

國立政治大學應用經濟與社會發展

英語碩士學位學程

International Master's Program of Applied Economics
and Social Development
College of Social Sciences
National Chengchi University

碩士論文

Master's Thesis

企業創新對於數位銀行之效益

The Effect of Business Innovation on Digital Banking

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中華民國 112 年 6 月 June 2023

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摘要

本文探討企業創新的關鍵成功因子，主要著重在企業持續創新、公司績效，以及不同企業創新方法之間的差異。研究採用次級資料和深度訪談法探討對台灣本土銀行創新的影響因子，本文同時回顧相關文獻，著重於創新在提升企業競爭力的影響，同時研究數位化轉型和疫情期間的創新策略。研究方法結合次級資料和深度訪談法，以深入了解台灣本土銀行內部的創新情況。研究結果指出，有效的管理政策、良好的企業文化、創新能力、精準行銷，以及有效率的服務流程是成功的關鍵因子。本文將文獻探討與訪談結果相結合，提供了有關企業創新對於企業成長和競爭力影響的深入見解，同時也為未來的研究提供了方向。案例研究以一家致力於數位服務的台灣民營銀行為中心，簡述了其背景，並透過訪談分析了其產品、行銷和創新的目標，透過比較傳統銀行和數位銀行，突顯出成功的企業創新因子。

關鍵詞：企業創新、數位轉型、數位銀行、精準行銷、社群媒體

Abstract

The study explores the key success factors for business sustainable growth, focusing on continuous innovation, company performance, and distinctions between changes in business innovation approaches. The research uses secondary data and interviews to identify elements influencing innovation in Taiwan's local banking. The study reviews the literature, highlights the role of innovation in competitiveness, and investigates strategies during digital transformation and the pandemic. The methodology combines secondary data and interviews to gain insights into innovation within Taiwan's banks. Findings indicate that effective management policies, conducive culture, innovation capabilities, precision marketing, and efficient service processes are key indicators of success. The study bridges literature and interviews, contributing insights into the impact of business innovation on growth and competitiveness, and guides future research. The case study centers on a Taiwan-based private bank with digital services, describing its background, analyzing products, marketing, and innovation-driven goals through interviews. Comparing traditional and digital banking highlights successful innovation.

Key Words : Business Innovation, Digital Transformation, Digital Banking, Precision Marketing, Social Media

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Chapter 1 Introduction

1.1 Research Motivation and Background

The advancements in digitalization and emerging technologies lead businesses to improve in all aspects to keep their competition. During the past few decades, numerous companies have decided to change their strategies, organization, and more to foster growth and achieve high-quality research, products, and customer services. However, not all businesses have successfully transformed. According to an evaluation conducted by the Boston Consulting Group in 2021, companies like Google, Facebook (now Meta), Apple, and Amazon are renowned for maintaining innovation in their businesses through continuous research and development of products and services¹. In contrast, Kodak and Motorola failed in the last decade. They lost the leading position and even were washed out in the film and cellphone industries.

In Taiwan, various industries are undergoing digital transformation to improve work efficiency and cater to customers' preferences. For example, the manufacturing industry utilizes IoT and big data analytics to enhance production efficiency and optimize manufacturing processes. In daily life, many physical stores have established online shops and use AI and big data analytics to analyze the customers' preferences and tailor advertising strategies. The banking industry in Taiwan has also followed the digital transformation trend, converting many services into online platforms and effectively implementing digitalization through technology and marketing strategies.

In the last decades, the Taiwanese people preferred going to the branches to save money, open accounts, and do other business in person. However, with the transformation of the economic structure, an increasing number of two-income families are emerging. This has made it challenging for office workers to visit the bank during

regular business hours personally. Since 2016, Taiwanese banks have begun developing new digital banking services. For instance, banks transformed traditional in-person processes such as account opening and currency exchange into online applications.

Furthermore, traditional banks faced a predicament when Covid-19 broke out, as people could not leave their homes. The pandemic became a key reason for accelerating the transformation of traditional banks. Consequently, banks began offering a wide range of online services during the pandemic, including loans, fund subscriptions, and purchasing various types of insurance, all of which can be conveniently applied for through digital banking platforms.

This study also refers to other relevant literature on business innovation and digital transformation to understand the impact and factors influencing bank digital transformation. It relies on secondary data and public awards for bank innovation, which provide objective information to discuss the critical success factors in business innovation. Thus, both global and domestic public innovation awards will be examined. The secondary data and literature review results will be discussed in identifying the success factors in the business innovation process. Additionally, interviews have been conducted with employees who work in the digital bank to explore key factors not previously mentioned in the literature.

This study adopts qualitative research, utilizing secondary data and public innovation awards as data resources. The case study approach focuses on the domestic digital bank with the highest market share to obtain data on digital transformation and identify the factors that differentiate successful innovation processes and products. Interviews with employees are conducted to gather valuable insights into key factors in business innovation. To investigate the innovation development in the bank industry more intimately and understand the whole process, the interviewees need to have related working experience for two years and have participated in one of the innovation

projects. The interviewees have working experience in one of the local digital banks with a high market share in Taiwan digital bank market.

1.2 Research Objective

This paper examines the key factors contributing to companies' successful and continuous growth. It aims to discuss their sustained innovation and business performance, and identify the factors that differentiate them from companies that have attempted innovation but experienced limited success. Secondary data will be utilized to identify influential innovation characteristics. Additionally, interviews will be conducted to gain insights into the experiences, challenges, and solutions related to innovation in local Taiwanese banks.

Chapter One includes the research motivation, research background, and research objective. Chapter two is the literature review. First, we will identify the key factors and innovative ways from the literature review and award programs. Second, we will explore the challenges and difficulties that the companies faced before. Third, we will discuss the benefits of business innovation and the external support that can make business development more efficient. In chapter three, the research method and structures will be discussed. The researcher will use secondary data and interviews to collect the data. After collecting the above data, the paper will divide into two analysis structures. Chapter four presents the research results. Through the innovation process of the local private bank, we collected data from the interviewees and the factors contributed by the secondary data.

Finally, this paper will also bridge the research gap between the literature review and the interview by exploring essential indicators that signal successful business innovation. These indicators include factors such as effective management policies, a conducive business culture, strong capabilities in innovation research and development,

and an efficient innovation service process. A comprehensive understanding of the key factors contributing to successful business innovation will be achieved by addressing this research gap and examining these crucial indicators.



Chapter 2 Literature Review

2.1 Why do businesses need to innovate?

Innovation meant something unusual in the late 1880s, and Schumpeter proposed that innovation is driven by substance. Nowadays, the competitive landscape of businesses relies on innovation. Management teams need to find innovative ways to continuously keep companies competitive (Boyles, 2022). Business innovation can bring changes in services and products and can also be an effective way to solve current problems and needs (Singh, 2023). According to the BDC report, business innovation can lead the whole company to change, such as reorganization, boosting productivity, and internal business culture¹. Innovation doesn't need a big project to revolutionize the whole company. It can involve slight, incremental, and simple improvements in any aspect. In addition to increasing productivity and efficiency, business innovation can also reduce company costs and waste.

On the other hand, the preferences of customers don't undergo automatically. The customers are passive in the economic development processes (Sledzik, 2013). Therefore, it is essential to implement practical business innovation to cater to and evolve the desires and demands of customers. The products and services have been innovated with the target customers to address their pain points. Businesses can also gain a competitive edge in the market.

Schallmo developed an innovation process for generic businesses, which is one of the most well-known innovation process designs to date. Ideation is the first step of the process, which can integrate the perspectives of multiple stakeholders and address the most direct and profound problems (Bocken, Short, Rana, & Evans, 2014). The

¹ 4 ways innovation can help your business." BDC. URL: <https://www.bdc.ca/en/articles-tools/business-strategy-planning/innovate/4-ways-innovation-can-help-your-business>

implementation and design process can be adapted efficiently and stably in a consistent venture, not for the traditional business model (Gesissdoerfer, Bocken & Hultink, 2016). Thomas Clauss and Matthias Breier proposed the Business Model Innovation (BMI) model in 2021. According to Clauss, Breier, Kraus, Durst, and Mahto (2022) the BMI model is for corporate innovation, and it provides useful perspectives about SMEs management, business logic, and the company's business. Because the capital is small and lacks resources, SMEs quickly face economic crises (Eggers, 2020). According to the BCG report in 2009, the innovation business model demonstrates the five perspectives to consist of a company to sustain a company innovated. The response during the pandemic crisis can be discussed, and companies can assess the improvements and opportunities in innovation.

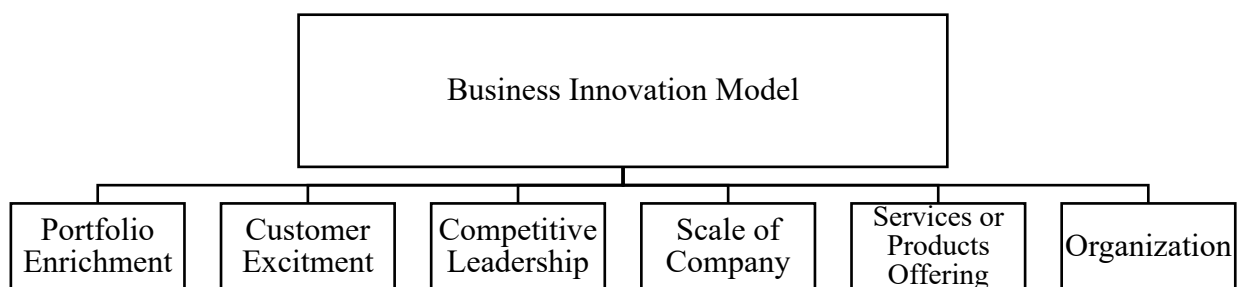


Figure 1 The Components of the Business Model

Digital transformation has evolved from being a trend to a necessity in the banking industry in Taiwan. To confront the rapid information changes in the digital age, banks not only innovate their services and technologies but also implement significant reforms in their existing organizational structure, systems, and even teamwork within the organization. AI provides the banking industry with advanced capabilities to enhance customer relationships, optimize work processes, and launch new products.

For instance, banks can gain deeper insights and data from big data analytics to plan new products or services based on customer preferences. Additionally, the bank's employees can be more efficient in their routine work through the latest technologies.

In conclusion, innovation is crucial for business development because it allows businesses to stay competitive, face challenges, create new opportunities, and adapt to market dynamics, especially during uncertain periods like pandemics or economic crises.

2.2 Factors Influencing Business Innovation

The key factors of business innovation are products and service offerings, including portfolio enrichment and customer satisfaction (Bowonder, B., Dambal, A., Kumar, S., & Shirodkar, A., 2010). The products and services offerings enable businesses to innovate. Firstly, by providing new offerings or products to customers, which may excite the customers and increase their profits. Secondly, they can face the competition in the marketplace more easily due to their high market share. Thirdly, they can develop new businesses to enter new market segments or foreign markets (Will Purcell, 2019).

According to the scale and organization of the company, large and small companies can have different drawbacks and advantages in flexibility and business innovation (Jean-Michel Sahut & Marta Peris-Ortiz, 2014). In recent decades, an increasing number of startups have been established, depending on the market environments and conditions. Startups are typically small/mid-sized enterprises with more flexibility than large enterprises in management, technology, design, and strategies (Mark Lydon, 2022). They usually have a flat organization, which can save time on administrative processes. On the other hand, large companies usually have more resources and capital to support their own development. Harvard's business

administration professor, Gary Pisano, rejects the notion that only startups can innovate nimbly. He considers that large companies can also evolve and adapt but they must consider the differences from narrative startups. If they want to acquire types of equipment or import new technology, they have advantages over small/mid-sized enterprises in terms of capital, services, products, connections, and customer base. Furthermore, large companies usually face challenges such as bureaucratic structures and fixed organizing plans that regulate internal company systems (Davis, 2018).

Domestic firms use innovative practices to solve difficulties (Nawal Abdalla Adam & Ghadah Alarifi, 2021). If the company can have innovative marketing strategies, it can promote the products and achieve its financial performance goals more easily. Effective marketing strategies enable businesses to gather market insights and understand customer needs, preferences, and trends. This knowledge helps identify innovation opportunities and develop products or services that meet customer demands. The outcome of selling products or customer services defines performance. The research shows a positive influence between the performance of enterprises and the probability of success (Friedlander & Pickle, 1968). If enterprises want to succeed in the market in the long term, they need outstanding performance. Besides, government support can also be an important assistance for business innovation.

To enhance the company's performance, the team within the department may be constituted of consultants or internal employees. These employees are usually young and have interdisciplinary backgrounds, including economics, finance, statistics, marketing, communication, and other diverse fields. They contribute their professional expertise to discuss marketing strategies for each product. The team focuses on the advantages of innovative projects, enhances their superiority, and identifies any negative aspects to take corrective measures (Mahmudova & Kovács,

2018). In recent years, businesses have developed new talent recruitment strategies, particularly in the banking industry. Banks have launched the Management Associate or Management Trainee Program, typically targeting freshmen or graduate students who graduated in economics, finance, or related fields. However, with changes in banks' demands, banks have gradually shifted to recruiting cross-disciplinary talents. These trainee programs emphasize the development of young management, aiming to shorten the time required to get promoted.

In addition to the points above, I have identified three other key factors less commonly mentioned in previous literature. These factors include precision marketing, marketing strategies in social media, and centralized task force.

2.3 The Impact of Covid-19 on Innovation

Since the end of 2019, the spread of the Covid virus has caused difficult and challenging situations in the global economies. Each government formulated standards to limit the spread of the virus and decrease the potential risks to the economy. Trade mobility was restricted, and most developed countries were locked down during the pandemic. The global supply chain had been distorted, and the blockade prevented merchandise shipments (Katarzyna Turon & Andrzej Kubik, 2021). The lockdown policy caused shops to close, and online shopping and food delivery have become the trend during the pandemic (Xuequan Elsie Peng & Chima Simpson-Bell, 2022). Many restaurants adopted the business model of Online Food Delivery (OFD) pattern to face the obstacles of lockdown. The wide range of business models (Damanpour, 1996) indicates that restaurants, such as traditional street food and fast food, have been developing new services or products to meet the changing demands of customers. (Diana Gavilan, Susana Fernández Lores, Adela Balderas Cejudo, & Gema Martínez Navarro, 2021). Additionally, human resources management had to alter the recruiting

processes. The new hiring processes include initial online interviews using platforms like Google Meet, Teams, or Zoom. After the candidates are on board, the orientation can also be conducted online, allowing employees from Taiwan and other countries to participate in the same orientation. This approach saves costs, lecture time and is more efficient. Employees can also choose E-learning to take the training courses companies require (Lauren N Wiseman, 2020). During the pandemic, banks have also provided various online services. For example, customers who lost their jobs during the pandemic may need loans but may have difficulty going out to apply for them. Therefore, digital banks launched services such as microloans, allowing customers to borrow small loans flexibly. Moreover, foreign customers who used to go to the branch to open accounts in person can also open an account through the digital bank during the pandemic. The bank launched a series of services to reduce contact through the innovation of the application processes.

Prior to Covid-19, banks had a policy that prohibited employees from taking their computers out of the company. However, staff, foreign customers, vendors, and even high-level managers couldn't enter Taiwan. This also influenced the majority of the banks' operations. Google Meet, Teams, Mobile Office, and Zoom were also developed as some of the working tools. The pandemic changed valuable contact to digital communication patterns (Evan DeFilippis, Stephen Michael Impink, Madison Singell, Jeffrey T. Polzer, & Raffaella Sadun, 2022).

Chapter 3 Research Methodology

The research objectives of this study include the innovation indicators of customer service, strategies, human resources management, business philosophy, financial performance, the market leader, and company internal policy

3.1 Research Framework

To address the first objective, the study will use a case study approach which includes interviews and second-hand data to examine the critical factors of innovation and measure performance. In addition to the literature review as a research methodology, this study will also conduct interviews with employees of the selected case study. The results from both research methodologies will be compared to identify differences in crucial factors.

The second important part is to measure the performance of the business and examine the innovative awards they won in the past five years to determine the advantages the company focused on developing during that period. The case study selection will focus on what they did in terms of innovation in the past years, how their organization changed, and how they adopted business innovation. The case study will discuss the indicators of innovation success and include realistic instances, such as the products which the company just launched, to analyze the outcomes.

- Discussing how to sustain the innovation growth in the same industry
- Comparing the differences between case study bank and literature results
- Analyzing the results from secondary data, public innovation awards, and interview
- Exploring the sustainability of the case-study firms and other issues which haven't been addressed

According to Ruey-Jer Bryan Jean, Jyh-Shen Chiou, and Rudolf R. Sinkovics (2016), the research design aims to control other factors and find the result of the impact of the independent variable on the dependent variable. To ensure the causal relationship between the independent and dependent variables, we will use the existing products to design the situation to ensure the validity of the product. The primary purpose of this study is to determine when businesses decided to innovate and the practical effect on entry-level employees. Moreover, we would like to investigate local Taiwanese enterprises, and interview participants must be selected to work in the native banks

3.2 Research Process

3.2.1 Research Flow

According to the literature review, this study formulates several key factors regarding the success of business innovation. To explore and validate more key factors in a qualitative research approach, the interview outline was designed to identify the key factors of innovation. Subsequently, interviewees from a high market share digital bank in Taiwan were selected to engage in in-depth discussions about other potential vital factors. The research allows for a deeper understanding and valuable insights into the complex dynamics of business innovation.

3.2.2 Research Design

This paper aims to explore business innovation in digital banking. In addition to the literature review and public innovation awards, we used interviews to compare key factors.

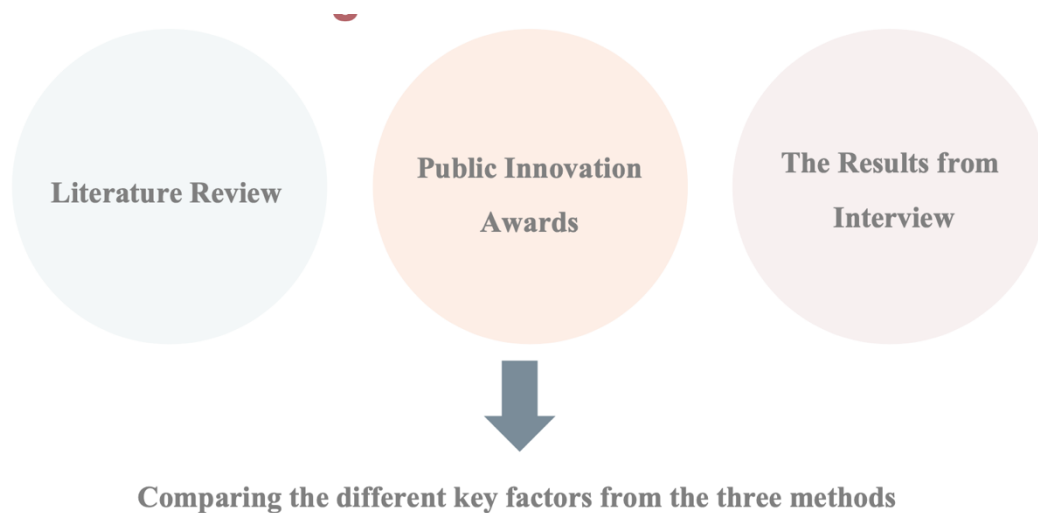


Figure 2 Research Design

We invited two participants who work in the digital bank and have joined the management associate program to be interviewed about the business innovation process. The interview participants have worked in the bank's different departments as management associates for two years and have been involved in various projects to develop the company's businesses. The interviews were conducted online via Google Meet.

The interview outline was related to the innovation of digital products, the influence of corporate culture, R&D, innovation abilities, service innovation, and the rise of NEO banks. The questions examined the impact of innovative changes, external resources support, and companies' performance after innovation. The outline consisted of six sections of questions. The first section briefly introduces the interviewees and the company's culture. The second section addressed the viewpoints on enterprises launching new products through digital innovation. The third section focused on the impact of the company's culture on personal or team innovative capability. The fourth and fifth sections addressed the perspectives of research and customer service. The last section focused on developing digital services in the banking industry. Based on the results of literature reviews and the interviewees' feedback, this study aims to identify

some research gaps.



Chapter 4 Case Study

In this study, we have chosen a private Taiwanese local bank that has developed digital bank services as a case study. This paper has selected the bank with the highest market share of digital banks in Taiwan now, and this digital bank was also the earliest to establish digital banking subsidiaries among the Taiwanese domestic banks. It has launched various products and services and is considered the most successful digital transformation bank in Taiwan. This chapter will be divided into the following parts and will discuss the digital bank's local aspects sequentially. In the first part, we'll describe the background of the case study company and analyze the objective factors of digital bank products, marketing advertisements, and innovative business developments with the award program. The analysis was conducted through interviews with the current bank staff. It compared the differences between conventional and digital banks and analyzed the successful key factors of business innovation.

The bank was established in 1992 and opened its first overseas branch in Hong Kong in 2003. It expanded domestically and established over a hundred branches in 2006. Over the past fifteen years, it has diversified its business by offering U.S. stock investments, insurance, and more services. In 2016, it launched its second digital bank in Taiwan and introduced digital financial ecosystem services through its digital banking platform in 2020.

We conducted two online Google Meet interviews, each lasting approximately one hour. Both interviewees work in the digital banking department of the company. The first interviewee is around thirty years old and has been with the company for approximately six years, having entered the MA Program. The second interviewee is around twenty-five years old and has worked in the company for about 2.5 years. The interview results, secondary data analysis, and awards analysis would interpret the

overall results. This case study's information won't indicate the natural brand name and interview's personal information.

4.1 Company Introduction

This bank was set up in 1992 and has over 100 domestic branches in Taiwan. With globalization, the bank established international branches in Asia, North America, and Australia to develop customer financial services worldwide. The main businesses include Corporate Banking, Personal Banking, Consumer Banking, Wealth Management, and Digital Banking. It provides financial services for individuals, families, enterprises, and micro-enterprises. In addition to public service, the bank also develops wealth management business in both local and foreign currencies, financial investment, and insurance. Traditional financial services, including personal loans, micro business loans, credit cards, and collaborations with mobile payment services, have contributed to the growth of new businesses.

In 2016, the bank established the first digital bank in Taiwan. It is committed to extending digital financial services and continually optimizing the platforms. The business is a digital bank app that includes new payments like mobile payments and cross-border payments. The development of digital bank services attracts the young generation and is changing the banking industry. It also matches AI techniques and big data to analyze customer preferences and create smooth financial services. The digital app collaborates with other partners to develop an ecosystem to innovate the business and increase revenue.

4.2 Factors Evaluated by the Public Innovation Awards

We have selected six prestigious awards, including domestic and international awards, which serve as significant indicators of business innovation. Each award is based on different criteria, including customer service, marketing strategies, products, innovative technology, industry and country contributions, and ESG practices. These

awards are used as evaluation criteria for assessing business innovation. In evaluating the success of the business performance, both profitability and reputation are of concern. After the company innovates, the management team will compare the profitability to the commission before. Thus, financial performance is one of the critical indicators for evaluating business innovation success. The study has referred to the objective materials on the standards of the awards. Similar variables would be one of the grade criteria and also reflect the high connection between the interview results.

The award program list is as follows:

- National Award of Outstanding SMEs, Taiwan
- Future Commerce Award
- Innovation Awards for Financial Services, Wealth Magazine
- Outstanding Digital Innovation in SME Banking, The Digital Banker
- World's Best Financial Innovation Labs, Global Finance
- Best Payment Innovation, Retail Banker International

Awards	A	B	C	D	E	F
Year of Award	2017-2022	2016-2023	2018-2023	2021	2021、2022	2019、2022
Customer Service	v		v	v	v	v
Marketing Strategies			v			
Products	v	v	v	v	v	v
Innovative Technology	v	v			v	
Donation of Industry and Country				v		
ESG	v		v			

Table 1 The Key Factors of Business Innovation

A	National Award of Outstanding SMESs, Taiwan (國家玉山品牌獎)
B	Future Commerce Award(創新商務獎)
C	Innovation Awards for Financial Services, Wealth Magazine(財訊財富管理大獎)
D	Outstanding Digital Innovation in SME Banking, The Digital Banker(最佳微型企業金融數位創新獎)
E	World's Best Financial Innovation Labs, Global Finance(全球最佳金融創新實驗室獎)
F	Best Payment Innovation, Retail Banker International(最佳支付創新獎)

Table 2 The Related Awards of Business Innovation

4.3 Interview Result

In the following section, the interview results are analyzed to gather valuable insight into business innovation, digital transformation, and recent NEO bank developments over the past two years. These interview results shed light on various aspects of business innovation, including marketing strategies, business policy, process, opportunities, challenges and business philosophy.

4.3.1 Innovation Design Process

Before its digital transformation, the parent company encompassed all traditional bank business operations, such as branch management, wealth management, and physical ATM service management. To optimize the business innovation process, the parent company established a new department dedicated to developing a digital bank sub-brand.

To streamline communication and response times, the new sub-brand has its own IT team, which works in the same open office space. This arrangement allows for quick collaboration and problem-solving when issues with the digital bank's website or app are encountered.

The sub-brand also places a strong emphasis on "Agile Development" to sustain

service innovation. Each Agile Development team consists of three to five members from different departments. Each with their own different perspectives, the team members contribute their professional abilities and unique ideas towards specific topics. Gathering cross-departmental opinions from the team during discussions ensures potential problems are identified and addressed from multiple angles, leading to smoother project operations.

Apart from teamwork, the sub-brand collaborates with a public relations firm to invite customers for interviews. Colleagues related to the project join these meetings online and ask questions anonymously. The interviewees are not informed that they are participating for the bank specifically. The public relations company prepares interview outlines with questions related to various banks, including the bank which is the subject of this study. Through these interviews, valuable insight into user preferences are obtained, aiding the design of new features for the app.

4.3.2 Application of Advanced Technology

Due to domestic financial regulations, customers were required to visit bank branches in person whenever they needed financial products or services. However, this process involved physical travel and queuing, consuming valuable time, which could be inconvenient for persons with fixed schedules such as office workers or individuals in emergencies.

The introduction of electronic processes allowed customers to quickly check their account information. However, for more extensive services, they would have to use a computer and log into the bank's system with their natural person certificate. With the widespread adoption of smartphones, the demand for enhanced electronic bank services increased.

To address these challenges, the bank decided to launch a digital banking platform, providing customers with standard services similar to traditional bank

branches. Initially targeting younger demographics, the digital banking platform offered basic features such as online access to savings accounts and a limited number of free transfers each month.

As the digital bank continued to evolve, an increasing number of customers began registering for its services. To expand its market share, the digital bank introduced additional features such as insurance and investment options, catering to a broader range of customer needs.

4.3.3 The Changes of Target Users

Mobile, digital, and internet-only (NEO) banks have become increasingly popular due to their convenience. Not only the younger generation, but also people from various age groups have started using these banking services. However, it's important to note that the target audience for mobile, digital, and NEO banking represents only a portion of the overall user base for traditional banks. Furthermore, digital banks typically have less capital compared to wealth management customers and focus more on offering multiple capabilities, user-friendly UI/UX design, and attractive sales activities such as free interbank transfers.

While the customer base of mobile, digital, and NEO banks might not contribute significant impact to the overall revenue of traditional banks, their users often share their experiences on social media platforms like PTT, Dcard, and Google reviews. These user comments and reviews can have a powerful influence on potential customers and significantly impact the brand's reputation. As a result, social media has become a critical advertising channel for banks to reach a broader audience and enhance their market presence.

4.3.4 Flat Organization and Semi-open Space Office

One of the key factors in business innovation is the adoption of a flat organizational structure. In contrast to the fixed structure of traditional banks,

innovative organizational systems seldom rely on rigid job titles in the office. While this may not directly impact the organization's development, it plays a significant role in reducing the distance between managers and subordinates.

In daily communication, which may include mediums such as email, employees can save time by avoiding the need to adhere to formalities when discussing ideas, projects, or emergencies. They can directly engage with their managers without going through the complicated process of booking discussion time.

Furthermore, the digital banking department office was re-designed to emphasize quick communication processes, cross-department teamwork, and a flat organizational hierarchy. As a result, supervisors no longer have their own offices; they sit with their colleagues in an open environment. This setup fosters faster communication and collaboration, leading to increased working performance. The design of the open office space is considered a critical factor in driving innovation within the organization.

Overall, the flat organizational structure and open office environment promotes a more agile and efficient working culture, encouraging employees to contribute their ideas and work together effectively. This, in turn, supports the growth and success of the digital banking department and fosters a culture of innovation within the company.

4.3.5 Changes in Customer Relationship

In the past, the relationship between banks and customers was passive. Customers would only approach bank branches or contact customer service when they faced problems or needed assistance. However, there would be long waiting times involved in these processes. Digital banks have transformed the relationship between banks and their customers through the following ways.

Implementing self-service options: the bank recognized the need to enhance the physical service experience offered to customers. Physical appointments were a

common grievance, inconveniencing customers with long and uncertain wait times. To address this problem, many banks introduced online reservation systems, allowing customers to schedule an appointment from the comfort of their homes and check their queue status online. This innovative approach aimed to optimize the customer experience and streamline service provision. Furthermore, customers nowadays prefer to have the option to handle their banking needs independently. To cater to this preference, banks have introduced self-service options, such as mobile banking apps, digital banking apps, and online account management platforms. By offering these tools, users gain more control over their financial activities and investments, which in turn reduces the burden on customer service representatives. These self-service options empower customers to manage their accounts efficiently and provide them with greater convenience and flexibility in their banking interactions..

Investing in customer feedback and data analysis: Banks can identify and address pain points in the customer service process by gathering and analyzing customer feedback. Digital transformation helps to streamline feedback collection for both the customer and then bank, giving banks much more information to work with. Analyzing this data helps banks improve customer experience and build trust in their services.

Using deep machine learning and artificial intelligence to improve internal efficiency: By using deep machine learning and artificial intelligence (AI), banks can automate some customer service tasks, like answering frequently asked questions or providing personalized recommendations based on customer data. This frees up customer service representatives to focus on more complex tasks, improving the overall efficiency of the customer service process.

These innovative approaches improve customer experience and contribute to operational efficiency within digital banks, leading to better service delivery and

customer satisfaction.

4.3.6 Comparison between the Traditional and Digital Banks in Taiwan

The interview highlights the key differences as follows between traditional and digital banks, specifically regarding products and customer services:

- a. **Branch network:** Traditional banks in Taiwan generally have an extensive network of physical branches, whereas digital banks typically do not have any physical branches and operate entirely online.
- b. **Products and services:** Traditional banks offer a wide range of products and services, including checking and savings accounts, loans, credit cards, investment products, and insurance. In contrast, digital banks primarily focus on core banking products like checking and savings accounts, offering a different range of services compared to traditional banks.
- c. **Customer experience:** Digital banks in Taiwan provide a more streamlined and convenient customer experience, offering mobile banking apps, online account opening, and instant account activation. Although traditional banks may offer similar services, the process can be more time-consuming and involve more in-person interaction.
- d. **Fees:** Digital banks in Taiwan typically have lower charges due to their lower overhead costs compared to traditional banks.

4.3.7 The Advantages of NEO Banks

In general, NEO banks are digital banks that operate exclusively online, providing a range of financial services through mobile apps or websites. The first NEO bank was established in January 2021 and has been gradually adding features since then. However, some NEO banks in Taiwan such as LINE Bank, Rakuten Bank, and Next Bank still lack certain functionalities, such as the ability to buy foreign currency.

However, NEO banks in Taiwan do offer basic features such as savings accounts, pocket money, and loans, and they are actively working on expanding their services. The appeal of NEO banks lies in their convenience and user-friendliness, especially to the younger generation. They enable users to perform transactions directly from their mobile devices and often integrate with mobile payment systems, making it easy for customers to pay fees and seamlessly manage their accounts.

NEO banks are gaining popularity worldwide as they offer customers an alternative to traditional banking options. Their potential to replace traditional banks in the future is a possibility, given the many similar financial services they provide, but through a digital platform. These banks can offer real-time account balance queries, budgeting tools, and quick payment and transfer options, leading to greater convenience for users. Moreover, NEO banks often have lower fees and overhead costs due to their limited physical presence, making them a cost-effective choice for customers.

However, traditional banks still hold a significant position in the financial industry and are likely to continue playing a vital role in the banking sector. Many customers value the security and stability offered by traditional banks and appreciate their comprehensive range of financial products and services.

When considering their options, customers can compare the benefits of traditional, digital, and NEO banks. Opting for a digital bank allows users to enjoy advantages from both traditional and NEO banks, finding a suitable balance based on their preferences and needs.

	Traditional Bank	Digital Bank	Neo Bank
Type	Credit Institution	Credit Institution	Only Payment
Services	Comprehensive	Diversified	Reduced
Contacting the Bank	Dedicated bank adviser	Team of remote banking advisers	Customer Services
Bank Availability	Opening Hour	All day	All day

Table 3 Comparison between the Traditional, Digital, and NEO Bank

Additionally, traditional banks have an advantage in terms of resources and infrastructure, making them more resilient during economic uncertainty. Both traditional and digital banks are expected to coexist and compete in the market, offering customers the freedom to choose the type of bank that best suits their needs. Careful research and comparison of different banking options are crucial to ensure customers select the one that meets their requirements and provides the desired level of security and protection.

4.3.8 Business Performance

The traditional bank recognized the importance of appealing to younger demographics and, as a result, launched its first digital bank in 2016. The strategy proved successful, as more than 75% of the digital bank's customer base is comprised individuals under the age of 35. Additionally, over 60% of these customers opened their first account at the bank through the digital bank.

According to statistics from the Banking Bureau, the sub-brand digital bank has amassed an impressive user base of nearly 3 million customers. Notably, this digital bank also leads the market in terms of the number of credit cards it has issued.

The digital bank's business performance has been remarkable as well. It managed to break even in 2020, which sets it apart from other digital banks that are still

operating at a deficit. The digital bank's profitability is commendable and places it in a favorable position compared to its competitors in the digital banking sector.²

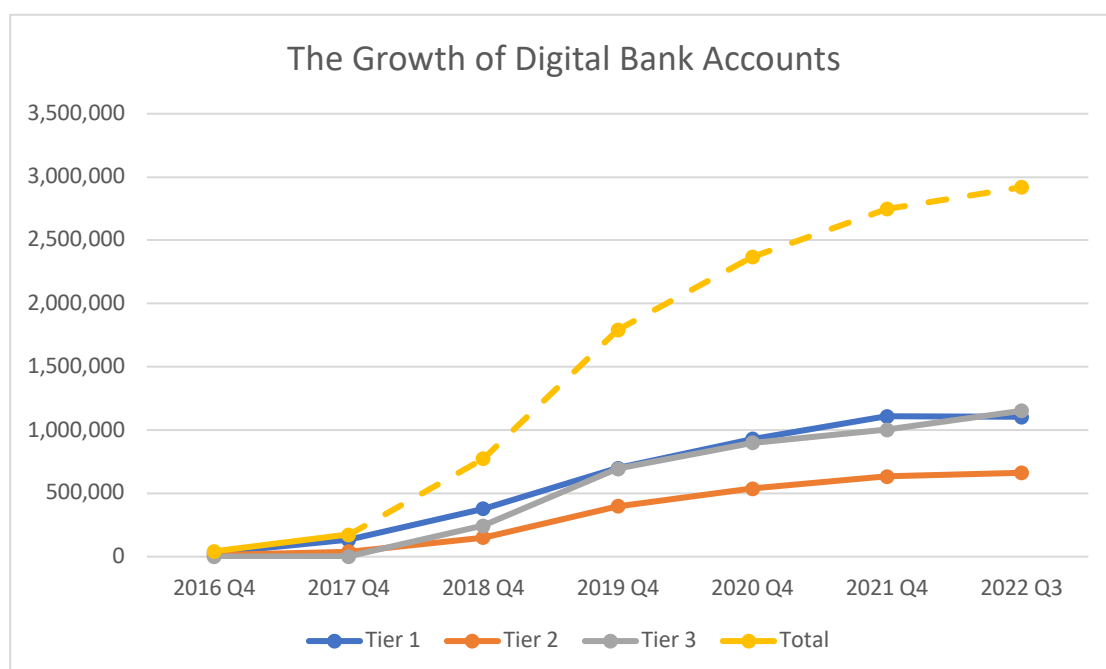


Figure 3 The Growth of Digital Bank Accounts

4.4 Factors Influencing Innovation

Depending on the literature review results, public innovation awards, and an interview, we found the key factors for innovation in our case study. The parent company formulated new practices according to these factors for their new innovative business department. In addition to the key factors, we also compare the viewpoints of traditional and digital banks in the interview.

4.4.1 Marketing Strategies

Through literature review, it was observed that marketing strategies play a crucial role in effectively directing resources toward achieving a business's goals of innovation, improving value delivery, and gaining competitive advantage. These strategies should encompass a comprehensive analysis of the business's competitive

² Data referred from The Financial Supervisory Commission Banking Bureau website: <https://www.banking.gov.tw/ch/index.jsp>

landscape, technological environment, as well as external challenges and opportunities.

In this case study, the enterprise established a digital bank sub-brand, leveraging the parent company's marketing strategies to create a new environment for developing digital banking services. The digital bank's app integrated mobile payments for local brands, allowing customers to conveniently manage daily routines such as bill payments, financial services, and shopping in a single app. Additionally, the bank collaborates with various partners in different industries to foster an economic ecosystem.

Through brand innovation and marketing strategies, the bank attracted partnerships with other companies, resulting in increased benefits and public recognition. This is evident in the bank's sizable online following, with nearly 300,000 followers on Facebook and over 4 million subscribers in the official LINE channel.

4.4.2 Human Resources Management

Rather than utilizing traditional hiring processes, the company implemented a campus recruitment program at various universities in Taiwan, collaborating directly with schools to offer internship opportunities and enhance its branding. Additionally, apart from recruiting fresh college graduates, the company organized a business competition to identify suitable talents interested in the financial industry. Once candidates were selected, the company provided them with onboarding pipelines such as the Management Associate and Advanced Management Associate tracks, offering comprehensive training, elite-level lectures, and cross-field training to enhance employees' skills.

4.4.3 Products and Services Offerings

With the largest captured user base and as the first digital bank in the overall digital bank market, the company offers a wide range of financial services, including foreign currency, insurance, and investment. Being an industry leader, other digital banks are now gradually introducing similar products. However, unlike its competitors, it prioritizes optimizing experiences for mobile users by reducing human intervention and paperwork. The process of realizing a comprehensive digital bank is still ongoing.

4.4.4 Re-Organization

In the context of business innovation, re-organization involves restructuring an organization to support and encourage innovation. This can include targeted changes in structure, operations, problem-solving approaches, and decision-making. Additionally, it may involve fostering a culture that promotes risk-taking, creativity, and collaboration. The identified strategies from the interview are as follows:

- a. Establishing dedicated innovation teams or labs: These teams are explicitly focused on generating and testing new ideas and may comprise employees belonging to various departments or functions.
- b. Encouraging cross-functional collaboration: By breaking down traditional departmental silos and encouraging employees from different sections of the organization to work together, organizations can foster a more collaborative and innovative culture.
- c. Embracing agile methodologies: Agile approaches to project management and product development, which involve frequent iteration and testing, can help organizations move quickly and adapt to change. Some benefits of using agile development in the banking industry include faster time to market, enhanced

collaboration and communication, and improved risk management. Agile development allows organizations to prototype and test new ideas to rapidly iterate and refine them, based on feedback from customers and stakeholders. This helps market new products and services faster, and keep them ahead of competitors. The agile approach relies on regular, frequent communication and collaboration between team members. Agile development also involves testing and refining ideas on a smaller scale before scaling up, which can help banks mitigate risk and reduce the impact of failures.

In this study, the bank initially established a “Digital Bank Department” under the Consumer Finance Division. As its digital banking business developed, the scope of the sub-brand expanded. The management decided to establish the “Digital Bank Division” which would include three departments: the Ecosphere Department, the Financial Department, and the New Payment Department. The Ecosphere Department focuses on maintaining a comprehensive banking ecosystem for users, while the Financial Department maintains the app itself, as well as testing new functions and planning promotional events and collaborations with other organizations. The New Payment Department then takes over online payments and executing events. By splitting the responsibilities of the original Digital Bank Department into dedicated units, targeted innovation can be executed more rapidly, and through the adoption of flat organization & agile methodologies the different departments work together effectively to rapidly push new business development strategies.

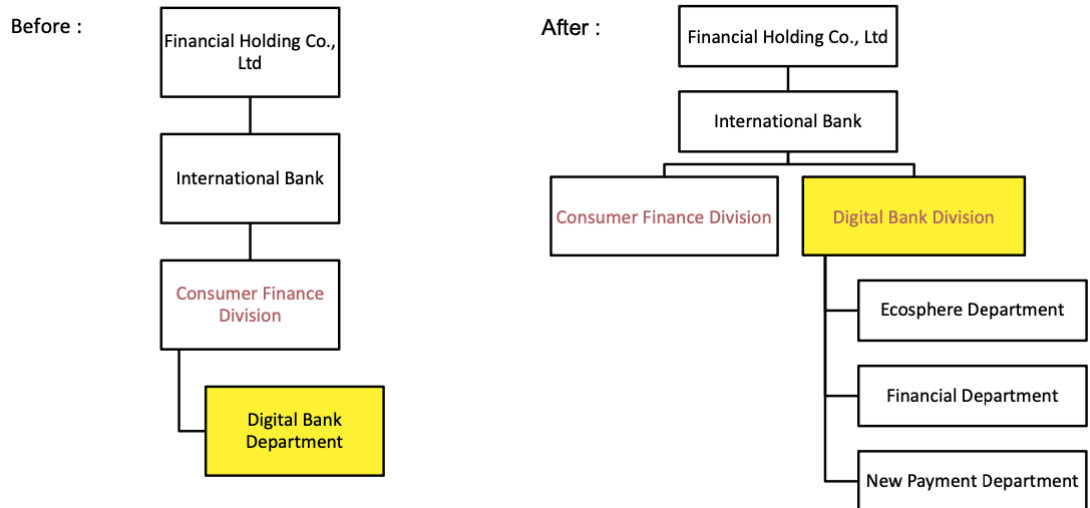


Figure 4 Re-Organization Structure Chart

4.4.5 Internal Collaboration

Through the interview, we discovered that traditional banks in Taiwan's banking industry frequently collaborate with digital banks. One common approach involves traditional banks establishing new digital bank brands. In this collaboration, the parent company provides resources to the subsidiary digital bank, allowing it to gain a customer base. The cooperation methods observed are as follows:

- a. Partnership arrangements: Traditional and digital banks may enter into partnership agreements to offer each other's products or services to their customers. For example, a traditional bank may partner with a digital bank to offer online or mobile banking services. In contrast, a digital bank may partner with a traditional bank to provide physical branches or ATM access. These partnerships offer win-win situations to both parties, giving traditional banks access to innovative digital services & expanding their user base, while digital banks gain a physical presence while similarly broadening their target audience.
- b. Referral arrangements: Traditional and digital banks may also enter into referral arrangements, in which one bank refers customers to the other in exchange for a

referral fee or opportunities for further interaction.

- c. Joint ventures: Traditional and digital banks may also choose to form a joint venture, combining resources and expertise to create a new entity that operates in a specific market or offers a particular set of products or services. By funneling their existing customer base to the newly established digital banks, the digital bank experiences rapid growth, while also directing its younger audience towards to more comprehensive and matured traditional bank system.
- d. Investment: Traditional banks may also choose to invest in digital banks, either as a minority shareholder or as a majority shareholder. Minority ownership injects funding into the digital bank, while majority ownership gives the traditional bank power in deciding new products or strategies, while giving the digital bank access to the other businesses and resources within the parent company. Usually, this is the case when the parent company directly establishes a subsidiary brand. In either case, these investments allow traditional banks to gain exposure to the digital banking sector and potentially benefit from the growth and success of the digital bank, while bolstering the digital bank using the resources and established footprint of the traditional bank.

The five factors mentioned above impact business innovation in digital banking.

Our conclusions are drawn from the literature review, the analysis of public innovation awards, and the case study analysis. Additionally, we have identified several distinct and noteworthy factors, which will be discussed further in Chapter 5.

Chapter 5 Discussion and Conclusion

Banking companies have started innovating their working processes in the past decade and launched innovative products. Innovation is a crucial driver of success in the banking industry, as it enables banks to stay competitive and meet the changing needs of their customers. Banks can foster and support innovation by reorganizing their organizations to support creativity and collaboration, embracing agile development methodologies, and providing resources and support for employee-led innovation. By embracing innovation, banks can stay ahead of the curve and adapt to the rapidly evolving financial services industry.

5.1 Theoretical Contribution

Through the different approaches used in this study, we find three key factors that were less mentioned before.

5.1.1 Precision Marketing

The specific target segment in the advertisement refers to specific groups. Customers are divided into different segments, increasing the marketing effects. The customers will receive separate APP Push Notifications and different marketing strategies depending on gender, income, occupation, age, etc. For instance, the customers are divided into different groups in the loan project, and each group will have its interest rate. The interest rate depends on the customers' financial situation. The range of loan interest rates is 1.68%~15%. The bank will decide the interest rate depending on the credit, salary, and deposit.

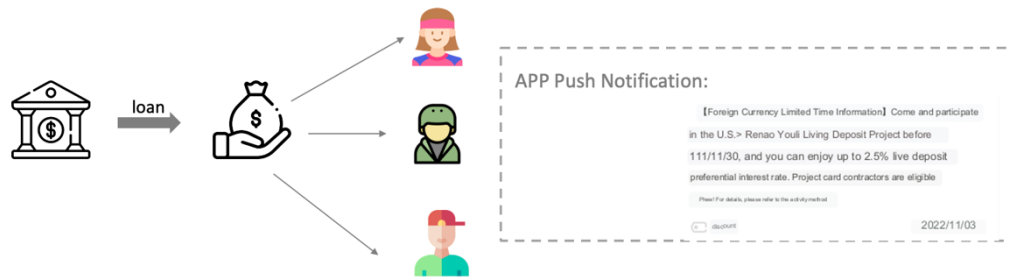


Figure 5 Precision Marketing on Loan Products

As shown in Figure 5, the APP Push Notification service also pushes advertisements based on the different types of customers. Identifying a target segment helps advertisers plan marketing strategies and projects that appeal to the specific group's preferences and demands. It can increase the advertisement's effectiveness and ultimately drive sales for the advertised product or service.

5.1.2 Social Media

With the development of social media, innovative marketing strategies have gradually become one of the effective ways to promote brand reputation, products, and profits. Depending on the different age groups, the marketing strategies will focus on different social media, such as Facebook, Instagram, and Line. As shown in Table 4, each social media has a specific marketing purpose.

Social Media	Main Target Audience	Advertisement Type	Advertisements
Facebook	Adult and Middle (20y~59y)	Post with picture	<ul style="list-style-type: none"> • Impression/Reach • Affiliated Marketing
Instagram	Teenagers and Adults (13y~39y)	Short Video	<ul style="list-style-type: none"> • Impression/Reach • Affiliated Marketing
LINE	All Age Group	Message of the new products or services	<ul style="list-style-type: none"> • Engagement

Table 4 The Comparison of Social Media Approaches

To impress fans on social media, businesses often use interactive content like creating polls, quizzes, and surveys or other interactive marketing strategies to engage their club or community on social media. For example, the business's official account on LINE would launch Member Get Member (MGM) activities to encourage customers to interact with companies. In addition to taking the initiative the marketing activities, the official accounts on Instagram would forward posting the fans' stories or posts to increase the interaction.

5.1.3 Centralized Task Force

The centralized task force suits large enterprises with multiple branches and locations. It allows businesses to plan the office to optimize the team-working, build solid and influential connections in the specific location and engagement and drive sales. Before implementing the Centralized Task Force, internal employees often had to spend considerable time contacting staff from other departments. They often had to handle a

small issue but had to go back and forth via email or phone. When the system encountered urgent problems, they could not address them immediately. Communication ways would also be more efficient if the co-work team worked in the same open office; they could discuss and solve problems immediately and directly. It is no longer using the telephone, email, or other communication software, and it saves time.

5.2 Managerial Implications

There are some managerial implications to the bank which I interviewed. These implications are based on the results which I found in the study.

- a. Integrate cross-departmental resources to increase internal collaboration opportunities: By breaking down silos and fostering collaboration between different departments within our organization, we can tap into a wealth of knowledge and expertise. Integrating cross-departmental resources allows for the exchange of ideas, promotes a culture of innovation, and enables teams to work together towards common goals. This collaborative approach enhances communication, coordination, and synergy, improving efficiency, creativity, and problem-solving capabilities.
- b. Collaborate with the parent company's mobile payment platform to extend our business: By leveraging the resources and expertise of our parent company's mobile payment platform, we can expand our reach and offerings to a wider customer base. This collaboration allows us to tap into an established customer network, benefit from existing technological infrastructure, and access valuable insights from the mobile payment industry. Through this partnership, we can explore opportunities for synergistic growth, develop innovative services, and enhance the overall customer experience.
- c. Develop an ecosystem with a customer-centric approach: By adopting a customer-

centric approach, we can create an ecosystem that revolves around fulfilling customer needs and preferences. This involves understanding the customer journey, identifying pain points, and designing seamless and personalized experiences. By integrating various products, services, and touchpoints within this ecosystem, we can enhance customer satisfaction, loyalty, and engagement, ultimately driving business growth and differentiation in the market.

- d. Utilize innovative technologies to create a more secure cybersecurity environment for launching products that require confidential identity documents: Given the sensitivity of launching products that involve confidential identity documents, it is crucial to prioritize cybersecurity. By harnessing innovative technologies such as advanced encryption, biometrics, and secure data storage, we can establish a robust and secure environment for handling confidential information. This instills trust and confidence in our customers, ensures regulatory compliance, and safeguards against potential cyber threats, thus protecting both customer data and the reputation of our organization.
- e. Increase social media engagement rate to position Richart as the preferred choice when people consider opening a digital bank account: By focusing on increasing social media engagement, we can effectively build brand awareness and reputation. Through engaging and interactive content, targeted advertising, and strategic influencer partnerships, we can position Richart as the go-to digital bank when individuals are contemplating opening a digital bank account. By fostering meaningful conversations, addressing customer queries and concerns, and showcasing the unique value propositions of our services, we can cultivate a strong digital presence and attract a larger audience, ultimately driving customer acquisition and brand loyalty.

By implementing these enhancements, we can foster internal collaboration,

leverage strategic partnerships, prioritize customer needs, ensure cybersecurity, and enhance brand positioning, all of which contribute to the growth and success of our organization.

5.3 Limitation

Due to my limited resources, I could not reach out to a broader range of my target audiences for interviews. It restricted the ability to gather comprehensive perspectives and experiences that could enhance understanding of their demands and preferences. Expanding our reach to a more diverse set of individuals would allow us to capture a more representative sample, enabling us to make more informed decisions and tailor our strategies effectively. Because of trade secrets, the company wouldn't provide confidential data to us. However, the confidential data may provide unique and critical perspectives, influencing the results significantly. This limitation causes a challenge like we can't delve into sensitive data that could uncover hidden patterns or trends. Access to such information could shed light on crucial aspects of our industry, competitors, or customers, enabling us to make more accurate predictions and informed strategic choices.

5.4 Future Study

By developing a robust framework that outlines the key principles, methodologies, and best practices for business innovation, we can establish a solid foundation to guide our future endeavors. This framework can serve as a reference point, enabling us to align our innovation strategies with proven approaches, reduce risks, and increase the likelihood of achieving successful outcomes. It can also foster a culture of innovation within the organization by providing a common language and understanding for all stakeholders involved. And incorporating quantitative research methods into our analysis, we can gather empirical data and numerical insights that can enrich our

understanding of the market, customer behavior, and industry trends. This data-driven approach can provide valuable statistical evidence to support our decision-making and strategic planning. To ensure the validity and reliability of our research findings, increasing the number of bank samples is crucial, thereby broadening the scope and representativeness of our research. This expanded sample size can enhance the credibility and generalizability of our conclusions, enabling us to make more informed and accurate business decisions.

After implementing these enhancements, we can strengthen our business innovation efforts and improve the quality and reliability of our research, leading to more successful outcomes and better-informed decision-making processes.

5.5 Conclusion

This study compares the results of secondary data analysis and interviews to identify key success factors. We found that factors such as product offerings, customer excitement, competitive leadership, company scale, services, organizational structure, customer service, marketing strategies, products, innovative technology, industry and country contributions, and ESG can influence the success of business innovation. We have also identified a research gap in business innovation through these three methods. By following the key factors discovered in this study, the company's probability of success in business innovation will be significantly enhanced, allowing the bank to achieve its goals, such as increasing market share, optimizing working processes, maintaining competitiveness, and enhancing the customer experience.

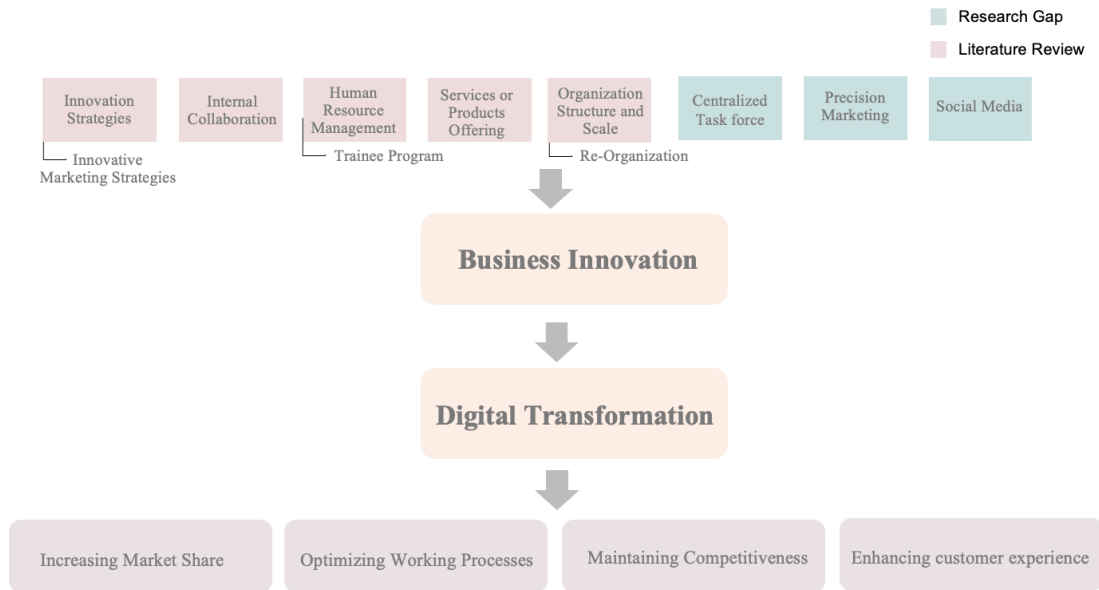


Figure 6 Business Innovation on Digital Banking Processes

After the innovation process, the bank utilizes big data analysis to understand the advertising methods more likely to attract customers. For instance, they use different links under various promotional messages and calculate the usage rates of each link based on backend data. This allows them to allocate marketing resources more accurately. In precision marketing, the bank categorizes customers based on the age groups and demographics of their purchases of different products. This enables them to target the audience with the highest purchase rates when promoting new products. Additionally, the bank monitors social trends and observes recently favored or launched products by the public and competitors. By analyzing customer needs, they introduce products like US dollar deposits, which are more popular than other banks.

Furthermore, the bank encourages employee-led innovation, fostering a culture of creativity by urging employees to generate new ideas and providing them with the resources and support needed to turn those ideas into reality. This might involve establishing dedicated innovation teams or funding and mentorship for employee-led projects.

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Appendix

Table 1: Compilation Table of Factors for Awards

		Evaluation Standard	National Award of Outstanding SMES	Future Commerce Award	Innovation Awards for Financial Services, Wealth Magazine	Outstanding Digital Innovation in SME Banking, The Digital Banker	World's Best Financial Innovation Labs, Global Finance	Best Payment Innovation, Retail Banker International
A	Customer Service	After-Sales Service			v		v	
		Problem-Solving	v		v	v	v	v
B	Marketing Strategies	Online Marketing						
		Brand Marketing			v			
C	Technology	Products Optimized	v	v	v			
		Operation Procedure Optimized		v			v	v
D	Products	Product features	v	v		v	v	v
		Design Concept	v	v		v	v	
E	Donation of industry	Social Benefit				v		
		Products Development				v		
F	ESG	Sustainable Development	v		v			
		ESG Products	v					

Table 2: Innovation Key Factors

Key Factors	Literature Review
Innovation Strategies	Bowonder, B., Dambal, A., Kumar, S., & Shirodkar, A,(2010). Innovation Strategies for Creating Competitive Advantage BDC, 4 ways innovation can help your business
Human Resource Management	Steve Davis, (2018). Innovation in Large Companies Karol Sledzik, (2013). Schumpeter’s View on Innovation and Entrepreneurship Xuequan Elsie Peng ; Chima Simpson-Bell, (2022). Assessing the Impact of Business Closures on COVID-19 Outcomes
Company’s Scale and Organization	Will Purcell,(2019). The Importance of Innovation in Business Gary Pisan, (2019). The DNA of Sustained Innovation NMP Bocken, (2014). Sustainable Business Model Innovation Damanpoiur, (1996). Organizational complexity and innovation: developing and testing multiple contingency models Jean-Michel Sahut & Marta Peris-Ortiz(2013), Small business, innovation, and entrepreneurship Mark Lydon, (2022).5 Types of Business Innovation Startups Can’t Afford To Ignore Steve Davis, (2018). Innovation in Large Companies Michael Boyles, (2022). Innovation in business: What it is & Why it’s so important
Services or Products Offering	Bowonder, B., Dambal, A., Kumar, S., & Shirodkar, A,(2010). Innovation Strategies for Creating Competitive Advantage BDC, 4 ways innovation can help your business Damanpoiur, (1996). Organizational complexity and innovation: developing and testing multiple contingency models

Cooperation Relationship	Maria Paula Bertran and Davi Ferreira Veronese, (2023). Fintech and Traditional Banks: Cooperation, Competition and the New Frontiers for Social Governance Davi Ferreira Veronese and Maria Paula Bertran, (2023). Fintechs and Traditional Banks: Regulation, Competition, and Cooperation in Brazil
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Table 3: Digital Bank User Statistics

Date	Tier 1	Tier 2	Tier 3	Total
2016 Q4	28,467	12,740	0	41,207
2017 Q4	132,714	38,177	1,374	172,265
2018 Q4	378,910	151,125	243,375	773,410
2019 Q4	700,344	399,421	693,268	1,793,033
2020 Q4	930,368	538,353	900,031	2,368,752
2021 Q4	1,109,729	634,097	1,003,677	2,747,503
2022 Q3	1,104,633	662,752	1,152,134	2,919,519

Interview Outline

深度訪談大綱

1. 個案簡述
 - A. 請簡單介紹一下你自己
 - B. 您認為企業文化為何？
 - C. 請問您是否有參與其中之專案？

2. 對於企業成功推出新型態數位產品的看法
 - A. 推動產品的行銷策略
 - B. 描述目前企業所推出的 APP 與之前公司所推出的產品差異為何
 - C. 您對於其他競業推出相同之產品的看法

3. 組織文化對於個人及團隊創新能力之影響
 - A. 公司文化是否有助於產品及技術創新？
 - B. 公司環境與企業創新之關聯性
 - C. 公司偏好僱用員工的特性
 - D. 企業對於制定策略之改變
 - E. 如何進行跨部門溝通優化開發之過程？

4. 對於企業在研發創新的看法
 - A. 研發部門在研發上之突破
 - B. 生產部門在產品製程上之突破

5. 對於企業在服務創新的看法
 - A. 企業對於社會形象觀念之改變
 - B. 企業對於客戶服務方式之改變

6. 針對國內外金融業推出數位銀行服務發展的看法（目前狀況及未來發展）
 - A. 您認為國內外相同性質 APP 的差異為何？
 - B. 您認為推行會員制的好處與壞處
 - C. 您認為數位銀行是否能完全取代實體分行？
 - D. 對於目前純網銀出現的看法