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How can a financial technology company make its quantitative trading and risk management software product more competitive in the Chinese bond market

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Master in Applied Management

Supervisor:

Professor Doctor Sofia Lopes Portela, Assistant Professor,

ISCTE-IUL

June 2023



**BUSINESS
SCHOOL**

Department of Marketing, Operations and General Management

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Abstract

Entering and expanding in the rapidly changing and fast growing bond market in China poses significant challenges for new fintech companies, specifically for Weijing Technology. The unique characteristics of the Chinese bond market, combined with the dominance of established global fintech leaders, make it difficult for new players to gain a foothold. Meanwhile, the specific objectives of the project are to identify direct competitors, compare the company's products and services to those of competitors, identify specific features or benefits that set the company apart from competitors, and areas of improvement. With this purpose, a qualitative market research study was conducted to reveal underlying causes, trends, and related management strategies. The findings indicate that, first, the project identifies Weijing Technology's competitors in the Chinese bond market, including established international fintech companies such as MSCI, SS&C Technologies, QRM, Numerics, and Finastra. Beside, Weijing Technology's financial analysis and management system, DealRisk, has several advantages, including being a domestic technology supplier, high security with servers located in China, a one-stop solution for various financial management needs, being designed for the domestic market with extensive back testing and localized adjustments, having a user-friendly interface, excellent after-sales service, and being price competitive compared to international counterparts. Finally, the areas for improvement for Weijing Technology's DealRisk platform include more frequent product updates to remain relevant and competitive, enhancing security through new technologies such as Blockchain, and expanding the coverage of financial products to meet institutional clients' needs.

Keywords:

Finetch, bond market, new entrants, niche targeting, product positioning

JEL Classification:

M30 and M31

Resumo

O mercado de títulos encontra-se em rápida mudança e rápido crescimento na China. Neste contexto, entrar e expandir a atividade neste mercado tem enormes desafios para as novas empresas de Fintech, especificamente para a Weijing Technology. As características únicas do mercado de títulos chinês, combinadas com a dominância de líderes globais de Fintech já estabelecidos, tornam difícil para os novos players conquistarem um lugar. Assim, os objetivos específicos deste projeto são identificar os concorrentes diretos da Weijing Technology, comparar os produtos e serviços da empresa com os dos concorrentes, identificar recursos ou benefícios específicos que diferenciam a empresa dos concorrentes, assim como apresentar propostas de melhoria. Com o objetivo de revelar causas subjacentes, tendências e estratégias de gestão relacionadas, foi realizada uma pesquisa de mercado qualitativa. Foram identificados os concorrentes da Weijing Technology no mercado de títulos chinês, destacando-se empresas internacionais de Fintech solidamente estabelecidas como MSCI, SS&C Technologies, QRM, Numerics e Finastra. Os clientes deste mercado identificam como principais vantagens do sistema de análise financeira e gestão da Weijing Technology, o DealRisk, o facto de ser um fornecedor de tecnologia doméstica, alta segurança com servidores localizados na China, uma solução completa para várias necessidades de gestão financeira, ser projetado para o mercado doméstico com extensos testes de retroação e ajustes localizados, ter um interface amigável, excelente serviço pós-venda e ser competitivo em termos de preço em comparação com concorrentes internacionais. Por fim, as áreas de melhoria propostas para a plataforma DealRisk da Weijing Technology incluem atualizações de produto mais frequentes para se manter relevante e competitivo, melhorar a segurança por meio de novas tecnologias como blockchain e expandir a cobertura de produtos financeiros para atender às necessidades de clientes institucionais.

Palavras-Chave:

Finetch, mercado de títulos, novos entrantes, segmentação de nicho, posicionamento do produto

JEL Classification:

M30, M31

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Glossary

- CSRC - China Securities Regulatory Commission
- Fintech – financial technology
- KPIs – Key Performance Indicators
- NDRC - National Development and Reform Commission
- PBOC - People's Bank of China
- QFII - Qualified Foreign Institutional Investor
- QRM - Quantitative Risk Management
- Weijing - Shanghai Weijing Information Technology Co., Ltd.

1. Introduction

New companies frequently face difficulties when dealing with the intricate nature of their targeted markets and the competitive landscape. Undertaking a thorough analysis of the market can provide valuable insights that new entrants can use to identify potential opportunities and enhance their market position.

The specific objectives of the project are to identify direct competitors, compare the company's products and services to those of competitors, identify specific features or benefits that set the company apart from competitors, and areas of improvement. Meanwhile, the methodology of this project involves qualitative research through interviews, due to the limited number of active users and potential customers. The sample size was limited to three current customers and two potential customers, and the analysis was qualitative in nature. The collected data will be analyzed to identify significant issues that need to be addressed, and an action plan will be designed to prioritize critical issues and align with the company's overall goals and objectives.

The company's targeted customers are the small to mid size institutions in the bond market in China. China's bond market is characterized by its second largest size and fastest growth in the world. The bond trading occurs in three major venues: inter-bank trading, exchange market and over the counter trading. It is worth mentioning that, although the inter-bank bond trading market was only established in 1997, it has experienced significant growth over the past two decades, including increases in market size, financing options, number of institutional participants and investment options.

With large outstanding bond balance and fast growing new issuance, the bond trading volume has increased dramatically as well. In 2021, policy bank bond and treasury had a turnover rate of 407% and 177%, respectively. The characteristics of the Chinese bond market outlined above clearly highlight the need for data and tools that support informed investment choices and risk management. This demands the integration of financial technology (fintech) into the operation of institutional bond investors.

Fintech is having a major impact on the finance industry by bringing in new technologies such as big data, cloud computing, and AI. These advancements are revolutionizing finance by focusing on areas like credit, risk control, and investment. The aim of this technological revolution is to enhance the speed and precision of finance. This feature sets fintech apart from traditional finance and makes it a crucial component of the finance industry.

The competition in fintech is fierce as expected. How to stand out from competitors and gain more customers are key issues for any company in this field. This project is based on a Chinese fintech company - "Weijing Technology".

An extensive review of the scientific literature was conducted, with a particular focus on two key areas. The first of these areas concerns the bond market in China, in which the targeted customers operate. The topics in this area include the structure of the bond market, the role of institutional investors, and the impact of government policy. The second area of focus in the scientific literature is the landscape of the fintech industry. The literature reviewed in this area covers a wide range of topics, including the emergence of new fintech business models, the impact of fintech on traditional financial institutions, and the regulatory environments for fintech firms in China. The goal of this part of the study is to provide a comprehensive understanding of the current state of the bond institutional investors in China and the dynamics of the rapidly evolving fintech industry.

This project will be presented in the following sections: "Literature Review" to establish a scientific base, "Research Methodology" to explain the chosen approach, "Data Analysis" to characterize and analyze the sample, "Results Discussion" to answer research questions, "Conclusion, Limitations and Future Research Suggestions" to summarize findings and highlight areas for further research, and "References" to provide a complete list of sources used.

2. Literature Review

The existing literature on management issues related to the Chinese bond market, which forms the core of this project, provides valuable insights into the challenges and opportunities faced by fintech companies. These studies have highlighted the importance of developing effective competitive strategies, building a strong brand identity, and positioning themselves effectively in the market to succeed in this dynamic and rapidly expanding market.

2.1. Bond market in China

The bond market in China has several noteworthy characteristics that set it apart from other bond markets around the world. One of the most significant characteristics is its relative youth and rapid growth. China's bond market has only been in existence for a little over three decades, having been established in the early 1990s. Another key characteristic of the bond market in China is its size. The total size of the market has grown exponentially in recent years, with total outstanding bonds now surpassing trillions of dollars. This makes the Chinese bond market one of the largest in the world, second only to that of the United States. Furthermore, the Chinese bond market is constantly evolving, with new instruments and products being introduced regularly. This reflects the ongoing development of China's financial markets and the efforts of the government to create a more diversified and sophisticated financial system.

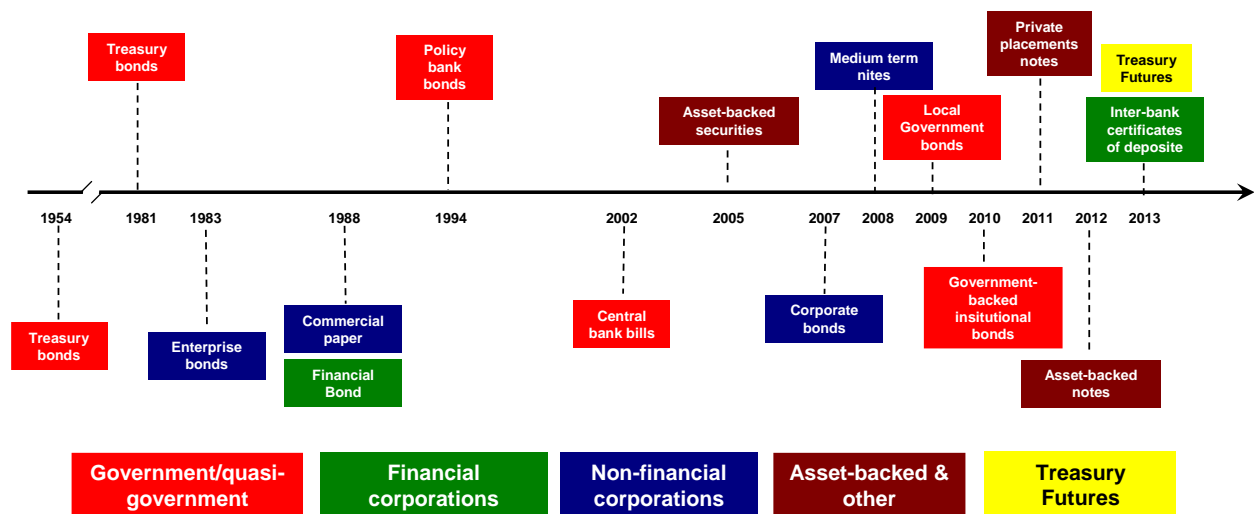
2.1.1 History of China's bond market

Although China issued treasury notes in 1954, it was not until the 1980s that China's domestic bond market began to develop, following a period of economic reform and opening up (Figure 1). In 1981, the People's Bank of China (PBOC) resumed the issuance of the government bonds in the country (Zhang et al., 2019). The PBOC also established a primary dealer system and a secondary market for bonds, allowing investors to trade bonds more easily.

In the 1990s, the Chinese government began to expand the bond market by introducing new types of bonds, including policy bank bonds, enterprise bonds, and financial bonds. These bonds were issued by various government entities, financial corporations and state-owned enterprises to finance infrastructure projects and other economic development initiatives.

However, it was not until the 2000s that the bond market really took off, with the establishment of the China Securities Regulatory Commission (CSRC) and the Shanghai and Shenzhen Stock Exchanges. Local government bonds, corporate bonds and asset-backed notes were introduced to the market during this period. In 2005, the CSRC introduced rules allowing foreign investors to participate in the domestic bond market, and in 2010, the government launched the "Qualified Foreign Institutional Investor" (QFII) program, which allows foreign investors to buy and sell Chinese bonds.

Figure 1 The development of bond market in China



Source: Wang and Guarino (2021)

Since then, the Chinese bond market has continued to grow rapidly, with the government taking steps to further liberalize and internationalize the market. In 2017, China launched the "Bond Connect" program, which allows foreign investors to trade bonds on the Chinese interbank bond market through Hong Kong. In 2019, the government also announced plans to remove restrictions on foreign ownership of Chinese bonds, which is expected to further increase foreign investment in the market (Wang and Guarino, 2021).

Overall, the development of China's bond market has been driven by the country's rapid economic growth and the government's efforts to reform and modernize its financial system. Today, China's bond market is one of the largest and most important in the world, and is

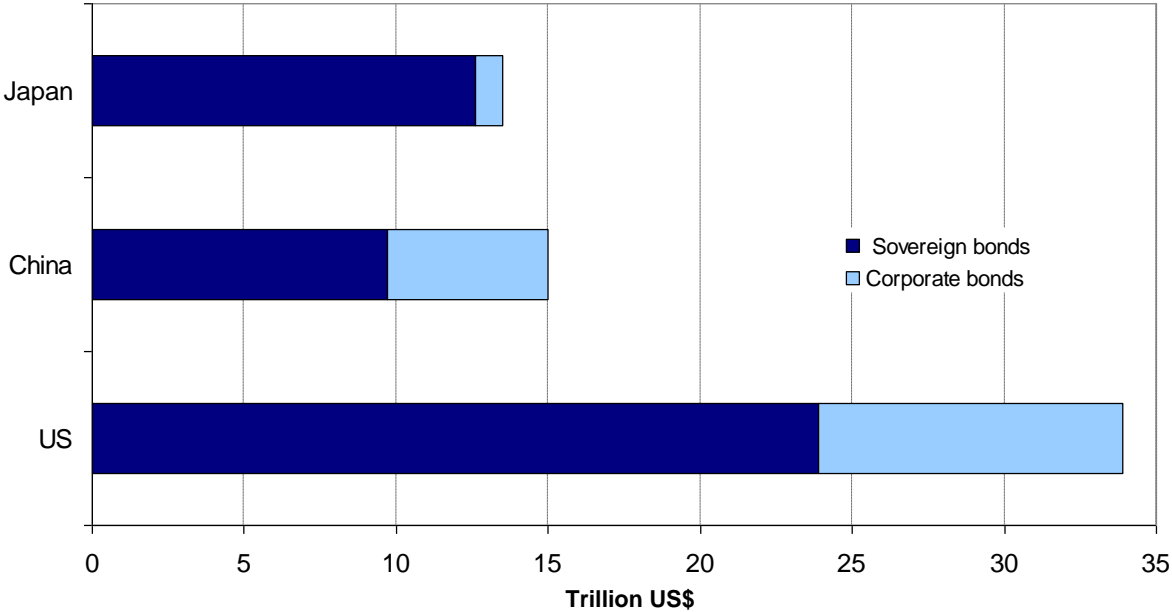
expected to continue to play an increasingly important role in the global financial system (Morningstar, 2021).

2.1.2 The size of China’s bond market

The Chinese bond market has been growing rapidly in recent years, thanks in part to the government's efforts to develop the market and encourage foreign investment. As a result, China's bond market has become a significant player in the global financial system, and its continued development is likely to have far-reaching consequences for investors and policymakers alike.

Currently, China’s bond market is the second largest in the world, just behind its counterpart in the US (Figure 2). As of 12/31/2022, China has a total of 144.5 trillion RMB bonds outstanding, an equivalent of 20.96 trillion US\$ (PBOC, 2023).

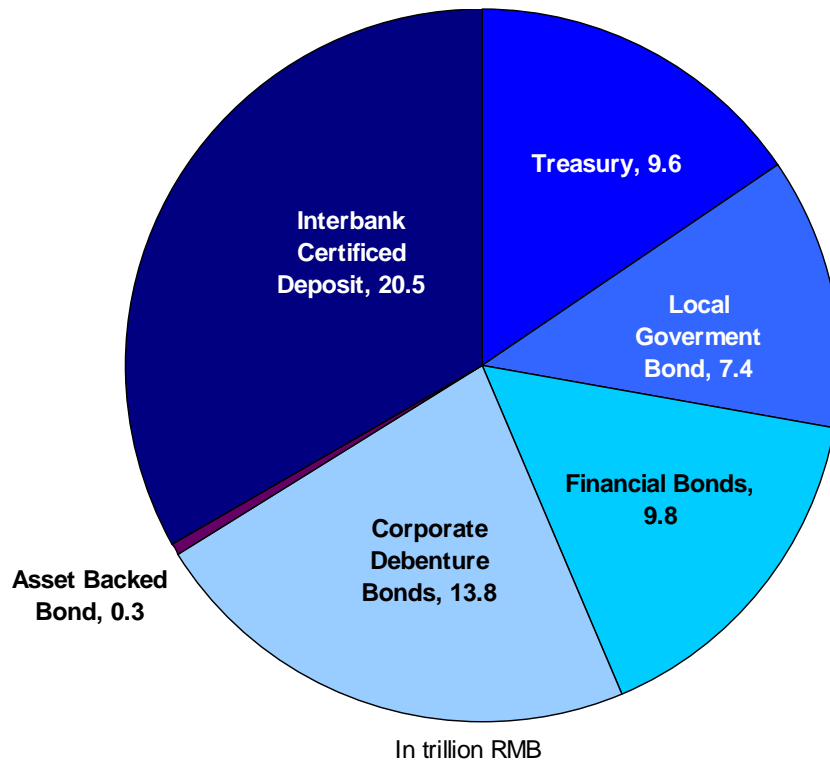
Figure 2 Global bond market sizes



Source: Seafarer(2021), Bloomberg(2022)

The bond issuance in 2022 increased to 61.4 trillion RMB, out of which 20.5 trillion RMB were inter-bank certificates of deposit, followed by 17 trillion government bonds (Figure 3)

Figure 3 2022 bond issuance in China



Source: PBOC (2023)

2.1.3 The evolving bond market in China

The evolving bond market in China reflects the country's ongoing transition from a centrally planned economy to a more market-oriented system. While there are still challenges and risks associated with investing in the Chinese bond market, the market's growth and diversification will certainly continue as the government has sought to develop and modernize the market (Wong, 2022). Overall, the China's bond market is on its way to be a vibrant and important part of the global financial market (Wong, 2022).

The evolution of the bond market in China includes changes in its regulatory schemes. The table (Table 1) below summarizes the three major trading venues of the bonds and related

regulators. The timeline of establish of these venues shows that the Chinese bond trading is transitioning from a bank-centric system to a capital market-centric system.

Table 1 Major bond trading venues and related regulators in China

Bond Market	Year Established	Trading Venue	Types of Issuers	Regulator(s)
Interbank Bonds and Medium Term Notes (“MTNs”)	1993	<i>Interbank Market</i>	Central and Local Government, Policy Banks, Commercial Banks, SOEs, Corporations	National Development and Reform Commission (NDRC), People’s Bank of China (PBOC)
Exchange Corporates	1993/2015	<i>Exchange Traded Market (via the Shanghai or Shenzhen stock exchanges)</i>	Non-financial Corporations (both private and state-connected)	China Securities Regulatory Commission (CSRC)
Private Placements	2008	<i>Interbank Market</i>	Smaller Corporations	PBOC

Sources: China Central Depository & Clearing Co., Ltd (2021)

In addition to the regulatory environment, some other key trends in the evolving bond market in China include (Marshall & Yang, 2022):

1. Diversification of issuers: Historically, the majority of bonds in China were issued by the government or state-owned enterprises. However, in recent years, the market has become more diverse, with more corporate bonds and municipal bonds being issued. This trend is also shown in Figure 1.

2. Opening to foreign investors: The Chinese government has taken steps to open up the bond market to foreign investors, including allowing them to invest directly in the market and issuing bonds denominated in foreign currencies. There are multiple routes for foreign capital to access the Chinese bond market (Jaquet, 2021)

3. Development of credit rating agencies: The Chinese government has encouraged the development of credit rating agencies in order to improve the quality and transparency of bond ratings. However, concerns have been raised about the independence and reliability of these

agencies as majority of these agencies have connections to the government and/or state-owned-enterprises.

4. Increase in bond defaults: As the bond market has become more diverse, the number of bond defaults has also increased. This has raised concerns about the quality of corporate bonds in China and the ability of investors to accurately assess credit risk.

5. Introduction of new financial instruments: The Chinese government has introduced a number of new financial instruments in order to facilitate the development of the bond market, including asset-backed securities, local government bonds and treasury futures.

Another important change in the bond market is the holder composition of Chinese bonds, which has evolved significantly over the past few years. Here are some of the key observations (Jaquet, 2021):

1. Increased foreign ownership: Foreign investors have become increasingly interested in Chinese bonds, with foreign ownership of Chinese bonds rising from less than 2% in 2015 to around 9% in 2021, according to data from Bloomberg (Hancock, 2022). This has been driven by a combination of factors, including the inclusion of Chinese bonds in major global indices, the opening of the Chinese bond market to foreign investors, and the relatively high yields offered by Chinese bonds compared to those in other developed markets.

2. Greater participation by retail investors: The Chinese government has encouraged greater participation by retail investors in the bond market as a way to broaden the investor base and reduce reliance on institutional investors. Retail investors can invest in Chinese bonds through a number of channels, including banks, securities firms, and online platforms.

3. Growing role of institutional investors: While retail investors have become more important in the Chinese bond market, institutional investors, including pension funds and insurance companies, have also played a significant role. According to data from the China Central Depository & Clearing Co., institutional investors accounted for around 29% of total bond holdings in China as of 2021.

4. Continued dominance of banks: Despite the growing participation of other types of investors, banks remain the dominant holders of Chinese bonds, accounting for around 54% of total bond holdings as of 2021. This reflects the fact that many Chinese banks hold large portfolios of bonds as part of their asset-liability management strategies.

Overall, the Chinese bond market's growth, evolution, and diversification suggest that it will continue to play an important role in the global financial system in the years to come.

2.2. Fintech in China

Information technology changed all industries dramatically, and there is no exception for the financial markets. Fintech, or financial technology, is making significant inroads into the bond market as well. From bond trading platforms to AI-based bond investments, fintech is revolutionizing the bond market by making it more efficient, transparent, and accessible to investors (Marszk & Lechman, 2021).

Bond trading platforms are digital platforms that allow traders to buy and sell bonds electronically. These platforms offer several advantages over traditional bond trading methods, including real-time pricing, improved liquidity, and reduced transaction costs. They also offer more transparency, as traders can view the prices of bonds and other related data on a real-time basis.

Automated bond investing tools use artificial intelligence and machine learning algorithms to analyze vast amounts of data and identify the best bond investments based on various factors such as risk, return, and other market conditions. These tools can help investors make better-informed investment decisions and achieve better returns on their investments.

Fintech landscape in Chinese bond market is similar to that in the international market. Large institutions, such as PingAn Insurance, have internal developed proprietary technology platforms for bond trading operations and management; mid-size and small institutions rely on market technology leaders for support.

The Figure below summarizes the leading fintech providers in China.

Figure 4 Fintech companies participate in the Chinese bond market

Data	Analytics	Book keeping
		
		
		

Source: author

2.3. New entrants to fintech in China's bond market

The financial banking sector is an information-intensive sector where data is constantly being generated, analyzed, and used to make decisions. Given the importance of timely and accurate information in this industry, the role of a fintech component is particularly critical (Pollari, I. 2016). This includes systems that manage customer data, transaction records, financial statements, and other important information in real time, while ensuring the accuracy and security of that data. These fintech systems must also be able to analyze the data effectively to derive insights that can inform strategic decision-making (Georgescu & Jeflea 2015). Overall, the role of a fintech component in the financial banking sector is complex and multifaceted. It requires a deep understanding of the industry's unique demands and a skillful application of technology to meet those demands efficiently and effectively (Haddad & Hornuf, 2019).

Entering the fintech arena, in general, can present both challenges and prospects for new players. On one hand, the market is highly competitive, and highly regulated, with strict compliance requirements that new players must adhere to in order to operate legally (Primeaux, 2017). On the other hand, the fintech market is constantly evolving and expanding, with new technologies and business models emerging that can create opportunities for new players to differentiate themselves and offer unique value propositions to customers (Fong et al., 2021).

When it comes to entering the Chinese bond market, there are additional challenges and prospects to consider. China's bond market presents a huge opportunity for fintech companies that can offer innovative solutions. However, entering the market can be challenging due to regulatory requirements and the complexity of the market itself (Chorzempa & Huang, 2022). Despite these challenges, there are also prospects for new players to succeed in the Chinese bond market. The Chinese government has been actively promoting financial innovation and liberalization, which has created a favorable environment for fintech companies to enter the market (Zhou et al., 2022). Additionally, there is a growing demand for more efficient and convenient ways to access and trade bonds in China, which presents an opportunity for fintech companies to fill this gap and gain a foothold in the market.

Some specific challenges and prospects related to this project include: 1) regulation; 2) Complexity of financial system 3) technology/human talent; 4) brand recognition/loyalty; 5) economies of scope; 6) data access and security; 7) customer acquisition costs; 8) Incumbent advantages.

1. Regulations. There are some important domestic and international regulations related to fintech industry in China. Here are some key regulations:
 - a. PRC “Law on the Promotion of Science and Technology Progress” amended version 2021 mandates priority procurement of domestic information technology innovation products

“Article 91: For domestically-produced science and technology innovative products and services provided by natural persons, legal persons and other organizations that can meet the functional and quality indicators required for government procurement, the government should purchase them. For those that are first introduced to the market, the government should give priority to procurement, and commercial performance should not be used as a reason to restrict procurement”.
 - b. China Banking and Insurance Regulatory Commission “Guiding Opinions on the Digital Transformation of the Banking and Insurance Industry.” It requires improving the business application capabilities of big data and models, enhancing support for risk control and decision-making, and embedding digital risk control tools such as big data and artificial intelligence into business processes to enhance business and risk control capabilities (You, 2022).
 - c. People’s Bank Of China “Development Plan for Financial Technology 2022-2025”. This plan provides guidelines for the development of fintech in a new era, outlining the overall plan, development goals, key tasks, and implementation measures for the digital transformation of the financial sector. The plan emphasizes the importance of integrating data into all aspects of financial service provision, pursuing development through digital technology, utilizing intelligent technologies, promoting a green and low-carbon economy, and fostering fairness and inclusivity (Partridge, 2022).
 - d. The Bank for International Settlements “Basel III”. It requires banks and insurance companies to have an internal model-based risk management system (Lei & Yuan, 2021)
2. Complexity of financial system. The complexity of the financial system can act as a significant entry barrier for new entrants. This complexity can arise due to various reasons, such as regulations, infrastructure, and industry-specific knowledge (Arinaminpathy et al., 2012). Financial infrastructure, such as payment systems, clearinghouses, and custody services, can also be complex and expensive to establish

or access. the financial industry often requires specialized knowledge and expertise that can be difficult for new entrants to acquire or replicate. Established players in the industry have often developed deep domain expertise over years of experience, and this can be a significant barrier for new entrants to overcome.

3. Technology/human talent. Technology and human talent can both serve as entry barriers in various industries, either independently or together (Hitt et al., 2000; Barney, J. B., 1991). Fintech, is a rapidly growing industry that combines finance and technology to create innovative financial services and products. It requires specialized knowledge and expertise in both areas, and as such, firms that have invested heavily in developing fintech capabilities may be able to use their technological and human resources to create entry barriers.
4. Brand recognition/loyalty. Brand recognition and loyalty can serve as entry barriers in many industries, particularly those where the market is saturated with well-established firms (Keller, 1993). This preference for established brands may be due to a number of factors, including familiarity with the brand, a perception of higher quality, and a sense of trust (Oliver, 1997). *Satisfaction: A behavioral perspective on the consumer*. McGraw-Hill.). In addition to brand recognition, brand loyalty can also act as an entry barrier. Brand loyalty is often driven by a combination of emotional and rational factors, such as past positive experiences, brand identity, and social influence. High switching costs, such as the time and effort required to learn about a new product or service, can also discourage consumers from switching brands (Lee et al., 2001).
5. Economies of scope. Economies of scope refer to the cost advantages that a firm can achieve when it produces multiple products or services that share common inputs, processes, or distribution channels (Barney, 2015). This is particular true in the fintech industry as the few international leaders spread their products into almost all areas of financial system.
6. Data access and security. Data access and security can be a significant entry barrier for new firms, as it requires significant investment in technology and expertise to ensure compliance with regulations and protection of sensitive data (Maurer et al., 2013). Established firms with a reputation for strong data security measures may enjoy a competitive advantage over new entrants.
7. Customer acquisition costs. Customer acquisition costs refer to the expenses incurred by a company to attract and convert new customers. These costs can include advertising, promotions, sales commissions, and other marketing expenses. In some

industries, customer acquisition costs can be a significant entry barrier for new firms trying to enter the market (Srivastava & Kaul, 2016). Customer acquisition costs can be particularly challenging for new firms that lack the economies of scale and market power enjoyed by established firms.

8. Incumbent advantages. Incumbent advantages refer to the advantages that established companies have over new entrants in a market. These advantages can take many forms, including economies of scale, brand recognition, access to resources, regulatory barriers, and customer loyalty (Hitt et al., 2017).

Entering the fintech industry as a new entrant can be challenging, however, there are several strategies that new entrants can adopt to successfully compete in this industry (Sinha & Sharma, 2020):

1. Focus on a niche market: Instead of trying to compete directly with established players, new entrants can focus on a specific niche market where they can offer specialized services that are not provided by incumbents.
2. Embrace technology: Fintech is a technology-driven industry, and new entrants can leverage the latest technologies to differentiate themselves from established players. For example, new entrants can use artificial intelligence, blockchain, or other cutting-edge technologies to offer more efficient and innovative services.
3. Focus on customer experience: Established firms may have strong brand recognition and customer loyalty, but they may not always prioritize the customer experience. New entrants can differentiate themselves by offering a superior customer experience, which can help build customer loyalty and drive growth.
4. Invest in talent: New entrants can also invest in attracting and retaining top talent in the industry. By hiring experienced professionals with a deep understanding of the industry, new entrants can gain a competitive advantage and build a strong foundation for growth.

Overall, successful new entrants to the fintech industry will need to be innovative, customer-focused, and willing to embrace technology. By adopting these strategies, new entrants can effectively compete with established players and build a successful business in this rapidly-evolving industry.

3. Methodology

The project aims to enhance Weijing Technology's competitiveness, pinpoint challenges related to product positioning and promotion in the rapid expanding Chinese bond market.

Due to the limited numbers of active users and potential customers, this project deploys qualitative research through interviews. The questions used in interviews are designed to gain a better understanding of the company's competitive position in the market, identify areas for improvement, and develop a competitive strategy that can assist in Weijing's future success.

The specific objectives of this project are:

1. Who the direct competitors are and how well the company's customers are familiar with them? This information is crucial for developing a competitive strategy that targets competitors' weaknesses while building on your strengths.
2. Compare the company's products and services to those of competitors. Answers to these questions can yield valuable insights into how the company is performing in the market, and thus to identify areas of weakness and strength, providing a clear picture of company's competitive position.
3. Ask customers to identify the specific features or benefits that set the company's products and services apart from competitors'. This information can help developing the company's unique selling proposition and create a competitive advantage.
4. Ask customers for areas for improvement. This can be a valuable source of ideas for product development and improving customer satisfaction, thus enable the company to innovate and stay ahead of the competition.

The interview questions and related objectives are presented in the following table.

Table 2: Question of Interview

Question	Specific Objective
1. How long have you been using our DealRisk platform? And how easy is it to use our platform?	3
2. How well does our analytics platform integrate with your other financial tools?	3
3. What features of our DealRisk platform do you find most useful?	3
4. What benefits have you seen from using our DealRisk platform?	3
5. How does our DealRisk platform compare to other software you have used in the past?	2
6. Have you tried any of our competitors' solutions? If so, which ones?	1
7. What features of our DealRisk platform do you think are superior to our competitors' solutions?	2
8. In what ways do you think our competitors' product is better than ours?	1
9. How do our prices compare to our competitors' pricing?	2
10. How does our brand reputation compare to our competitors'?	1
11. Do you think our DealRisk platform provides better customer support than our competitors?	3
12. Have you recommended our products or services to others over our competitors'? If so, why? If not, would you intend to do it in the future?	3
13. Are there any features that our competitors offer that you wish our DealRisk platform had?	4
14. What improvements would you suggest for our product?	4

15. Are there any trends in the fintech market that you think our competitors are taking advantage of that we are not?	4
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Weijing Technology focuses on serving to small to medium-sized institutional investors in the Chinese bond market. However, due to competition-related constraints, the author was only able to interview three current customers and two potential customers. The interviewees were individuals occupying top to middle-level management positions and were responsible for IT purchasing decisions within their respective organizations. The interviews were conducted between November 20 and December 17, 2022, using a non-probability convenience sampling method, where the author personally selected and invited the interviewees. Given the limited sample size, the analysis was qualitative in nature.

The data collected in the interviews will be analyzed to identify the most significant issues that need to be addressed. The analysis should consider the potential impact of the findings on the organization's performance, including the financial implications, operational impact, and strategic implications.

After that, an action plan will be designed to address the issues identified that can be improved. The plan should prioritize the most critical issues. The plan should be actionable, measurable, and aligned with the company's overall goals and objectives.

4. The company Weijing Technology

4.1 Overview of Weijing Technology

Shanghai Weijing Information Technology Co., Ltd. ("Weijing") was established in 2019 by Mr. Yang Jianbo, a rare talent in the field of entrepreneurship with a PhD in Econometrics and Finance from the University of Manchester. Mr. Yang's extensive and diverse experience in the field of quantitative finance includes cross-asset and large-scale platform construction.

The majority of Weijing Technology's core research and development team members have gained experience in quantitative trading or platform development at internationally renowned investment institutions. Additionally, key members of the team have work experience in core valuation and risk management at major banks in the United States. Over 40% of the R&D team holds PhDs from top domestic and foreign universities.

Weijing Technology has developed a proprietary financial analysis and management system, called "DealRisk", that offers a comprehensive suite of quantitative tools and services to support risk management, investment decision-making, and asset-liability management. The system's underlying technologies, including database construction, strategy investment analysis engine, business terminal modules, and algorithmic trading systems, were all pioneered by the company's talented team. Weijing's products incorporate models that are characterized by localization, innovation, and transparency, and unlike other systems, have undergone extensive backtesting and localization adjustments by its skilled quantitative engineers. This has made DealRisk the most advanced quantitative system for the Chinese domestic market.

Weijing Technology's products not only provide domestic alternatives but also address the long-standing issue of domestic financial institutions being constrained by foreign-funded technology companies in core measurement and risk control fields. Moreover, Weijing's products are developed with a focus on local market characteristics and conditions, reflecting the company's strong localization capabilities. At present, Weijing's research and development level and product functionality are at the forefront of the international market, even surpassing foreign competitors.

Weijing operates in the most challenging and complex analytical field of the financial technology market. The company is dedicated to offering cutting-edge analytical solutions to domestic financial institutions in the core areas of measurement and risk control. Weijing's

products possess distinctive Chinese modeling characteristics, localization, and high levels of security that cater to the specific needs of Chinese markets and customers.

In a market dominated by a few foreign-funded technology companies such as MSCI, QRM, Murex, Summit, Weijing's products have strategic significance for the core competitiveness of domestic Chinese institutions and the national financial security of the country.

4.2 WeiJing's product offering

4.2.1 Market Risk Management System

The functions of the Market Risk Management System of the "DealRisk" are:

- Multilevel market risk indicators
- Sensitivity analysis
- Limit and warning value management
- Custom scenario stress testing
- Interest rate hedging
- Profit and loss attribution
- VaR, ES calculation
- Return testing
- Cash flow analysis
- Analysis reports

The key features of the Market Risk Management System of the "DealRisk" are:

- Satisfy regulatory requirements: meet FRTB standards
- Comprehensive coverage of financial products: interest rate, credit, foreign exchange, and gold.
- Sound product design: developed based on local characteristics and fully considering the needs of domestic enterprises in China
- The interface design is user-friendly with strong interactivity, making it easy to import data and support customization of parameters and adding products.
- The system has powerful functionalities, while the price is competitive

4.2.2 Asset Liability Management System

The functions of the Asset Liability Management System of the "DealRisk" are:

- Bank book risk indicators
- Liquidity analysis
- VaR, ES calculation
- Scenario analysis and stress testing

- Interest rate hedging
- FTP curve management
- FTP pricing
- Asset liability management and optimization
- Analysis reports

The key features of the Asset Liability Management System of the “DealRisk” are:

- Satisfy regulatory mandatory requirements: able to meet IRRBB standards
- Comprehensive bank book risk management, including interest rate risk, credit spread risk, liquidity risk, volatility risk, foreign exchange and option risk
- Flexible, easy operation: customizable parameter settings, user-friendly interactive interface, automatic calculation, and automatic saving of historical settings records
- Standardized product framework, easy deployment, and powerful functionality available at a competitive price

4.2.3 Quantitative trading investment decision support system

The functions of the Quantitative trading investment decision support system of the “DealRisk” are:

- Fair interest rate curve
- Interest rate curve prediction
- Shibor, IRS curve
- Credit spread curve
- Bond pricing and market making
- Certificate of deposit market analysis
- Market making strategy assistance
- Portfolio management optimization
- Credit bond default probability prediction
- Credit analysis report

The features of the Quantitative trading investment decision support system of the “DealRisk” are:

- Broad market, applicable for customers in banking, securities, insurance, etc.
- Wide range of applications, can be used by front office as well as middle and small-middle office for risk management
- Provide standardized analytical tools for FICC trading
- The model can not only be used for valuation but also for market making and trading

4.3 WeiJing’s VRIO Analysis

1. Value: Weijing's proprietary financial analysis and management system, DealRisk, provides significant value to its customers through its comprehensive suite of quantitative tools and services. DealRisk supports risk management, investment decision-making, and asset-liability management, which are critical functions for financial institutions and investors. DealRisk's capabilities and services are highly useful to customers and help them manage risk and make informed investment decisions, thereby increasing their returns.

2. Rarity: Weijing's expertise in fintech and its team of highly qualified and experienced professionals provide a rare and unique advantage over its competitors. Weijing's team is composed of individuals with diverse skill sets and experiences, including expertise in finance, technology, and business development. This unique combination of skills and experience is difficult for competitors to replicate and provides Weijing with a significant competitive advantage.

3. Imitability: Weijing's intellectual property and localization capabilities are difficult to imitate, providing a sustainable competitive advantage. Weijing's proprietary financial analysis and management system, DealRisk, is protected by intellectual property rights, which prevents competitors from replicating its features and services. Additionally, Weijing's localization capabilities, which include knowledge of local regulations and customs, are difficult for competitors to match, providing Weijing with a sustainable competitive advantage in local markets.

4. Organization: Weijing's organizational capabilities, including its focus on R&D, innovation, and customer satisfaction, are strong and contribute to its success in the market. Weijing emphasizes R&D and innovation to stay ahead of the competition, and it has a strong track record of developing new products and services that meet the evolving needs of its customers. Additionally, Weijing places a high priority on customer satisfaction, which has helped it build strong relationships with its clients and maintain a loyal customer base.

Overall, Weijing's VRIO analysis suggests that the company has a sustainable competitive advantage in its industry.

5. External environmental analysis

5.1 PESTEL Analysis

A PESTEL analysis examines the macro-environmental factors that can impact a company's operations and performance. For Weijing Technology, understanding these factors is crucial for navigating the ever-changing fintech landscape in China. This analysis will provide a detailed assessment of the political, economic, social, technological, environmental, and legal factors that can influence Weijing's business.

1. Political Factors:

—Government Regulations: Changes in government regulations and policies can significantly impact Weijing's operations. The government's attitude towards the fintech industry and its support for domestic players can create opportunities or constraints for Weijing. Staying updated with regulatory changes and proactively complying with them will be critical for maintaining a favorable business environment.

—Geopolitical Factors: Geopolitical tensions or trade disputes between China and other nations can have indirect effects on Weijing's business. Restrictions on cross-border data flows or trade barriers may impact Weijing's ability to collaborate with international partners or expand its reach beyond domestic markets.

2. Economic Factors:

—Economic Conditions: Weijing's growth and success are closely tied to the economic conditions in China. Fluctuations in GDP growth, interest rates, inflation, and consumer spending can impact the demand for Weijing's products and services. An economic downturn may lead to reduced investment in fintech solutions, affecting Weijing's revenue.

—Customer Acquisition Costs: Fintech companies face high costs in acquiring new customers. Economic factors, such as changes in marketing costs or consumer purchasing power, can impact Weijing's ability to attract new clients. Adapting marketing strategies and pricing models to align with economic conditions will be crucial for managing customer acquisition costs effectively.

3. Social Factors:

—Fintech Adoption: The increasing adoption of fintech solutions in China presents a significant opportunity for Weijing. As consumers become more tech-savvy and seek personalized financial services, Weijing's focus on tailored solutions aligns with evolving customer preferences. Capitalizing on this trend can help Weijing expand its customer base and gain a competitive advantage.

—Demographic Changes: Changes in demographics, such as an aging population or shifting income levels, can influence the demand for Weijing's products. Understanding the preferences and needs of different demographic segments will enable Weijing to customize its solutions and cater to specific customer groups effectively.

4. Technological Factors:

—Technological Advancements: The fintech industry is characterized by rapid technological advancements. Staying at the forefront of emerging technologies such as blockchain, artificial intelligence, and big data analytics will be crucial for Weijing's competitiveness. Leveraging these technologies within its financial analysis and management system will enable Weijing to offer innovative and cutting-edge solutions to its clients.

—Cybersecurity and Data Privacy: With the increasing digitization of financial services, cybersecurity and data privacy are paramount concerns. Weijing must ensure robust security measures to protect sensitive financial data and comply with regulatory requirements. Investing in cybersecurity infrastructure and regularly updating security protocols will be essential to maintain client trust and meet regulatory obligations.

5. Environmental Factors:

Environmental factors have limited direct impact on Weijing's business. However, the company should be aware of emerging sustainability trends and the potential reputational risks associated with being non-compliant with environmental regulations. Adopting environmentally responsible practices within the organization can enhance its brand image and stakeholder perception.

6. Legal Factors:

—Compliance and Regulatory Changes: Compliance with financial regulations and laws is critical for Weijing's operations. Adhering to anti-money laundering (AML), know your customer (KYC), and data protection regulations is essential to maintain trust and avoid legal repercussions. Weijing should closely monitor regulatory developments and adapt its operations to ensure compliance with changing requirements.

—Intellectual Property Protection: Protecting intellectual property rights is vital for Weijing's proprietary financial analysis and management system. Obtaining patents, trademarks, and copyrights will safeguard the company's innovative technologies and prevent unauthorized use or duplication by competitors.

Analyzing the PESTEL factors allows Weijing to understand the external environment in which it operates and identify potential risks and opportunities. By considering political, economic, social, technological, environmental, and legal factors, Weijing can adapt its strategies, proactively address challenges, and capitalize on favorable conditions. Continual

monitoring of these factors will enable Weijing to stay agile, innovative, and competitive in the dynamic fintech market in China.

5.2 Analysis of the 5 Forces of Porter

The 5 Forces of Porter analysis for Weijing in the Chinese fintech industry reveals both challenges and opportunities for the company.

Regarding the threat of new entrants, the fintech industry in China is rapidly growing, and there is always a potential for new players to enter the market. However, Weijing's proprietary technology and expertise provide a significant barrier to entry for these new entrants. This advantage allows Weijing to maintain its market position and expand its offerings.

The bargaining power of suppliers is relatively low for Weijing, as its suppliers are likely to be technology and data providers. This aspect provides Weijing with some leverage in negotiations with these suppliers.

In contrast, the bargaining power of buyers is relatively high, as there are multiple fintech providers operating in the market. This factor means that Weijing must compete aggressively on pricing, customer service, and product innovation to maintain its customer base.

The threat of substitutes is another challenge for Weijing, with traditional financial institutions and foreign fintech providers serving as potential substitutes for its products. However, Weijing's focus on localization and its unique Chinese modeling characteristics provide a competitive advantage over these substitutes.

Finally, the fintech industry in China is highly competitive, with both domestic and international players vying for market share. Weijing's strengths in local market expertise, competitive pricing, and its proprietary technology provide a competitive edge over its rivals. However, Weijing must continue to invest in product innovation and customer service to maintain its competitive position in the market.

6. Data analysis

Weijing Technology targets the small to mid-size institutional investors in the China bond market. Due to competition-related issues, only three existing customers and two prospective customers were interviewed. These interviewees were top to middle-level managers who were involved in IT purchasing decisions at their respective institutions. The interviews were conducted between November 20 and December 17, 2022, using a non-probability convenience sampling method, where the author directly selected and invited the interviewees. Qualitative analysis was performed because the research method employed interviews.

6.1 competitor identification

Weijing Technology is a recent participant in the fintech industry catering to the Chinese bond market. As a typical newcomer in a new domain, it encounters both challenges and prospects. While not easy, Weijing Technology has the prospect to use its fresh perspective and innovative approach to stand out in the fintech industry and achieve long-term success.

All of five interviewees have either used or currently using risk management and quantitative analytic products provided by established international vendors, which have been operating in the market for decades and have established their brand name and reputation. These companies include:

- MSCI provides of investment decision support tools, including indices, portfolio risk and performance analytics. The company's indices, such as the MSCI World Index, are widely used as benchmarks for global equity markets, and its risk and performance analytics help clients better understand and manage investment risk.
- SS&C Technologies is a global provider of software and services for the financial services industry. It offers technology solutions for portfolio management and accounting, trading and order management, risk and compliance, performance analytics, and data management.
- QRM (Quantitative Risk Management) is a provider of enterprise risk management solutions for financial institutions. QRM offers a suite of software products that help banks and other financial institutions manage their market, credit, and liquidity risks.
- Numerics is a business analytics and data visualization platform that helps businesses track and visualize their key performance indicators (KPIs). The

platform was developed by Cynapse, a software development company. Numerics integrates with a range of data sources, allowing businesses to create customized dashboards and reports that reflect their unique data requirements.

- Finastra was formed in 2017 through the merger of two established fintech firms: Misys and D+H. Finastra provides software solutions for various aspects of banking operations, including core banking systems, treasury and capital markets, lending and financing, payments and transaction processing, and digital banking.

6.2 Incumbent products

All interviewees are familiar with competitive products from established international fintech providers. The notable observations from the interviews are:

1. Most of the incumbent companies often offer products designed to complement each other, providing a complete set of solutions to meet the needs of financial institutions across a wide range of trading categories.
2. These products provide not only front-office functionality, which is essential for trading and risk management activities, but also strong back-office support capabilities, which are critical for managing the operational aspects of trading, including trade confirmation, settlement, and accounting.
3. Multi-function software platforms enable financial institutions to streamline their operations, reduce costs, and improve efficiency.
4. Moreover, these products normally cover all trading categories, including securities, fixed income, foreign exchange, commodities, and derivatives. This means that financial institutions can use them to manage their entire trading operations, from front-office to back-office, across multiple asset classes.

Examples of key product offering from competitors:

MSCI

1. RiskMetrics: The suite includes products for market risk, credit risk, liquidity risk, and operational risk management, as well as tools for stress testing, scenario analysis, and risk reporting.
2. BarraOne: The platform includes modules for portfolio optimization, risk modelling, stress testing, and performance attribution.
3. WealthBench: The platform includes modules for asset allocation, risk modelling, and investment strategy optimization, as well as tools for performance reporting and client communication.

4. CreditManager: The platform includes modules for credit analysis, risk monitoring, and portfolio management, as well as features for stress testing and scenario analysis.

Finastra

1. Kondor: a range of tools to manage trading operations, including real-time position monitoring, trade capture, pricing, and risk management. The platform supports a wide range of asset classes, including foreign exchange, fixed income, equities, and derivatives.
2. Opics: a suite of tools for managing treasury operations, including cash management, liquidity management, foreign exchange, and interest rate risk management.

6.3 Weijing product advantages

DealRisk is a comprehensive financial analysis and management system developed by Weijing Technology specifically for domestic Chinese institutions. The key features noted by interviewees include:

1. Domestic technology supplier: Under the influence of regulatory and political factors, the trend of foreign capital withdrawal and domestic substitution is emerging, and Weijing's products have greater market stability.
2. High security. With servers located in China and proprietary data safety design, Weijing's platform enables secure and transparent data sharing and transactions.
3. A one-stop solution for risk management, investment assistance, asset-liability management, and more.
4. Designed for domestic market. The model has undergone extensive back testing and localized adjustments by quantitative engineers, making it the most advanced quantitative system for the domestic Chinese market.
5. A user-friendly interface, making it easy for financial professionals to navigate and utilize its features. It offers a high level of flexibility in usage, allowing users to easily configure parameters and adjust settings to meet their specific needs, all while providing a straightforward and intuitive user experience.
6. Excellent after-sales service: Providing continuous maintenance and support with a long service period.
7. Price competitive. The DealRisk platform is about 20-30% cheaper than its international counterparts.

6.4 Future areas for improvement

The areas for improvement identified by interviewees include product updates, security and coverage of more financial products.

1. Product updates. The suggestion for more frequent product updates is a crucial one, especially in today's fast-paced digital landscape and expanding Chinese credit market. With rapid advancements in technology, changing user expectations and regulatory environment, it's important for Weijing to continuously improve its products to remain relevant and competitive. Regular updates can address user feedback, fix bugs, and introduce new features that can enhance the user experience.
2. Security. Interviewees were satisfied with the security of the DealRisk platform. However, data breaches and cyber attacks have become increasingly common, institutional clients expect increased level of security. By implementing new technologies, such as Blockchain, Weijing would be able to further enhance security, transparency, and efficiency. This means that financial institutions can reduce transaction costs, speed up settlement times, and enhance security and privacy in their operations. Additionally, blockchain technology is also being used to enable smart contracts, which are self-executing contracts that can automate various financial transactions.
3. Expanding the coverage of financial products. Institutional clients constantly seek opportunities in different financial markets; therefore it is naturally for them to demand a software platform to cover all the financial products they offer. Weijing is a new player in the fintech field, but it needs to follow the client needs to stay competitive.

7. SWOT Analysis

The interview results indicate that Weijing, a company operating in the fintech sector in China, is gaining a foothold in the market. The products offered by Weijing are proving to be a robust alternative to foreign products in the same industry. This suggests that Weijing has successfully carved out a niche for itself in the highly competitive fintech market in China.

The success of Weijing can be attributed to several factors, such as the quality and functionality of its products, the reliability of its services, and the company's focus on meeting the unique needs of the Chinese market. Weijing's products appear to have resonated with Chinese consumers, who are increasingly looking for local alternatives to foreign fintech products.

A SWOT analysis is performed to assist the formulation of an action plan for Weijing.

Strengths:

1. The company's high quality development team with notable intellectual property in the fintech area is a significant advantage. The expertise and experience of the team enable the company to develop innovative and effective fintech solutions. Additionally, the intellectual property owned by the company provides a competitive edge and can be used to protect its products and services from imitation.
2. The company's products are developed based on local market data, the unique needs and preferences of the local market, giving Weijing a competitive edge over foreign competitors. The company can tailor its products to meet the demands of its customers more effectively, producing a more personalized and engaging experience for users.
3. The competitive pricing of the company's products is another positive. By offering products that are priced lower than those of its competitors, the company can attract price-sensitive customers, especially the small to mid-size institutions in China.

Weaknesses:

1. The company is relatively young and has no track record. This may make it difficult for the company to attract customers who may be hesitant to invest in an unproven company. To overcome this weakness, the company will need to build credibility and establish a track record of success.
2. Limited resources are another weakness for the company. The company may struggle to compete with larger and more established players in the market due to its limited financial resources.

Opportunities:

1. The government's recent calling for domestic alternatives to foreign fintech products is an opportunity for the company. The company can leverage its local market expertise and offer solutions that are specifically designed for the local market. This can help the company gain a competitive advantage over foreign competitors and increase its market share.
2. Small to mid-size financial institutions that lack the internal capacity to model risk are another opportunity for the company. The company can target this segment to establish itself as a trusted partner and increase its customer base.

Threats:

1. The incumbent advantage held by established players in the market is a threat to the company. Established players have brand recognition and an established customer base, which makes it difficult for new players to gain a foothold in the market. The company needs to find ways to differentiate itself and compete effectively against these incumbents.
2. The high cost of customer acquisition in the fintech industry is another threat to the company. Acquiring new customers is expensive, and the company may struggle to compete with larger players who have more resources to invest in marketing and customer acquisition.
3. International competitors with economies of scope are a final threat to the company. These competitors can leverage their expertise to develop products and services across multiple financial asset classes. In another words, these large international players often provides one-stop solutions, thus making it harder for new players to get into the market.

8. Proposals to improve the competitiveness of Weijing Technology

8.1 Issues

Weijing Technology faces several challenges in the fintech market, including limited market awareness and brand recognition, competition from established foreign-funded technology companies, talent acquisition and retention, regulatory compliance, economic conditions, and customer acquisition costs. Addressing these issues is crucial for Weijing to establish a strong market presence, attract customers, retain talent, comply with regulations, navigate economic fluctuations, and manage costs effectively. By recognizing and strategizing to overcome these challenges, Weijing can position itself for long-term success in the dynamic fintech industry.

1. **Limited Market Awareness and Brand Recognition:**
Weijing Technology, despite its advanced financial analysis and management system, DealRisk, faces the challenge of limited market awareness and brand recognition. The company is relatively young and lacks the visibility enjoyed by well-established foreign-funded technology companies. This lack of market awareness can make it difficult for Weijing to attract new customers and compete effectively in the fintech industry.
2. **Competition from Established Foreign-Funded Technology Companies:**
Weijing Technology operates in a highly competitive market dominated by established foreign-funded technology companies such as MSCI, QRM, Murex, and Summit. These companies have significant brand recognition, established customer bases, and substantial resources, which can make it challenging for Weijing to gain market share and compete effectively.
3. **Talent Acquisition and Retention:**
As a fintech company operating in a specialized field, Weijing faces the challenge of attracting and retaining top talent. The industry is highly competitive, and there is a high demand for skilled professionals with expertise in quantitative finance, risk management, and algorithmic trading. Recruiting and retaining talented employees is crucial for Weijing to maintain its competitive edge and continue developing innovative solutions.
4. **Regulatory Compliance:**
Weijing Technology operates in a highly regulated industry, and compliance with financial regulations and laws is critical. The company must stay updated with evolving regulatory requirements, such as anti-money laundering (AML), know

your customer (KYC), and data protection regulations. Failure to comply with these regulations can result in legal consequences, reputational damage, and loss of customer trust.

5. Economic Conditions:

The economic conditions in China can impact Weijing's business. Fluctuations in GDP growth, interest rates, and consumer spending can influence the demand for Weijing's products and services. Economic downturns may lead to reduced investment in fintech solutions, affecting Weijing's revenue and growth prospects.

6. Customer Acquisition Costs:

Acquiring new customers in the fintech industry can be costly. Weijing faces the challenge of high customer acquisition costs due to intense competition and the need to establish credibility and trust in the market. The company needs to effectively manage these costs to ensure sustainable growth and profitability.

8.2 Proposals

To compete more effectively and gain more market share, Weijing should improve its marketing efforts, enhance the customer experience, stay at the forefront of technological advancements, and attract top talent to its development team. Specific actions include:

1. Focus on Small to Mid-size Institutions as a niche market.
 - Develop targeted marketing campaigns to reach out to these institutions.
 - Offer free trials or demos of the software to potential customers to showcase its effectiveness and gain their trust.
 - Establish partnerships with other service providers that work with small to mid-size financial institutions to increase the reach of the marketing efforts.
2. Focus on Customer Experience, Including Better Support and More Frequent Product Updates:
 - Conduct interviews and gather feedback from existing customers to identify areas for improvement in customer support.
 - Implement strategies to provide better customer support, such as offering online chat support, extending support hours, or providing personalized support.
 - Develop a schedule for more frequent product updates to ensure the software remains relevant and competitive.
 - Keep customers informed about product updates and provide training or resources to help them utilize new features.

- Consider implementing a customer loyalty program to reward long-term customers and incentivize them to continue using the software.
3. Embrace New Technology Such as Blockchain and AI:
 - Conduct research to identify how blockchain and AI can be incorporated into the company's existing software or used to develop new products.
 - Partner with technology companies or startups to collaborate on the development of blockchain or AI-based solutions.
 - Develop a strategy for marketing these new products and solutions to potential customers.
 4. Invest More in the Internal Development Team to Get More Talents:
 - Conduct a review of the current development team to identify any gaps in expertise or staffing needs.
 - Recruit new talent to fill any gaps and expand the team's capabilities.
 - Offer ongoing training and development opportunities to ensure the team is up-to-date on the latest industry trends and technologies.
 - Offer competitive compensation packages and benefits to attract and retain top talent.

Accordingly, the table below summarizes the proposals for enhancing Weijing Technology's competitiveness in the Chinese bond market. For each proposal, the table presents the pros and cons, complementary actions, key performance indicators (KPIs), objectives, level of investment, and an implementation schedule. The proposals are categorized as strategic or operational, depending on their intended impact on the company's long-term goals or day-to-day operations.

The implementation schedule outlines a detailed timeline for carrying out the proposed actions. The schedule spans 18 months and is divided into several phases, each with specific objectives and actions to be completed. The schedule is designed to ensure that the proposed actions are carried out in a timely and efficient manner, with regular reviews and adjustments to ensure that objectives are met. By following the implementation schedule, Weijing Technology can enhance its competitiveness in the Chinese bond market and achieve its long-term goals.

Table 3: Proposals for enhancing Weijing Technology's competitiveness

Proposal	For	Against	Complementary Actions	KPI	Objectives	Level of Investment	Implementation Schedule
1. Focus on Small to Mid-size Institutions as a niche market	- Can establish a loyal customer base	- May limit the potential market size	- Develop tailored marketing campaigns	- Increase the number of small to mid-size institutions using the software	Strategic and Operational	Moderate	6 months
2. Offer free trials or demos of the software to potential customers	- Showcases the software's effectiveness	- May lead to an increase in support requests	- Provide online resources to help customers use the software	- Number of trial users who convert to paying customers	Operational	Low	3 months
3. Establish partnerships with other service providers that work with small to mid-size financial institutions	- Increase the reach of marketing efforts	- May require significant coordination efforts	- Offer joint promotions or discounts	- Number of leads generated from partner referrals	Strategic and Operational	Moderate	9 months
4. Conduct interviews and gather feedback from existing customers to identify areas for improvement in customer support	- Identify areas for improvement	- May require additional resources to implement changes	- Offer rewards or incentives for completing interviews	- Increase in customer satisfaction ratings	Operational	Low	3 months

5. Implement strategies to provide better customer support, such as offering online chat support, extending support hours, or providing personalized support	- Increase customer satisfaction and loyalty	- May require additional resources	- Hire additional support staff or outsource support services	- Number of support requests handled within a certain time frame	Operational	Moderate	6 months
6. Develop a schedule for more frequent product updates to ensure the software remains relevant and competitive	- Enhance the software's features and functionality	- May require additional resources	- Prioritize updates based on customer feedback and market trends	- Number of new features or updates released within a certain time frame	Operational	High	12 months
7. Keep customers informed about product updates and provide training or resources to help them utilize new features	- Increase customer satisfaction and loyalty	- May require additional resources	- Develop training materials or videos	- Increase in customer engagement with new features	Operational	Low	6 months

<p>8. Consider implementing a customer loyalty program to reward long-term customers and incentivize them to continue using the software</p>	<ul style="list-style-type: none"> - Increase customer retention and loyalty 	<ul style="list-style-type: none"> - May require additional resources 	<ul style="list-style-type: none"> - Develop a point system or reward system for loyal customers 	<ul style="list-style-type: none"> - Increase in customer retention rates 	<p>Operational</p>	<p>Moderate</p>	<p>9 months</p>
<p>9. Conduct research to identify how blockchain and AI can be incorporated into the company's existing software or used to develop new products</p>	<ul style="list-style-type: none"> - Stay ahead of technological advancements 	<ul style="list-style-type: none"> - May require significant investment in research and development 	<ul style="list-style-type: none"> - Hire experts in blockchain and AI technologies 	<ul style="list-style-type: none"> - Number of successful integrations of blockchain or AI technologies 	<p>Strategic and Operational</p>	<p>High</p>	<p>18 months</p>
<p>10. Partner with technology companies or startups to collaborate on the development of blockchain or AI-based solutions</p>	<ul style="list-style-type: none"> - Expand the company's technological capabilities 	<ul style="list-style-type: none"> - May require significant coordination efforts and investment 	<ul style="list-style-type: none"> - Develop clear goals and expectations for collaborations 	<ul style="list-style-type: none"> - Number of successful collaborations resulting in new products or solutions 	<p>Strategic and Operational</p>	<p>High</p>	<p>18 months</p>

11. Develop a strategy for marketing new products and solutions to potential customers	- Increase awareness and interest in new products	- May require significant investment in marketing efforts	- Develop targeted marketing campaigns and messaging	- Number of leads generated from marketing efforts	Strategic and Operational	High	12 months
12. Conduct a review of the current development team to identify any gaps in expertise or staffing needs	- Ensure the team has the necessary skills and expertise	- May require additional investment in hiring or training	- Develop a hiring plan and training program	- Increase in employee satisfaction and retention	Operational	Moderate	6 months
13. Recruit new talent to fill any gaps and expand the team's capabilities	- Enhance the company's technological capabilities	- May require significant investment in hiring and compensation	- Develop a recruitment plan and offer competitive compensation packages	- Number of new hires and their impact on the company's technological capabilities	Operational	High	12 months
14. Offer ongoing training and development opportunities to ensure the team is up-to-date on the latest industry trends and technologies	- Enhance employee skills and expertise	- May require additional resources and time	- Develop training programs and opportunities for professional development	- Increase in employee satisfaction and retention	Operational	Moderate	Ongoing

<p>15. Offer competitive compensation packages and benefits to attract and retain top talent</p>	<p>- Attract and retain top talent</p>	<p>- May require significant investment in compensation and benefits</p>	<p>- Conduct market research to ensure the company's compensation packages are competitive</p>	<p>- Increase in employee satisfaction and retention</p>	<p>Operational</p>	<p>High</p>	<p>Ongoing</p>
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8.3 Implementation Schedule:

- Month 1-3: Conduct interviews and gather feedback from existing customers, offer free trials or demos of the software to potential customers, establish partnerships with other service providers that work with small to mid-size financial institutions, and offer rewards or incentives for completing interviews.

- Month 4-6: Implement strategies to provide better customer support, develop targeted marketing campaigns to reach out to small to mid-size institutions, and hire additional support staff or outsource support services.

- Month 7-9: Develop a customer loyalty program, establish collaborations with technology companies or startups, and conduct a review of the current development team to identify any gaps in expertise or staffing needs.

- Month 10-12: Develop a schedule for more frequent product updates, keep customers informed about product updates and provide training or resources to help them utilize new features, and offer competitive compensation packages and benefits to attract and retain top talent.

- Month 13-18: Conduct research to identify how blockchain and AI can be incorporated into the company's existing software or used to develop new products, develop a strategy for marketing new products and solutions to potential customers, recruit new talent to fill any gaps and expand the team's capabilities, and offer ongoing training and development opportunities to ensure the team is up-to-date on the latest industry trends and technologies.

KPIs:

- Number of small to mid-size institutions using the software
- Number of trial users who convert to paying customers
- Number of leads generated from partner referrals
- Increase in customer satisfaction ratings
- Number of support requests handled within a certain time frame
- Number of new features or updates released within a certain time frame
- Increase in customer engagement with new features
- Increase in customer retention rates
- Number of successful integrations of blockchain or AI technologies
- Number of successful collaborations resulting in new products or solutions
- Number of leads generated from marketing efforts
- Number of new hires and their impact on the company's technological capabilities

- Increase in employee satisfaction and retention

Level of Investment:

- Low: \$0 - \$10,000
- Moderate: \$10,000 - \$50,000
- High: \$50,000 - \$100,000+

Note: These are rough estimates and may vary depending on the specific needs of the company.

Overall Implementation Schedule:

The implementation schedule will take 18 months and will be divided into several phases. Each phase will focus on specific actions and objectives, as outlined in the table above. The schedule will be reviewed and adjusted regularly to ensure that the project stays on track and objectives are achieved within the specified timeframe.

9. Conclusions

To navigate complex markets and competition, new companies can benefit from conducting a comprehensive market analysis to identify opportunities and improve their market position. Hence, the objective of the project is to improve Weijing Technology's competitiveness in the rapidly expanding Chinese bond market through qualitative research methods such as interviews. The research aims to gain insights into the company's competitive position, identify areas for improvement, and develop a competitive strategy. The proposed action plan includes targeting small to mid-size institutions, enhancing the customer experience and support, adopting new technologies such as blockchain and AI, and investing in the internal development team. For such a purpose, the methodology of the project involves qualitative research through interviews to enhance Weijing Technology's competitiveness and identify challenges related to product positioning and promotion in the Chinese bond market.

The action plan proposes several strategies for Weijing Technology to improve its competitiveness and gain more market share, including focusing on small to mid-size institutions as a niche market, improving the customer experience through better support and more frequent product updates, embracing new technologies such as blockchain and AI, and investing more in the internal development team to attract top talent. These proposals allow Weijing Technology to better target potential customers, enhance customer loyalty, future-proof its products, and strengthen its internal capabilities. However, there are also risks associated with these proposals, such as increased competition or the need for significant investment. The ultimate goal of these proposals is to position Weijing Technology as a leader in the fintech industry and drive sustainable growth.

The implementation schedule outlines a timeline of 18 months and is divided into several phases with specific objectives and actions. The required budget for implementing the proposals is categorized into three levels: low, moderate, and high, with rough estimates provided. The budget may vary depending on the specific needs of the company. The schedule will be reviewed and adjusted regularly to ensure that objectives are achieved within the specified timeframe.

However, the project uses a limited sample size of active users and potential customers for the research. Additionally, the project does not provide a detailed analysis of the Chinese bond market or the competition in the market. Further research is needed to provide more comprehensive insights into the market and competition. More specifically, future research can expand the sample size and include a more diverse range of customers to provide a more representative picture of the market. Additionally, future research can include a more detailed analysis of the Chinese bond market and the competition in the

market to provide a more comprehensive understanding of the challenges and opportunities facing Weijing Technology.

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