analysis, and risk management. A stable legal policy promotes financial security through risk management and encourages traditional banking to diversify its revenue streams to remain competitive. Therefore, it is critical to preserve financial sector consistency by establishing an effective legislative structure for monitoring bank and third-party financial products.

TPP Platforms and Banking Sector

The TPP business has exploded in popularity as the smartphone user population has exploded. The emerging transactional method via the TPP platform has drawn considerable interest to the sector's effect on both traditional and online banking. In recent decades, there has been an increase in literature materials devoted to tracking the development of TPP platforms and their impact on conventional and online banking systems.

Tandulwadikar (2015) observed that conventional banks were slow to adopt new technologies and approaches in the digital payment market, whereas non - bank participants such as Paypal and Square, and IT industry giants such as Google and Apple gained traction. Dapp (2015) analyzed the German banking sector and emphasized that the non-bank industry earns significant profits from digitalization through a deeper comprehension of the web's language. Dapp (2015) concluded that many banks' contemporary online strategies are incapable of sustaining long-term competitiveness (p. 187). Further, conventional banks should not undervalue the financial services provided by the TPP sector or the impact of consumer preferences. Grima, Bezzina, and Romanova (2016) explored the significant risks of developing financial innovation to assess recent trends across Europe. According to the analysis, the central European and American banks face a possible danger in their sector due to technology-driven but low-knowledge-required services such as payment services and simple savings products. Financial products and services offered by TPP platforms are gaining market share due to their superior customer experience and usability (Grima et al., 2016, p. 34). The trend highlighted the need for commercial banks to reorganize their service delivery streams and invest in technological innovations.

Fung, Molico, and Stuber (2014) examined the money transfer advancement in Canada and the United States and concluded that transaction behaviour is not shifting as quickly as anticipated toward electronic money. After analysing the impact of increased e-

money adaptation, the research concluded that banks could continue to wait and watch the evolution of payment methods. In comparison, numerous publications document the relatively rapid growth of online transactions in developing markets such as India and China. As fast-growing economies with the largest population markets, financial services have grown into a rapidly emerging industry, accelerating the development of electronic payments. Kamal, Thomas, and Tinaikar (2009) characterize the e-payment operations in India as having significant prospects in the retail market and government flows. While digital payments continue to grow in income, Indian banks keep up with the quality and safety of payment systems. TPP companies pursue the market within a legislative structure that is not well influenced by conventional banks. Chiriac et al. (2018, p. 79) established that customers are dependent on mobile payment, with its volume accounting for more than half of China's GDP. Chinese technology companies such as Alibaba and Tencent invest extensively in attracting new customers and undermining conventional banks' position. Tech giants obtain digital payment popularity by combining a large user base with comprehensive, trustworthy procedures.

TPP institutions and online banking are developing industries, and it takes time for legislation to be drafted and implemented. At the moment, Chinese legislation focuses exclusively on the regulations for third-party virtual initial registration. The comprehensive governance of TPP organizations' operations has been perpetuated. The majority of government restrictions governing these companies' transaction processes are implemented as part of policy guidance records and state viewpoints. Because these documents can be drafted and propagated rapidly, they can adjust to the TPP's rapid transformations. For instance, the People's Republic of China's Central Bank and ten other ministries jointly issued *The Guidance on Promoting the Healthy Development of Internet Finance* in 2015.

However, strategy supervision has a limited role. First, the legislative consequences for falsifying these government records are constrained. The government may enforce civil sanctions instead of criminal penalties on companies or people that violate these regulations' stipulations. It lowers the cost of criminal activity associated with illegitimate TPP operations and indirectly encourages their illegal activity. Second, certain official documents are approved by local authorities and are therefore only justifiable in certain areas. When a TPP agency engages in unlawful activity across multiple sectors, punishing it becomes more challenging and contentious. Third, these official documents have low binding validity. They cannot be construed as laws during the course of a trial, nor can they be referred to during the period of a trial. Fourth, the absence of rules results in the administrative power assuming a dominant role, creating anarchy in governance. It is an especially tense incident in China. Due to historical justifications, bureaucratic administration, instead of laws, is frequently used to govern social structure in China. For example, the Commercial Banking Law does not prohibit private investors from entering the banking sector, while authorization of China's investment lenders is conditional on removing specific policies.

China lacks constitutional immunity for privacy, and public awareness of the importance of privacy protection is low. TPP groups are more likely to profit illegally from the vacuum. The rapid advancement of network technology in recent years has resulted in collecting a large amount of personal information. Digital technology enables replicating these private data at a low cost, and the internet allows for the distribution of personal data at a breakneck pace. As a result, the business of buying and selling personal information has become profitable. Similarly, regulations are not being implemented quickly enough to keep pace with technological advancements, and as a result, there is insufficient legislation to protect these developing areas.

TPP entities obtain personal data from consumers before or during the service provision and analyse it for commercially critical data. Their substantial data collection and processing capabilities enable them to mitigate financial threats and grow their operations, enabling them to streamline the approval process and offer additional suitable services to clients quickly. However, many TPP organizations frequently overlook privacy protection when collecting data. They obtain personal details without consumers' consent or trick them into signing contracts they are unaware of, or they even purchase confidential info through unofficial means or individuals. Therefore, banks shall not make credit decisions relying on statistics gathered by the data partner, thereby deflecting accountability for loan risk assessment.

Although China has laws protecting online consumers' privacy, there are still gaps in privacy protection due to China's law program's late implementation. China's privacy protection law is still relatively lax, with several elements of privacy unprotected (Zhao and Dong, 2017). Second, Chinese organizations and individuals have limited data protection awareness levels, paying little attention to personal and institutional privacy protection. TPP groups in Europe are also at risk of unauthorized access to customer information, referred to as a GDPR violation. For instance, in Europe, numerous TPP organizations serve as transaction functionalities for consumers, merchants, and banks. There is no direct involvement in the transfer or deposit business (EBF, 2014), and thus are exempt from traditional banking regulations. However, they have access to consumers' and merchants' privacy data, posing a significant risk to financial institutions' data security.

Overview of Chinese SMEs and Influence of TPP Platforms

SMEs are frequently classified according to their employee count, total revenues, and asset values. The Small Business Administration (SBA) of the United States of America (USA) defines small businesses according to the business sector to which they belong. SMEs

are defined using two criteria in the Chinese context based on the SME Promotion Law of China: a firm with a sales revenue of less than ¥ 30 million or with fewer than 200 full-time employees in the manufacturing industry; and with fewer than 75 full-time employees in the services and other sectors (Xiengfeng, 2007, p. 39). However, this study defined SMEs according to their size or number of employees: micro-enterprises with fewer than ten employees, small enterprises with ten to fifty employees, and medium-sized enterprises with fifty to two hundred and fifty employees. The definition is consistent with previous research findings for Southeast Asian countries (Xiengfeng, 2007; Kurnia et al., 2015), which designate SMEs as entities with fewer than 50 employees or annual revenue of less than ¥ 30 million. However, in China, the definition of SMEs is quite complicated and can involve huge companies.

SMEs also face several challenges in their operational activities in China. Xiengfeng (2007, p. 48-50) established weak linkage to the international market, low technological adoption, and insufficient financing as significant difficulties. Muriithi (2018) collaborated on the findings where the author established that SMEs accounted for 5-10% of China's exports in the 2017 fiscal year. The numbers are relatively low when compared to the number of exports transferred by Chinese multinational corporations. Further, technology has become a part of the corporate world in China. However, Chinese SMEs are slow in adopting them to their operations (OECD, 2020). These technologies include TPP platforms that influence the payment techniques of the firms.

Numerous scholarly articles have demonstrated that adopting new technologies enhances the success rate of users when compared to non-user SMEs (Ameyaw and Modzi 2016; Kurnia et al. 2015; Muriithi, 2018). In comparison, Muriithi (2018) asserts that Chinese SMEs rely on a narrow range of technologies and are incapable of remaining competitive. Furthermore, despite the administration's continuing encouragement for

technological development through its bureaus, existing technology assimilation models within Chinese SMEs have failed to produce a proper knowledge of the determinants that influence successful acceptance (Xiangfeng, 2007, p. 5). Additionally, other studies have discovered numerous hurdles to digital transformation adoption in Chinese SMEs, including apparent safety and privacy; staff education knowledge levels in information and communications technology (ICT) and the expenses of ICT facilities (Li and Wang, 2018); and the inadequate funding assets, digital commerce expertise, and an organizational culture conducive to innovation (Ameyaw and Modzi 2016). Therefore, this study could help to narrow down the technological innovation that SMEs can utilize in their operations. In this context, TPP platforms and their influence on SME performance.

Theoretical and Conceptual Framework

Davis et al. (1992) investigated and modified motivation theory for an information technology (IT) setting. According to the Motivation Model, extrinsic and intrinsic motivations determine a person's behaviour (Li, 2010). Extrinsic motivation alludes to the belief that consumers desire to engage in an interaction "because it is regarded as influential in attaining profitable results unrelated to the interaction, such as improved job performance, pay, or promotion" (Davis et al.,1992, p. 1112). Extrinsic motivations include apparent effectiveness, perceived ease of use, and performance expectancy (Li, 2010). Intrinsic motivation is significant in determining how much comfort and satisfaction one derives from executing the conduct (Li, 2010). Users desire to engage in a behavior "for no apparent reason other than the act of engaging in the activity itself" (Davis et al., 1992, p. 1112). Intrinsic motivation is viewed as computer playfulness and enjoyment (Davis et al., 1989).

The study assimilated the motivation theory because it could help in explaining the reasons behind the establishing and running of TPP platforms and their potential rewards. In this case, the study will dwell on SMEs and online banking in the Chinese market, where TPP

is a technological invention, and the people established it with specific goals. However, gratification has positive and negative influences. Therefore, the motivation theory could help to explain the effect of IT (in this context, TPP systems) on individuals' motivation (in this study, SMEs and online banking).

A research study is a methodical, organized, and scientific investigation of current and novel socioeconomic and corporate phenomena. The process is guided and moulded by a framework that is deemed appropriate for selection and an assessment instrument that relates the discrepancy's elements and provides the concepts inferred from correlating the statistical relationship of the research (Hofmann and Jaeger-Erben, 2020, p. 2775). As a result of the study's breadth, five primary constituents served as the study's cornerstones and framework. The components included China's online payment system, its implications, Alipay, deductions, and the development of SMEs.

Conclusion

To sum it up, the Chinese business world has undergone rapid developments in the recent century. A part of these developments is due to the use of technological innovations in corporate activities. One specific part that has become a part of the business is TPP platforms. Various scholars have defined the term differently, but the study adopted Zheng et al. (2020) definition that TPP systems are the "digital transaction of funds between systems via digital sites that are accessible via an internet access" (p.475). These platforms have influenced the conventional operational activities of banks and SMEs in China, where cash dominated the sectors (iResearch Global Group, 2018). TPP platforms provided a modern manner for making payments, thus impacting SMEs and online banking operations. In the Chinese context, there is limited literature on the subject.

Zhang (2011), Wang and Guo (2011), and Wu et al. (2010) focused on the risks of TPP platforms in the business world. However, the two studies focused on only Alipay and failed to cover the positive risks of TPP platforms. Alternatively, Zhao and Dhong (2017) and Lai (2019) focused on the impact of TPP platforms on traditional banking operations in China. The studies failed to address the effects of these modern payment systems on online banking and SMEs. Various authors also focused on China's regulations governing TPP practices (Raza et al., 2019; Kahrl, 2018; Lu, 2018 and Liang, 2020). Therefore, this investigation sought to bridge the academic gap and establish the impact of TPP platforms on online banking and SMEs in the Chinese market.

Research Methodology

In this chapter, the study presents and discusses the methodological framework governing the survey. The chapter will also outline the purpose of the research, research approach, data collection and analysis techniques, and reliability and validity of the tools.

Purpose of Research

There are numerous classification schemes for research based on the study purpose, the gathered data, and the data analysed (Gratton and Jones, 2010). According to Saunders et al. (2011), the most frequently utilized research purpose categorization in the literary works on methodological approaches is the three-part designation of exploratory, descriptive, and explanatory research. Explanatory research is a cause-and-effect research technique. It makes an effort to establish connections between the causes of something and its cascading consequences (Ragab and Arsha, 2018, p. 3). Authors conduct explanatory investigations when there is an existing hypothesis on why something occurs. The design of questions and tests bolster that hypothesis and demonstrate its correctness or incorrectness. It is typically conducted in marketing or researching sociological trends; because third-party online payment is a socioeconomic phenomenon, the author chose to research it. Therefore,

this investigation has an explanatory purpose. TPP platforms are part of the socioeconomic phenomenon and lead to a causative type of research. Thus, the study aims to explain the impacts of adopting TPP platforms on online banking and SMEs in China.

Research Approach

The term "research approaches" refers to the specific techniques used by scholars to amass the crucial evidence for designing and evaluating theories (Ragab and Arsha, 2018, p. 6). There are two distinct methods for researching: induction and deduction. Inductive reasoning relies on empirical evidence, whereas deduction relies on logic (Elliot et al., 2017, p. 790). Through the development of a theory and assumption and the structure of a research approach, the deductive method aids in testing the hypothesis (Saunders et al., 2011). Authors use the inductive strategy to reach definite conclusions through empirical understanding, discoveries, and theory construction, with findings integrated into current literature materials to enhance theories (Elliot et al., 2017, p. 793).

Authors must derive assumptions from available literature and demonstrate their formulation, demonstrating data collection efforts to answer the research questions and the utilized theories (Opie, 2019, p. 137). Deductive research is typically divided into five stages: deriving a hypothesis, expressing it in practical terms, testing, assessing the particular result of the investigation, and, if necessary, altering the theories and models because of the discoveries (Elliot et al., 2017, p. 791). The concept results from inductive studies, and it has a close association with qualitative research (Ragab and Arsha, 2018, p. 9). Inductive authors prefer qualitative data and use various methods to collect multiple perspectives on the manifestations (Elliot et al., 2017, p. 791).

In this investigation, the author derived the thesis through a deductive approach. The study evaluated several literature materials on TPP platforms, SMEs, and digital banking in

the Chinese and global markets. The study drafted three questions from which the study would derive a cause and effect relationship based on the theoretical and conceptual models. The study collected quantitative research using a survey and analysed it to answer the study's questions. Therefore, the study used inductive and deductive research approaches to establish the influence that TPP platforms have on SMEs and online banking.

Research Design

The analysis can be carried out qualitatively or quantitatively. The research was conducted using a combination of qualitative and quantitative methodologies. According to Saunders et al. (2011), qualitative research methods delve deeply into a specific research problem. Additionally, these techniques evaluate the study issues in plain language rather than using numerical terms. In the current study, the author employed qualitative research approaches to undertake an in-depth examination of TPP platforms and their influences on online banking and SMEs. Additionally, authors utilize qualitative research techniques to elicit detailed data from management participants (Saunders et al., 2011).

Quantitative methodologies examine a specific problem using facts and a systematic process (Opie, 2019, p. 131). It entails collecting facts and numerical data via engaging investigative instruments such as surveys (Elliot et al., 2017, p. 789). The current study used quantitative techniques to examine customer and SME owners' impressions of TPP platforms in China. Quantitative research methods also include numerical evaluation of research questions. However, in this study, a straightforward application of statistics was used to analyse the data. The author combined qualitative and quantitative research methods. The assessment of quantitative statistics was carried out using in-depth discussions that exemplify inferential statistics. This way, the study could provide detailed and logical findings on the impact of TPPs on the operational activities of SMEs and online banking.

Data Collection

When collecting data, there are three distinct types of data sources for consideration. However, primary and secondary data are the most frequently used data types in research (Saunders et al., 2011, p. 13). Primary data remains unknown before conducting a study, and authors obtain the specific data for the research endeavour at hand (Elliot et al., 2017, p. 790). The author chose to collect data exclusively through primary and secondary sources in this study. Primary data is intended to collect information for research projects, while secondary data entails the info gathered for another purpose and is now being used in the current research project (Opie et al., 2019, p. 126). The study combined the two data sources to accomplish the study objectives effectively.

Interview

Interviews can be defined as a deliberate conversation between two or more individuals (Elliot et al., 2017, p. 793). It can assist authors in gathering accurate and reliable information that is pertinent to their research goals and hypothesis. The interview can be structured, semi-structured, or unstructured. Unstructured interviews are conducted informally between the interviewer and interviewee to delve deeply into a broad focus topic (Opie 2019, p. 126). Semi-structured interviews are guided by a set of predetermined issues and queries, which may deviate from one interview to another. Saunders et al. (2011) state that authors utilize structured interviews when emphasizing structured interviews when emphasizing identical questions. The study conducted only a single telephone interview. The benefits of telephone interviews include cost and time efficiency. The author called the Alipay offices to establish the background information of the organization. The acquired data served as the basis for sampling the study participants.

Sampling

In this study, the target populations are Chinese consumers that purchase commodities from SMEs, SME owners, online bank account holders and users, and TPP platform users. Since and time remained a critical barrier in the research, the author narrowed down the research population to primarily focus on the impact of TPP platforms on online banking and the performance of SMEs. Sampling is the process of observing a part of something or people to obtain the information of the entire population (Ragab and Arsha, 2018, p. 3). The study evaluated all the available sampling techniques (random, non-random, and mixed) and settled with the most appropriate one that could answer the research questions. The author chose quota sampling as the sampling technique for this study. According to Saunders et al. (2011), quota sampling is the most frequently utilized sample design, particularly in market analysis and opinion polling. When implementing the procedure, the author began by subdividing the study population into a known number of strata defined by a few variables with known distributions.

Various scholars have given different opinions on the most appropriate sample. Saunders et al. (2011) argued that 100 is insufficient, 200 is fair, and 300 is good, while 500 and above respondents are excellent. Elliot et al. (2017) urged authors and various scholars to use a sample of 500 and above when possible. Therefore, this study used 261 as its sample. The sample includes SME owners, online banking users, and consumers that utilise SMEs, online banking, and TPP platforms as a payment channel. The study sample also includes users who do not utilize TPP platforms, which could help the investigator establish why they do not use the technologies while viewing them as potential markets. Therefore, the user and non-user samples are paramount in this study when showing the impact TPP platforms have on digital banking and SME operational activities.

Based on the report provided about the Chinese online users, consumers that utilize TPP platforms are mainly college students, corporate employees, and government and organizational employees. Therefore, the study designated quotas based on the consumer distribution data. These three groups accounted for 81.9% of the sample, while the survey labelled the remaining 18.1% as others. The "others" are the study participants who own SMEs but do not utilize online banking and TPP platforms. However, the study views them as potential users with specific reasons for their current situation. Therefore, the study sample has 149 corporate employees, 56 institutional and government employees, and 95 college students.

Questionnaire

In this study, the author utilized a questionnaire to explain the impact of TPP platforms on online banking and SMEs in China. Considering that all of the study respondents were Chinese, the author translated the questionnaire queries into Chinese since the people prefer their mother tongue, which could help in better comprehension and answering of questions. Saunders et al. (2011) classified questionnaires into two: self-administered and interviewer-administered. The study used self-administered questionnaires where the respondents complete the questions as the name implies. Internet-based, postal, delivery, and collection questionnaires are all self-administered. In the current study, the author used internet-mediated questionnaires where the respondents could acquire and fill them online. The study further adopted the technique since it is relatively cheaper and time-saving than interviewer-administered questionnaires.

The study utilised Sojump, a Chinese web-based online survey provider, to distribute and receive the questionnaires from the sample. The questionnaires included three sections that focused on the background information of the respondents, utilization of TPP platforms in the online banking and SME sectors, and the impact of these platforms on the respective

sectors. The study further utilized open-ended questions to have a different opinion about TPP platforms. Respondents answer open-ended questions in various lengths and content. These questions yield valuable insights in research, particularly in research problems where the authors do not have a finite set of responses (Saunders et al., 2011).

After developing the initial questionnaire draft, the author pilot-tested it to ensure those survey participants had no difficulties comprehending or responding to the questions and accurately observing the directives. The investigator emailed the questionnaires to 40 university students in the pilot test, where 18 returned them answered. However, some respondents had issues with the questionnaires where they deemed some questions as ambiguous and unclear, and some Chinese translations made it difficult for interpretation. The author did a new translation of the questions to Chinese to ensure the questions remained clear and straightforward for respondent comprehension.

Data Analysis

The study utilised SPSS version 22.0 statistical software to analyse and accomplish the study's goals statistically. In this study, the questionnaire gathered data on the total participants, gender distribution, the respondents' ages, their level of education, and any other pertinent basic details (Pallant, 2020). Additionally, before answering the research questions, the study conducted descriptive statistics for each conceptual framework were obtained.

The reliability of a scale is the instrument's resistance to an error variance (Pallant, 2020). Test-retest reliability and internal consistency are two frequently used scale reliability measures (Pallant, 2020). Internal consistency entails attributing responses to individual questions asked with answers to other questionnaire questions (Saunders et al., 2011). Internal consistency is the widely used reliability form in the information technology domain

(Elliot et al., 2017, p. 791). Therefore, the study used internal consistency to evaluate construct reliability.

A scale's validity is the extent to which a scale accurately gauges what it is intended to measure (Pallant, 2020). As a general rule, the greater the device's validity, the more accurate it becomes. Authors typically conduct exploratory factor analysis (EFA) or confirmatory factor analysis (CFA) on the empirical data to determine the construct validity. EFA is used early in the study procedure to elicit details about the associations between variables. CFA is a more advanced and involved set of methods used later in the research process to scrutinize particular hypotheses or theories about the framework of a group of variables (Pallant, 2020). Therefore, the purpose of this study was to conduct EFA to ascertain the key denominators affecting the dependent variable (SMEs and online banking operational activities and performance).

The study used multiple regression analysis. All independent variables were introduced concurrently into the equation. Each independent variable was assessed for its prediction accuracy in addition to that of the other independent variables. Open-ended questions are frequently utilised in management studies to evoke new knowledge about perception or topic, illustrate or clarify quantitative findings, and explore the multidimensional nature of respondents' experiences. The study analysed the responses to open-ended questions using the directed content analysis technique. The author read and classified as "advantages" and "disadvantages" of TPP platforms, particularly Alipay on SMEs and online banking.

Reliability and Validity

Reliability is the extent “to which data collection procedures or analysis measures will yield consistent results” (Easterby-Smith et al., 2021, p. 109). The investigator utilized

internal consistency to determine the questionnaire's reliability. Cronbach's Alpha values were calculated for each concept to guarantee internal consistency reliability. Saunders et al. (2011) stated that validity focuses on determining if study results are genuinely about what they seem to be about in research. The author primarily discussed the content validity of the questionnaire used in the investigation since content validity refers to the extent to which the questionnaire's quantification inquiries adequately cover the exploratory dilemma (Saunders et al., 2011). The author read a substantial amount of literature and participated in previous discourse before defining this research purpose to ensure "adequate coverage" in the questionnaire. Additionally, the study based its survey questions on the standard scale of the motivation model.

Study Limitations

The study had a significant number of limitations. Globally, there are several TPP platforms. However, the study focused on the Chinese market, emphasizing Alipay, the largest TPP platform in the country. Therefore, the research limited itself to the Chinese context and focused on the largest TPP Corporation in the country. Another study limitation is the young people that make up the large volume of Alipay customers. However, most individuals that run SMEs are middle adults; the large volume of their customers are young adults and adolescents (Xiengfeng, 2007, p. 57). Therefore, the finding influenced the study's sample population, where the young people made up the more significant part.

Ethical Considerations

The potential ethical concerns in this study included respect for privacy, conflicting interests, unbiased presentation, and equitable selection of respondents. The investigator addressed respect for ethical privacy concerns by establishing participants' privacy expectations. When a participant wanted their information kept private, the author treated the acquired data with the utmost confidentiality. The participants' reports could include initials

and acronyms instead of their names. The author also gave some participants pseudonyms to ensure their identity remained confidential. In cases where the participant sought anonymity, the principal investigator achieved this by using pseudonyms in their entries. The investigator gave the sample participants ample time to consider the project problem and purpose and adequate space to provide accurate feedback about the research questions.

Chapter 4: Results and Discussion

In this chapter of the study, the author restates the problem statement, reaffirms the study aims, and briefly explains the methodologies and questions used to govern the study. The section also includes descriptive data concerning the project participants, sample, and the setting. The principal investigator also presents the results and correlates them with the available literature on the topic. The chapter further provides the practical implications of the study findings.

China has undergone rapid technological developments in the recent past, which have influenced the operational activities of SMEs and banks. The emergence of TPP platforms has posed different opportunities and risks to the Chinese. Further, various scholars have done significant research on the influence of TPP platforms on corporate activities. In this study, the author sought to establish the impact of TPP platforms on online banking and SMEs, focusing on corporate performance, regulations, and future influences.

Descriptive Analysis

The study conducted a descriptive analysis on the study participants to establish the influence of TPP platforms on SMEs and online businesses. The table below shows the frequency stipulations of the sample.

Table 1
Gender distribution in the sample

	Variable	Frequency	Percentage
Gender	Male	102	39
	Female	159	61
	Total	261	100

The study further collected information on the age of the respondents. The majority of the sample were aged between 25-30 years (143 respondents). Adolescents and young adults 18-24 years were 79, whereas individuals aged 31-35 were 32. Participants aged above 36 years were only 17, the smallest number of age groups in the study. The pie chart below shows the age distribution of the sample.

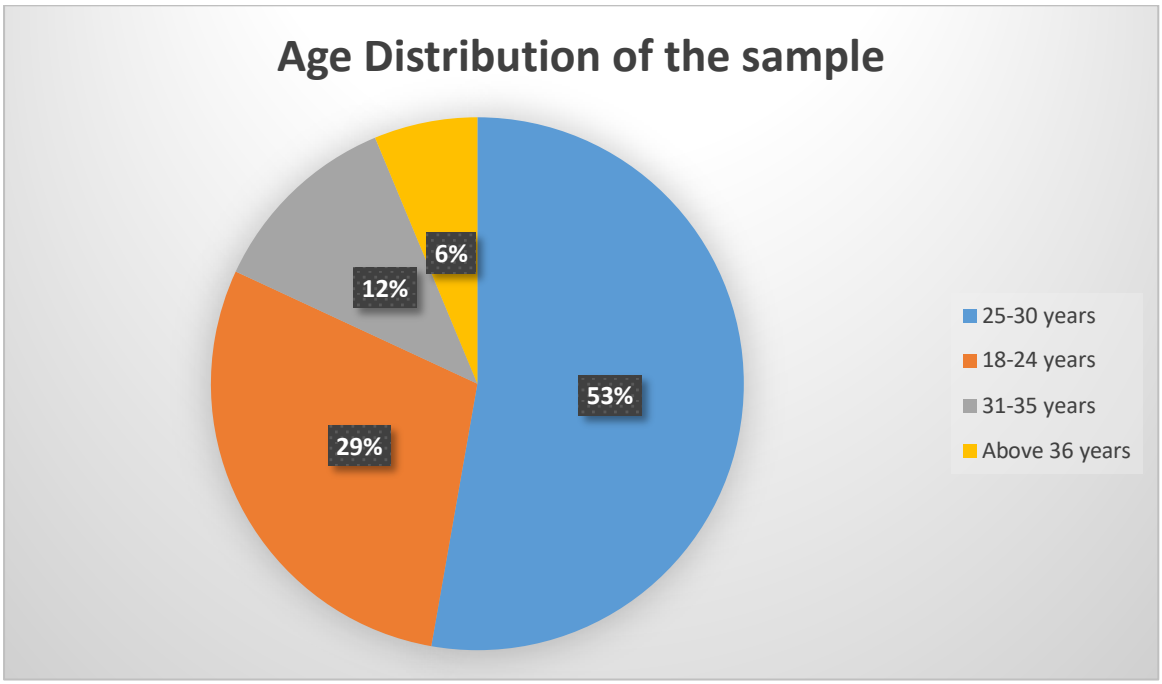

Figure 2. Age distribution of the sample

The study asked the respondents to provide their educational achievements. The essence of this question was to establish whether SME owners and online bankers' academic levels influenced their utilization and impact of TPP platforms. The collected data revealed that 20% of the sample involved had qualified from high school, and 35% had a college degree. 34% had finished the Masters' degrees, whereas the remaining 11% had diplomas or qualified technical institutions that translated to level A. Figure 3 below shows the educational distribution of the respondents.

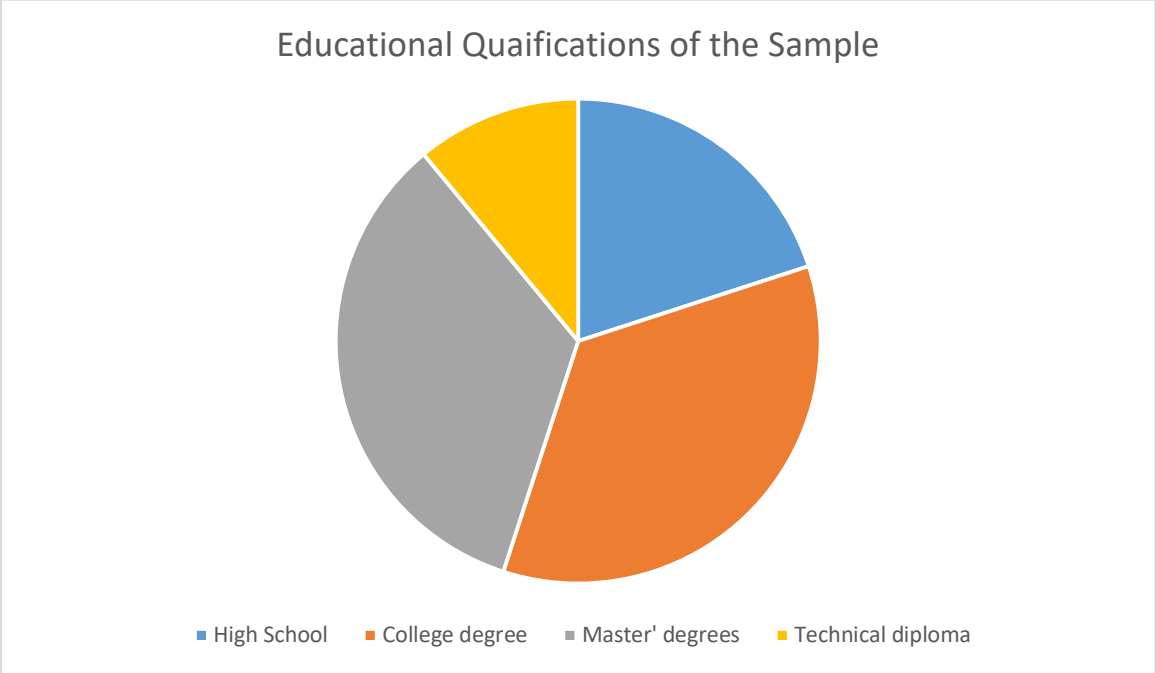

Figure 3. The educational distribution of the respondents.

The study also sought to establish whether the sample utilized TPP platforms in their business and personal activities. The collected data revealed that 57% of the respondents used TPP platforms in their online banking and SMEs activities while 43% did not use them. Previous studies in China showed that many SMEs and online users did not utilize TPP platforms. However, the studies further revealed that the user population has kept increasing as people change their perceptions towards the assimilation of technology in business activities. The study also asked the study participants on the main reasons as to why they did

not utilize TPP platforms. A majority of the sample (43%) stated security concerns as the main reason for failing to use TPP platforms. Most users with the technical diploma educational level (17%) also revealed that the payment technique was not convenient for them, hence failure to assimilate them to their SMEs. 24% of the sample indicated that there was no need for them to utilize TPP platforms showing that they opted for conventional payment methods over new technologies. 16% of the respondents noted that the sophisticated and complex registration and operation of TPP platforms discouraged them from initiating them for their SMEs and online activities. These findings revert to Yang's (2017) establishment that insufficient knowledge and awareness levels impacted the technological adoption levels of SMEs in China. The results also depict that individual and data privacy is a serious issue in China that affects how individuals and organizations can adopt TPP platforms for their usage.

The study further asked the research participants about the current and potential risks that TPP platforms posed to their business entities and operational activities. Twelve participants reported the market risks, 36 reported the credit risk, while 104 reported the policy and regulatory risks. The remaining respondents (109) reported the security and technological risk. Figure 4 below represents the information.

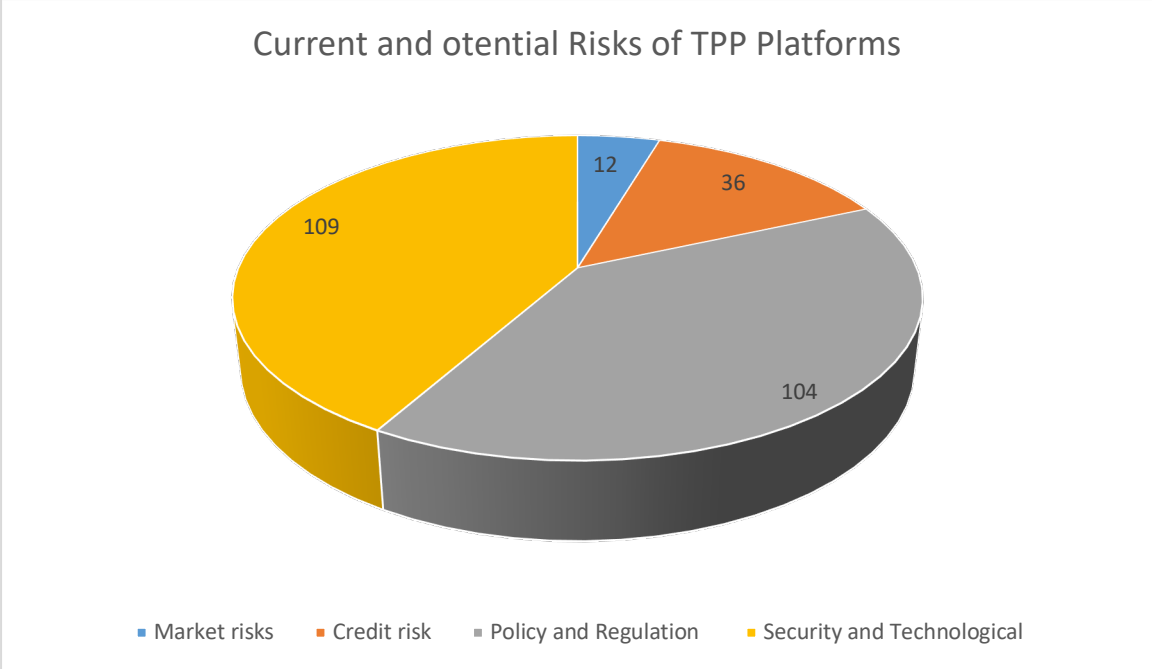

Figure 4. Risks of TPP platforms to SMEs in China

The study further sought to establish the efficiency of TPP platforms for the research participants that utilised the platforms for their SME and online banking payment. 45% of the participants stated that the TPP platform had increased the efficiency of their businesses, whereas 31% felt that TPP platforms had an insignificant effect on the efficiency of their business activities. 16% indicated that TPP platforms had little efficiency, while 8% indicated that the platforms had no impact on the efficiency of their business operations at all.

Since security and data protection was significant in determining the payment method, the study asked the respondents how secure they felt utilizing TPP platforms. Most of the participants that utilised the TPP agreed that they felt secure (30%). 59% strongly agreed that they felt safe, whereas 5% disagreed that they felt secure bout utilizing TPP platforms. The remaining 6% remained impartial about the security and privacy protection of TPP platforms.

Reliability and Validity Verification

The study calculated Cronbach's coefficient alphas using the mean interrelationship coefficients to assess logical reliability. The Cronbach's coefficient alpha range is 0 to 1, with higher scores reflecting more excellent reliability (Pallant, 2020). Pallant (2020) suggested a Cronbach alpha valuation of at least 0.7. The Cronbach Alpha was 0.925 for all variables in this research. It ranges between 0.701 and 0.903 for the correlating structural model factors. Cronbach's alpha value for each construct was more significant than 0.70. Table 2 below shows the reliability results of the study constructs.

Table 2

Cronbach's alpha value for Study Constructs

Construct	No of Items	Cronbach's alpha
Service quality	3	0.867
Perceived risk	3	0.708
Performance expectancy	2	0.880

Analysis of the Open-Ended Questions

The study presented the participants with open-ended questions where they could provide more details and content. The study coded the details into advantages and drawbacks of assimilating TPP platforms in the operations of SMEs and online banks. Convenience was the main advantage of TPP platforms, whereas insecurity was the main disadvantage. On convenience, 96 respondents indicated that it was convenient to use Alipay and other TPP platforms in Chia when buying products from SMEs. The 96 participants further reported that it was easy for them to operate Alipay when purchasing products from SMEs and other business-to-consumer (B2C) business entities. Other respondents indicated the significance of Alipay through its easiness to use and interface.

However, 37 participants reported that TPP platforms threatened their enterprises through data and privacy breaches. Twenty-two respondents argued that Alipay limits the amount of money they can transfer through the payment platform, thus making it unreliable to send money that exceeds the stipulated limit. The respondents further reported that Alipay had a payment limit on some products that negatively impacted their SMEs. Ten respondents said that Alipay is a trusted TPP platform in China, but several B2C business firms and SMEs cannot utilize its services. Also, China has an imperfect credit system, and Alipay makes up for its shortcoming, and the government would eventually restrict the operations of the TPP platforms.

Discussion

In this section, the study has presented the variables that correlate to the operational activities of online banking and SMEs to establish the impact of TPP platforms on the operational activities of SMEs and online banking in China. Further, according to the collected data on the efficiency of TPP platforms on the SMEs' operations, the study will establish their efficiency. The current and potential risks results will help the investigation establish why the Chinese fail to adopt TPPs to their corporations.

In the descriptive analysis section, the study established that most respondents were aged 25-30 years (143 respondents). The second age group with a large share of participants in the study was the 18-24 segment (79 respondents). Alternatively, respondents over 36 years made up the smallest part of the sample (17). The findings depict the influence of age on adopting and utilizing technological innovations in routine corporate activities. Adolescents and young adults made up the most significant consumer population. These findings second Xiengfieng's (2007) results that youths and young adults adopted technological innovations quicker than older adults. These findings depict that youths and young adults mostly used Alipay and other TPP platforms for payment operations of their

SMEs. However, these participants own a small number of SMEs in China than adults making the assimilation of Alipay in SMEs low.

The study also established the current and potential risks Alipay and other TPP platforms posed to the Chinese SMEs. As indicated in Figure 3, 12 respondents stated market risks as the main TPP platform risk they faced and feared that they could impact their operations in the future. Market risks primarily include customer loss, bank refusal to cooperate, new competitors, competitive rivalry, and sector substitution (Shuai et al., 2018, p. 550). SMEs and users, as TPP clients, have the following traits of combining high cardinality and low loyalty, and the diversifying of platforms results in more vicious competition and customer loss. TPP platforms conduct business through the bank docking provider station. Once the bank fails to collaborate, these transactions will become challenging for completion. As TPP platforms, mobile operators, and banks enter the TPP space, and market competition is expected to become more competitive. Additionally, as of the end of 2016, China had licensed 255 TPP corporations and multiple industry players resulted in fierce competition (Shuai et al., 2018, p. 550). Therefore, as technology progresses, new implications and techniques will arise, implying that similar and superior products or services will emerge, posing a significant risk to the TPP and SMEs in the Chinese market.

Thirty-six respondents reported credit risk, 104 said policy and regulation risk, while 109 respondents reported security and technological risks. Credit risks arise when TPP platform users fail to pay in full, leaving debts to the service providers and bad ratings on online platforms. Credit risk leads to bad industrial influence where most SMEs and online banks get their services revoked because they cannot provide the commodities that clients want because of previous debts (Guan and Ren, 2019). Therefore, the study findings revert to the conclusions presented by Guan and Ren (2019) and Shuai et al. (2018) that SME owners

fail to adopt TPP platforms because they can lead to bad industrial influence, misappropriation of funds, and loss of customers.

Policy and regulatory risk is also a significant determinant in the adoption and the impact of TPP platforms on SMEs in China. Currently, China holds a record for motivating and funding technological innovations in the TPP sector (McDowell 2019, p.122). However, China keeps altering its policies, and there is a significant possibility that the country will modify its TPP policies in the future. Further, Xu (2017, p.79) established that TPP platforms had been established rapidly in China, and the existing laws and regulations lag in governing and controlling the TPP activities. For instance, most respondents noted that the laws and regulations failed to protect their right of interest. These findings make it alarming for SME owners to adopt TPP platforms in China.

TPP platform development relies on internet technology development (Zhao and Dong, 2017). However, these developments pose security and privacy risks, including the operations and aspects of system security. TPP platforms endanger users through illegal data breaches. The respondents expressed their fears in situations where hackers could manage to access consumer information illegally. The development could make it difficult for their operations, thus failure to adopt them for operational activities.

The respondents also provided different findings on the efficiency of TPP platforms upon adoption by SMEs and online banking institutions in China. Although a large number of the respondents agreed that adopting TPP platforms had increased the efficiency of their operations, a small disagreed. 45% of the respondents agreed that TPP platforms increased the efficiency based on payment ease and transaction of payment from different places without any geographical barriers. The respondents stipulated that platforms had lowered

their efficiency pointed on the credit, market and policy, and regulation risks. Therefore, there are mixed results on the efficiency of adopting TPP platforms for SMEs in China.

Impact on Online Banking

The advancement of TPP systems may encourage online banks to enter new markets (Wang, 2016). Before the growth of TPP frameworks, financial institutions in e-commerce had only two functions: transfer accounts and disbursement (Chu et al., 2019). However, the degree of legitimacy between producer and consumer has no bearing on the optimal system. Additionally, credit fraud directly results in economic losses. The situation will erode purchaser and vendor confidence, pose a severe impediment to digital financial security, and work against the online banking sector's ability to develop and continue operating the pertinent online payment enterprise (Che, 2015, p. 82). TPP platforms have a middleman role, based on online banking, acting as a credit intermediary between two parties, constructing a desirable credit atmosphere, and promoting the growth of e-commerce (Guo and Shen, 2016, p. 16). Additionally, it broadens online banking business scope, accelerates innovation, and expands business.

Additionally, TPP platforms can assist online banking owners in growing their high-quality customer base. In general, online banking has the B2B and B2C credit model customer status, flexible financing, and basic information but lacks the relevant insights required for the new modes of B2C, where the buyer and seller are primarily individuals. Online banking can obtain dynamic funds and record information from the buyers via a TPP platform, gaining better comprehension of their brand image among individuals and businesses. Therefore, online banking can attract many high-quality clients and tailor its brand portfolio to these customers by utilizing TPP platforms.

Since TPP platforms' scope stretches to online banks and has even supplanted the industry's trading and inclusive financial business, hence absorbing a significant customer base from online banking, TPP platforms also include a trading warranty feature. The feature eliminates the need for users to enrol for internet banking, thus lowering the price and earns the consumer's endorsement, posing additional difficulties for the online banking industry.

Impact on SMEs

Consumers' buying behaviour has changed due to the development of TPP platforms, with concrete manifestations in the areas of utilization thought, consumer habits, and purchasing behaviours (Lu, 2018, p. 958). Before the widespread adoption of TPP, customers preferred to shop with cash because it is safe and efficient (Klein, 2020). In general, consumers determine their consumption concept by their behavioural and financial capabilities. Customers of varying ages have distinct attitudes toward consumption. For example, in the 1960s, Chinese customers were concerned with product prices, the 1970s with product quality, and the 1980s and 1990s with the product experiences (Wang et al., 2008, p. 559). Until the advent of TPP platforms, people's perceptions of usage and transaction shifted from conventional utilization and commerce to a hybrid of traditional and online payment.

For a good time, Chinese SMEs utilised cash in their operations where customers could visit the retailers and exchange commodities for money. However, geographical constraints made it difficult for most customers since they could not travel to the SMEs to make the purchases. With the emergence of TPP platforms, SMEs had eased in making sales to people from various areas in China to pay through the payment frameworks. The SMEs can form cooperation with TPP platforms giving customers a wide variety of payment services at any time and place.

The various aspects that TPP platforms influence in the operational activities of SMEs include safety, impartiality, efficiency, and openness. TPP businesses possess substantial capital, which enables them to develop a comprehensive and safe payment platform. Since TPP platforms utilise the most sophisticated digital payment technology and are connected to each bank's payment processor, the account and password entered by the user on the TPP systems will give them access to the user's bank account, allowing the bank to deliver regulatory compliance. Alternatively, TPP platforms have a safety security mechanism, including an SSL128 encryption mechanism and a public key infrastructure (PKI), which ensures the consumer's data integrity. Therefore, SMEs can efficiently utilise TPP platforms because their information remains protected from unauthorized entities.

By utilizing the foreclosure feature of the TPP platform, the facilities create a favourable, trust-based economic climate for both SMEs and their consumers. As a TPP corporation, it can protect SME’s and consumers' markets transactions data, building a positive assurance to safeguard both parties' justifiable liberties and preferences. TPP platforms also make SME operations effective (Chuo et al., 2019). These platforms establish the relationships between SMEs, consumers, and financial institutions ensuring cooperation between these three entities. These platforms provide a uniform payment interface that enables the consumers to pay the SMEs and the SMEs to transfer their funds to the relevant banks making SME operations efficient.

Practical Implications

Drawing from the study findings, TPP platforms have a significant effect on the operational activities of SMEs and online banking in China. However, the results also suggest that the people are failing to adopt TPP platforms to their SMEs because of market, credit, policy, and regulatory risks. Therefore, the study suggested relevant practical implications that could booster the TPP platforms adoption amongst Chinese SMEs.

Establishing a sound legal security system will enhance SMEs' adoption of TPP platforms. TPP platforms belong to the e-commerce law and should emphasize the law because of the rapid technological advancements and usage by the Chinese. The Chinese government and relevant TPP platforms can improve the regulatory framework by establishing a current financial framework that determines the qualifications for TPP platforms and asserts these parties' rights and responsibilities. Further, security is a crucial part of digital payment technologies. TPP corporations should enhance the phone and computer console's critical techniques and infrastructure and safety and cybersecurity capabilities. Adopting a client-supplied code sorting system, encryption, a virtual visa, and authentication protocols, among other performance standards, bolster network security. Additionally, TPP organisations should develop a backup centre to retrieve their data whenever there is a data breach immediately.

The mobile market has become more significant in the Chinese market as intelligent phones gain popularity. TPP service providers are capitalizing on the development to accelerate the growth of digital money. For example, Alipay is collaborating with convenience stores to incorporate bar code and QR code payments to broaden the reach of Alipay's digital transaction software. Mainly when most online banks charge fees for smartphone fund transfer transfers, Alipay uses the TPP platform to connect with various banks, enabling a fee-free service transfer. Additionally, partnering with the automobile interface is one of the ways Alipay attracts new customers.

TPP providers may also consider strengthening regionalized facilities by paying close focus to local payment requirements. For instance, provide a payment platform for a regional e-company, local e-government, and payments for local utilities such as water and electricity, and charges for local education, such as online education and exam preparation. The

developments will provide an avenue for various SMEs and local businesses to assimilate TPP platforms for their activities because of their relevance.

Chapter 5: Conclusion

China's economy has proliferated, and the online and SME markets have been dominated by cash for most of its history until the recent rise of e-payments via TPP platforms. From that point forward, people began paying with their mobile phones rather than cash or credit cards. The fact is that this innovative transaction framework and technology involve a more straightforward financial connectivity mechanism than a credit card, along with an exact provision device for online users and SMEs. Customers prefer a faster response time and a more pleasant user experience when compared to more conventional payment methods that integrate fewer banking services.

Since payments began to be processed via TPP platforms, the conventional banking sector has lost its ability to exploit transactions. As a result, the new payment procedure displaces the transaction fee industry, which accounts for the majority of the non-interest revenue of financial institutions. Additionally, the idea of utilizing the TPP platform poses a threat to traditional banking across a broader spectrum of financial services. The framework's products have evolved from digital money to e-wallet functionality, putting them in direct competition with banks in the savings business. For instance, Alibaba's Yu'e Bao gem has a higher interest rate than banks and is comparable to commercialize money funds. As a result, individuals are enticed to withdraw funds from their banks and deposit them in Yu'e Bao accounts.

However, for several years now, China's banking industry regulatory framework has had numerous flaws. The sector has been more government-oriented with little private industry participation for an extended period, and thus the strategy has been unresponsive to

market signals. Nonetheless, the large state-owned banks in China monopolize the banking markets and exercise control over capital disbursements that barely meet the needs of private corporations and customers. Meanwhile, clients and capital are deposited in TPP escrow accounts. With personalized service, the TPP system has shattered the financial institutions' monopoly. As such, the study sought to establish the impact of TPP platforms on the performance of online banking institutions.

The ideology that TPP platforms influence the operational activities of online banking and SMEs provided a motif for this paper. The study conducted qualitative and quantitative analyses to understand these constructs fully. The quantitative element focused on the influence of TPP platforms on SME activities, including sales and profitability. In contrast, the qualitative aspect focused on the regulatory framework and the current and future risks that TP platforms pose to the SME and online banking sectors. The findings could help the Chinese government identify the need to monitor and restrain regulations towards evolving and innovative financial products.

China's TPP organization is primarily composed of businesses with a mixed formulation. It includes deposit and lending as financial institutions do and some insurance policies to bolster their goods' attractiveness. Currently, the law is ill-equipped to regulate the heterogeneous types of TPP brands and industries that create risk in the financial sector by creating a murky area for business dealings. In terms of privacy and data security, China lags behind other developed countries such as the United States and the United Kingdom (Ozili, 2018). TPP groups are likely to benefit unlawfully from the vacuum. As a result of the rapid growth of web technological advancements, a significant number of clients’ data has been dispersed. Capital chasing and profit-driven financial third-parties circumvent privacy protection laws by exchanging personal data between various organizations.
Therefore, Chinese authorities should maintain sophisticated monitoring to respond

appropriately to the rapid development of a diverse range of financial products (Ozili, 2018). With the support of rules and early implementation legislation, the Chinese market will become ideal for the TPP's progressive conformity assessment maturity.

Since the emergence of TPP platforms in the Chinese market, various authors have conducted multiple examinations assessing their impact on different business sectors. Dennehy and Sammon (2015, p. 53) established that TPP platforms are external factors that influence the economic wellbeing of SMEs in China. Fung et al. (2014) argued that TPP platforms could affect China's domestic gross product since it leads to dynamic changes in the economy and various investment opportunities. The current study sought to verify these findings by conducting a mixed approach study focusing on the impact of TPP platforms on the operations of online banking and SMEs in China. Therefore, to quantify the effects of TPP on SMEs, the study selected a sample of 300 people and the modified modification theory to attain the research objectives. In China, TPP platforms have undergone rapid developments since 2013, and the study ensured that it collected valuable insights from 2013 to the present day. The data covers more than 40 commercial banks in China that utilise online banking and SMEs.

The study results presented quantified and qualitative data on the study problem. The study focused on customer loyalty and financial performance with and without the assimilation of TPP platforms for development. The mixed-methods approach satisfies the research objective by providing an image of both strategy designation and evidential knowledge. The research problem can be solved succinctly following the development of this study. From a quantitative standpoint, TPP platforms have an adverse effect on commercial banks' non-interest income ventures. The institutional dimension reveals that Chinese TPP regulations are slow to respond but are progressively maturing. Nonetheless,

liberating China's online banking and a thoughtful set of rules should enable the growth of the developing private financial industry and the conventional banking sector.

On SMEs, TPP platforms have both negative and positive impacts on the business owners and the consumers. These technological innovations increase the cooperation of SMEs with the other financial entities making it easier for the business owners to send and receive payments. Enhanced security and protection of client information are also advantages that TPP platforms that TPP platforms pose to Chinese SMEs. These platforms can also lead to a negative industrial influence, credit and market risks, and complications because of the rapidly changing rules and regulations in China's financial sector framework. However, online banks and SMEs can deal with problems through establishing a sound legal framework, enhancing security functions, strengthening corporate collaborations, and strengthening localized business endeavours.

Since the current study focused on SMEs and online banking, future authors should focus their interest on the impact of TPP platforms on conventional banks. TPP platforms in China perform some responsibilities that resemble those of commercial banks, like transferring funds. Another area of study that investigators should focus on in the future includes factors that hinder or motivate SMEs to adopt TPP platforms in their payment systems and the impact of the Chinese financial system legislation framework on the effectiveness of TPP platforms in corporate activities.

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Appendix

Appendix A: Questionnaire

This study aims to establish the impact of TPP platforms on online banking and SMEs, focusing on Alipay. Currently, Alipay is the largest TPP platform in China, and the study will establish how utilising it influences online banking and SMEs' operational activities. Your answer will be valuable to the investigation, and the author will uphold your confidentiality.

Part A

1: What's your gender? 1. Male 2. Female 3. Other

2: How old are you? 6. Under 18 7. 18-24 8. 25-30 9.31-35 9. More than 36

3: What's your level of education? 1. Completion of Specialized or General Sec. Ed. & Under 2. College or bachelor's degree 3. Master's degree 4. Doctor/PHD degree

4: What's your occupation? 1. Student 2. Employees from Party and government organs and institutions 3. Company employees

Part B

5: Do you utilize SME goods and services? …….

6: When you go shopping in various SME stores, the owners ask you about the payment method you will use. Indicate your payment method……

(If you use Alipay or any other TPP platform, proceed to part C. If you use any other payment methods, answer question 8)

7. Why do you not utilize Alipay or any other TPP platform? Explain your answer

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Part C

Please, according to your experiences of using Alipay on SME sites, or current understanding of Alipay, judging the degree of, answer the following questions with “agree,” “strongly agree,” “neutral,” “disagree,” and “strongly disagree.”

8. During your use of Alipay, the customer service provided was very effective……

9. During your use of Alipay on SMEs, the TPP platforms protected your safety and private information……..

10. I think it is safe to use Alipay with the rapid advancement of TPP platforms in China. …….

11. I am worried that my Alipay account information will be leaked or resold by Alipay when buying commodities on SME sites……

12. I am worried that it is time-consuming to use Alipay on SME sites…….

13. Alipay lowers the services provided by SMEs and online banking services……..

14. Alipay increases the profits that SMEs and online banks generate……

15. The current Chinese legal framework fails to cover all Alipay operations leaving consumer information vulnerable……

16. I intend to recommend Alipay to friends and family when they shop on SME sites……..

Appendix B: Interview

1. How long did you use Alipay or other third-party online payment solutions?

2. Which third-party online payment solution do you use most? Why?

3. Do you prefer to use the cash or online payment solution to purchase in-store? Why?

4. Do you think the TPP platform influenced your SME? In which part?

5. Which aspects could make TPP platforms effective for all Chinese consumers?