The Data Management Transformation in the Capital Market: A Case Study of PT XYZ in the Centralization and Sharing Strategy of Investor Data Through the ABC System

Pungkas Budhi Santoso[1], Buddi Wibowo[2]
[1] Universitas Indonensia, Indonesia, pungkas.budhi@ui.ac.id
[2] Universitas Indonensia, Indonesia, buddi.wibowo@ui.ac.id

[*]Corresponding Author: pungkas.budhi@ui.ac.id

Abstract: This study is conducted using a robust research methodology. It aims to analyze the capacity and capabilities of PT. XYZ in implementing the strategy of Investor Data Centralization and KYC Data Sharing through the ABC System. This strategy aims to provide centralized KYC storage and KYC data sharing through the ABC (Centralized Investor Data Management System) platform, which participants in the Indonesian capital market sector can utilize. The study employs both external analysis (PESTEL model, Porter's Diamond, and comparative analysis with KYC platforms in other countries) and internal analysis (Value Chain and VRIO Framework) to assess PT XYZ's capacity and capability in executing this strategy. The effectiveness of this strategy is measured through EFE, IFE, IE and SWOT matrices. The research findings are expected to offer strategic insights into opportunities and challenges in KYC data centralization strategies, provide recommendations for optimizing CORES services, and contribute to the strategic management literature in the financial sector, especially in the context of KYC regulation and technology.

Keyword: Centralized KYC, KYC Data-Sharing, SWOT Analysis, Capital Markets.

INTRODUCTION

Amid increasingly dynamic and complex capital market developments, the need for an efficient customer verification and identification process, or Know Your Customer (KYC), is critical. KYC ensures compliance with applicable regulations and maintains the integrity and security of transactions in the capital market. Currently, the KYC process is seen as complicated and inefficient. Research conducted by Fenergo—a private company that provides CLM services (Client Lifecycle Management) and SaaS-based KYC (Software as a Service) according to Chartis Research and Aite Novarica Group—conducted by Censuswide—a market research and consulting institution that offers survey and data analysis services for various industry sectors—with 1,100 respondents Chief Operations Officers, Chief Compliance Officers, and Chief Risk Officers from various Global Investment Banks in Europe, the United States, and Asia Pacific conducted in September

2023, mentioned that nearly half of financial institutions worldwide (48%) lose potential revenue from customer friction due to slow and inefficient KYC processes (Fenergo Limited, 2023).

In addition to being slow and inefficient, the need for data verification and meeting complex document requirements as mandated by increasingly stringent regulations poses new operational challenges for Financial Services Institutions (participants). The inevitable consequence of this situation is the increased cost of adding or training operational resources for KYC. Research by Fenergo in 2022 involving 1,055 Chief Operations Officers, Chief Compliance officers, and Chief Risk Officers across various Global Investment Banks in the Americas, the United Kingdom, Australia, Singapore, Japan, Hong Kong, and Mexico conducted from August 12 to 24, 2022, showing that nearly a third (28%) of respondent firms spent 31% – 40% of their total compliance budget on KYC needs. Manual operations that require labor cause 31% of companies to hire 1,001 – 1,500 permanent employees to handle KYC. Due to the lengthy process, such efforts by participants often do not yield the expected results. The 2022 survey stated that the leading causes of investor onboarding process failures are weak data management (82%), unpleasant and lengthy KYC processes (78%), and inadequate products and services (41%) (Fenergo Limited, 2022).

Based on POJK regulation No. 8 of 2023, it is stipulated that participants must collect certain basic information and documents from clients before officially acknowledging them as customers. This requirement does not prevent participants from requesting additional data or information based on evaluating their prospective customer profile. As a result, beyond these regulatory minimums, each FSP sets its standards, leading to variations in investor data held by different participants. These differences require repeated KYC procedures when investors engage with multiple participants, complicating the process with overlapping information, document complexity, and duplication. This situation complicates the KYC process for clients and presents unique challenges as the volume of investor registrations increases significantly. Overcoming this problem requires joint efforts and collaboration between Authorities, Regulators, and participants to grow and strengthen the competitiveness of the Indonesian capital market sector.

In this regard, the OJK issued POJK no. 15 of 2023 concerning the Know Your Customer Principle Administration Service (LAPMN), which is effective on February 8, 2024. These provisions are the operational basis for the ABC (Centralized Investor Data Management System) application, which is a centralized platform for storing investor data and sharing KYC information, which aims to improve the efficiency and effectiveness of customer data management by participants in the Indonesian capital market. Through ABC, any participants that utilize PT XYZ's electronic service platform—System A, System B, System C, System D—in their daily operations can download other participants' investor data from KYC that has been completed after obtaining prior approval from investors. So, participants will utilize this joint investor data and supporting documents from other participants' KYC, thereby avoiding excessive KYC processes, speeding up the SID creation process, and providing a more convenient and better KYC experience for investors. Systems A, B, C, and D represent electronic platforms provided by PT XYZ, serving the diverse needs of capital market participants in various products and instruments. For example, System A facilitates the management of stock transactions and debt securities, while System B is designed to support the administrative and reporting needs of mutual funds. Each system has a feature to generate a SID number and summarize the investor's KYC data and supporting documents related to the formation of the unique SID. The process of creating an SID on the second participant by investors who already have an SID from the initial participants' KYC is known as Crosslink. The main emphasis of the ABC platform is to eliminate the repetitive process involved with each participant when creating an SID Crosslink.

However, implementing a centralized KYC system like ABC involves complex challenges, not only from technical and operational aspects, but also from regulatory dynamics and the need for internal adaptation within PT XYZ and external among various stakeholders in the Indonesian capital market. This study aims to answer the question of what factors can be opportunities and threats XYZ in the strategy of Investor Data Centralization and KYC Data Sharing through the ABC system. What is the capacity and capability of XYZ to optimize the centralization of investor data and KYC data sharing through the ABC system? What is the strategy that XYZ will implement to optimize the centralization of investor data and KYC data sharing through the ABC system? The analysis of the ABC implementation strategy by PT XYZ was carried out through a comparative approach with KYC platforms in other countries, and strategic analysis models such as PESTEL and Porter's Diamond Model were adopted. This research is expected to reveal how ABC can be implemented effectively and efficiently and assess its impact on the Indonesian capital market. Utilizing the External Factors Evaluation (EFE), Internal Factors Evaluation (IFE), IE Matrix, and SWOT analysis will enable a thorough assessment to identify opportunities and weaknesses and formulate strategic recommendations to optimize ABC services. This study aims to analyze PT XYZ's capacity and capabilities in centralizing investor data and sharing KYC data through ABC.

METHOD
Research Methode

This type of research is a case study research at PT XYZ. This study uses a qualitative approach to analyze the strategy of centralizing investor data and sharing KYC data through the ABC system. Qualitative research is a method used to explore and understand the meaning given by individuals or groups to social or humanitarian issues (Creswell & Creswell, 2018). This process emphasizes naturally occurring questions and procedures, data collection that is generally carried out at research locations, data analysis conducted inductively from specific themes to more general themes, and the author's interpretation of the meaning of the data. The final research report is written with an adaptive structure. For this study, the authors will collect two types of data: primary and secondary. Primary data will be collected through direct sources such as interviews. To avoid bias, the authors triangulation of data sources and triangulation of methods. According to Denzin & Lincoln (2017), triangulation methods were carried out by comparing the results of interviews with the results of direct observations and the study of internal documents of PT XYZ. Meanwhile, the data sources are triangulated by conducting interviews with different people in different places and at different times. On the other hand, secondary data will be obtained from published literature, articles, online sources, or PT XYZ's database. The authors will incorporate these data collection methods to ensure a comprehensive and accurate analysis.

Data Collection

Interviews are primary data collection techniques used to collect data in a qualitative methodology (Schindler, 2022). An in-depth interview (IDI) is an interaction between an interviewer and one participant. Interviews will be conducted using purposive sampling with semi-structured questions. The first interview was planned with the director in charge of system development (A1). Then, the writer will interview the Head of Division (A2), who is the project leader of the ABC system. Then, the author also conducted an interview with the Head of the Legal Unit (A3) in relation to regulations and regulations related to the ABC system, the Head of the Database Management Unit (A4), and the Head of the Account Maintenance Unit (A5). The questions will explore information and opinions from resource persons related to the capacity and capabilities of PT XYZ based on the influence of the

external environment and the internal environment derived from the strategic management valuation framework used.

In qualitative research, the author is the main instrument in data collection by examining documents, observing behavior, or conducting interviews with sources (Creswell & Creswell, 2018). In this context, the author is directly involved in gathering information and is not limited to interviews or relying on instruments developed by other authors. Creswell & Creswell (2018) also emphasized that qualitative research is interpretive, in which the authors are often involved in intensive and ongoing experiences of the operationalization of the ABC system. Hennink et al. (2020) emphasized that the advantages of in-depth interviews lie in their ability to reveal detailed information, effectiveness in handling sensitive issues, and the ability to understand the context of the interviewee's life. However, this method has limitations, including the absence of interaction or feedback from parties other than the source, its subjective nature based on individual perceptions, and the need to identify various problems in many interviews. This research will apply in-depth interview techniques with five resource persons.

Referring to the data analysis model developed by Miles et al. (2014), the data analysis process includes three main activities, namely data condensation, data presentation, and conclusions drawn. Data condensation involves simplifying data through summarizing, selecting key aspects that are significant and relevant, identifying themes and patterns, and eliminating data that is considered unimportant. This process is intended to clarify information, making it easier for writers to collect the data needed. The author uses the NVIVO 12 tool in this process.

RESULTS AND DISCUSSION

The results of the external environment analysis that produce a number of opportunity and threat factors, after being evaluated by weighting and ranking methods, are obtained as seen below.

Table 1. EFE Matrix Results

No	Description of External Factors	Weight	Rating	Value
	Chance			
1	Government Support through the Issuance of POJK 15 of 2023	0,106	4	0,424
2	The trend of high investor growth since 2020 will continue until early 2024.	0,093	3	0,279
3	The potential use of OCR technology (Text reading on files/images) to Artificial Intelligence (AI) for document verification	0,094	3	0,282
4	Collaboration in Industry: Collaboration with IKNB and Banking in the creation of SID.	0,099	3	0,297
5	Economic Growth Impacts Asset Value Growth and Instrument Diversification	0,087	3	0,261
6	Widespread implementation and understanding of Blockchain.	0,058	2	0,116
	Total	0,537		1,659
No	Description of External Factors	Weight	Rating	Value
	Ancaman			
1	High Dependencies on IT Service Providers	0,106	4	0,424
2	Low level of participants and Investor (Public) Adoption of new habits in CDD data sharing	0,096	3	0,288
3	Capacity and system security issues\	0,100	3	0,3
4	Potential Competitiveness in the Industry	0,093	3	0,279
5	Political Instability: Political and economic instability during the Presidential Transition "wait and see."	0,067	2	0,134
	Total	0,462		1,425
	Grand Total	1		3,084

Information:
Weight: level of important
Rating: 4 = very good response, 3 = above average response, 2 = average response, 1 = poor response
Source: Processed by the author, adopted from (David et al., 2020).

The evaluation of internal factors is carried out, one of which is carried out with the VRIO framework. The following is a table of the results of the VRIO analysis of internal data insights.

Table 1. Results of VRIO Analysis

No	Resources	V	R	I	Or	Competitive Implications	Strength/ Weakness
1	Infrastructure						
	Technology and information systems	yes	yes	yes	yes	Sustained Competitive Advantage	Strength and sustainable distinctive competence
	Financial fundamentals	yes	-		yes	Sustained Competitive Advantage	Strength and sustainable distinctive competence
	System Security	yes	-		yes	Temporary competitive advantage	Strength and distinctive competence
2	Research and product development						
	ABC	yes	yes	yes	yes	Sustained Competitive Advantage	Strength and sustainable distinctive competence
	Product knowledge	no	-	-	-	Competitive Disadvantage	weaknesses
	Strong research	no	-	-	-	Competitive Disadvantage	weaknesses
3	System development						
	Robust system development	yes	no	-	yes	Temporary competitive advantage	Strength and distinctive competence
	Quality Assurance	yes	no	-	yes	Competitive parity	Strength
4	Operational						
	SOP	yes	-	-	yes	Temporary competitive advantage	Strength and distinctive competence
	Risk mitigation	yes	-	-	yes	Temporary competitive advantage	Strength and distinctive competence
5	Human Resources						
	HR Competencies	yes	-	-	yes	Temporary competitive advantage	Strength and distinctive competence
	Company values	yes	yes	yes	yes	Sustained Competitive Advantage	Strength and sustainable distinctive competence
6	Legal/Regulatory						
	Legal review	yes	-	-	-	Competitive parity	Strength
	Acceleration of internal regulations	yes	-	-	-	Temporary competitive advantage	Strength and distinctive competence
7	Socialization/Education						
	XYZ as LPP (Self branding)	yes	-	-	no	Competitive Disadvantage	Weakness
	ABC Features and Services	yes	-	-	no	Competitive Disadvantage	Weakness

Source: Processed by the author (2024), adopted from (Barney & Hesterly, 2019)

The evaluation of internal factors is carried out by looking for the average value of each internal key factor, which is then arranged in a matrix, as shown below.

Table 3. IFE Matrix Results

No	Description	Weight	Rating	Value
	Strength			
1	Reliable Information Technology (IT) Infrastructure	0,110	4	0,440
2	ABC Application Holder and LAPMN organizer permit	0,100	3	0,300
3	Human Resource Development and Maintenance	0,098	3	0,294
4	Financial Fundamentals	0,096	3	0,288
5	Company values	0,092	3	0,276
	Total	0,496		1,598
No	Description	Weight	Rating	Value
	Weaknesses			
1	Socialization/education to stakeholders	0.109	4	0.436
2	Product knowledge	0,106	3	0,318
3	Strong research	0,100	3	0,300
4	Human resources competence	0,098	3	0,294
5	Legal Review/Opinion	0,092	3	0,276
	Total	0,505		1,624
	Grand Total	1		3,222

Information:

Weight: level of important

Rating: 4 = very good response, 3 = above average response, 2 = average response, 1 = poor response

Source: Processed by the author (2024), adopted from (David et al., 2020)

Table 4. Metric SWOT

			Key Factors of the Internal Environment		
		No	Strengths	No	Weaknesses
MatriksSWOT		1	Reliable Information Technology (IT) Infrastructure	1	Socialization/education to stakeholders
		2	ABC Application Holder and LAPMN organizer permit	2	Product knowledge
		3	Financial Fundamentals	3	Strong research
		4	Human Resource Development and Maintenance	4	Human resources competence
		5	Company values	5	Legal Review
External Key Factors					
No	Opportunities (Peluang)	No	S-O Strategy	No	Strategy W-Z
1	Government support through the issuance of POJK and LAPMN implementation permits	1	(S1, S2, O1, O3, O6)Utilizing XYZ's positioning as an LPP to obtain regulatory support for the development of existing ABC services and the potential use of technologies such as OCR, AI, or even blockchain in the future.	1	(W1, W2, W5, O1) Leverage government support to expand the reach and effectiveness of ABC outreach and education to various stakeholders, including participants, retail investors, institutions, regulators, and academics
2	Optimistic Investor Growth Year Over Year	2	(S1, S2, O2)Develop a mechanism for automatic socialization/delivery of information to initial investors related to data-sharing services through ABC, as well as the existing ones that run at the AKSes XYZ facility.	2	(W2, W3, W4, W5, O2) Held regular training and professional development sessions for staff to deepen their understanding of ABC's products and features, as well as how XYZ meets the evolving needs of investors.
3	Technological	3	(S1, S2, S3, S4, O1, O2) Conduct	3	(W3, O3) Conduct studies and

	developments and infrastructure utilization		studies on the development potential using the latest technology, and conduct training, training, and certification for employees on competence in new technologies		research on technologies such as AI and OCR to improve research and development capabilities in XYZ, ensuring that innovations and market changes can be responded to quickly.
4	Collaboration within and outside the Industry	4	(S1, S2, S5, O1, O2, O3, O4) Coordinating with Authorities (OJK Capital Market, OJK Banking, OJK IKNB) and establishing strategic partnerships with other parties—existing KYC service providers—to generate benefits of cross-industry collaboration	4	(W1, W2, W3, W4, W5, O1, O3, O4) Establish partnerships with KYC service providers to hold seminars, knowledge exchanges, and training programs that focus on knowledge sharing to improve the knowledge and technical skills of staff operations.
5	Economic Growth has an impact on Capital Market Asset Value Growth and Instrument Diversification	5	(S1, S2, O1, O5) Utilizing the position of the central custodian and providing convenience for investors to switch from one participant to another participant in the context of diversifying investment products, as well as changes in investment strategies from investors.	5	(W2, W3, W4, W5, O2, O5) Holding internal training or seminars in connection with the potential generated by economic growth to XYZ business development opportunities.
6	Widespread implementation and understanding of Blockchain	6	(S1, S2, S3, S4, S5, O3, O4, O6) Utilizing existing information to create studies and research that focus on the feasibility and readiness of regulations, infrastructure, technology, finance, industry, and Indonesian society on a blockchain model that offers transparency and speed but is expensive and decentralized.	6	(W2, W3, W4, W5, O6) Forming a special team to examine the potential of blockchain applications in data verification and security, as well as the potential development of blockchain-based solutions that can improve the efficiency and transparency of the KYC process.
No	Threats (Ancaman)	No	**S-T Strategy**	No	**PE Strategy**
1	High Dependency on External (IT Service Providers)	1	(S1, S2, S3, S4, S5, O1) Conducted legal and technical studies related to the readiness of technical support and infrastructure to review the potential maintenance of the system and the surrounding applications in-house.	1	(W2, W3, W4, W5, T3) Strengthen internal research teams to reduce reliance on technology solutions developed by external vendors. Conducting training and certification of employees on important specific competencies, and ILA is needed to add IT experts. Build the capabilities and quantity of internal legal teams to reduce reliance on costly external legal services and accelerate internal regulatory adjustments.
2	Low Adoption Rate from Participants and Customers of New Cultures in KYC	2	(S1, S2, S3, S5, T2) Conducting hands-on training programs and direct socialization related to the ABC application to participants, accommodating participants' input related to the development of Host-to-host from BO to ABC and the integration of the ABC	2	(W1, W2, W4, W5, T2) Organizing information dissemination and education through webinars, workshops, investor summits, and social media that educate about transparency and security in sharing investor data from KYC

			database with other main applications, and strengthening socialization to investors through the media by utilizing regulatory support and XYZ's position as a capital market regulator.		results, which was first offered in Indonesia through ABC
3	Capacity and system security issues	3	(S1, S2, S3, S4, T4)Increasing the capacity and capabilities of SID Gen, maintaining existing ISO 27001, and keeping up to date with cyber security issues.	3	(W3, W4, T4) Provide more intensive cybersecurity and systems management training and recruit experienced technology talent.
4	Potential Competitiveness in the Industry	4	(S1, S2, S4, S5, T1)Utilizing XYZ Positioning as LPP and POJK support related to the LAPMN organizer's permit. Use your financial strength to develop KYC services that are more comprehensive and superior to your competitors. Establish persuasive, assertive communication with other parties—existing KYC service providers—to jointly advance the industry and take advantage of existing opportunities through clear boundaries and business scopes upstream and downstream to generate maximum collaboration benefits	4	(W1, W3, T1) Conduct intensive internal training programs for staff on the features and technologies used in ABC and the potential for the development and use of new technologies, as well as emphasize the competitive advantages of products.
5	Political Instability: Political and economic instability during Presidential Transition	5	(S1, S2, S3, O5) Maintain the conduciveness of the company's financial fundamentals through appropriate investment strategies, maintain the stability and functionality of ABC services to continue to provide the best service	5	(W2, W3, W4, W5, T5)Hold seminars or training on how Business XYZ (including ABC) survives and takes advantage of times of political uncertainty.

Source: Processed by the author (2024), adopted from (David et al., 2020)

CONCLUSION

This study seeks to find out what factors can be opportunities and threats to XYZ in the strategy of centralizing investor data and sharing CDD data through the CORES system. XYZ, what is the capacity and capability of XYZ in an effort to optimize the centralization of investor data and CDD data sharing through the ABC system, and what strategies can XYZ apply in the optimization effort? Based on the results of data analysis and discussion, the authors can convey the conclusions of this study as follows:

1. The strategic initiatives outlined above leverage PT XYZ's strengths and opportunities while addressing its weaknesses and potential threats. To capitalize on XYZ's positioning as an LPP, the company should seek regulatory support to enhance existing ABC services and explore the future implementation of technologies such as OCR, AI, and blockchain. By leveraging government support, XYZ can expand the reach and effectiveness of ABC's outreach and education efforts to various stakeholders, including participants, retail investors, institutions, regulators, and academics. Developing mechanisms for automatic socialization and delivery of information to initial investors about data-sharing services through ABC, alongside the existing services at the AKSes XYZ facility, is essential. Additionally, conducting studies on the development potential using the latest technology

and providing comprehensive training and certification for employees on new technology competencies will ensure that XYZ remains at the forefront of innovation. Coordinating with authorities like OJK Capital Market, OJK Banking, and OJK IKNB and establishing strategic partnerships with other KYC service providers will enhance cross-industry collaboration and knowledge sharing.

2. On the other hand, addressing weaknesses requires specific actions, such as leveraging government support to enhance ABC's outreach and education programs and holding regular training and professional development sessions for staff to deepen their understanding of ABC's products and features. Conducting studies and research on AI and OCR technologies will bolster XYZ's research and development capabilities, ensuring quick responses to market changes and innovations. Establishing partnerships with KYC service providers to organize seminars, knowledge exchanges, and training programs will improve XYZ's staff's knowledge and technical skills. Utilizing XYZ's central custodian position to facilitate investors' transitions between participants, which aligns with their investment diversification strategies, will also add value. Forming a dedicated team to explore the potential of blockchain applications in data verification and security and developing blockchain-based solutions to enhance the efficiency and transparency of the KYC process will position XYZ as a leader in adopting cutting-edge technologies. These initiatives aim to optimize XYZ's strategy for centralizing investor data and sharing CDD data through the ABC system, ensuring sustainable growth and enhanced stakeholder confidence.

3. PT XYZ has outlined several strategic initiatives to enhance its internal capabilities and mitigate potential threats. One key strategy involves conducting comprehensive legal and technical studies to assess the readiness of technical support and infrastructure, enabling the maintenance of the system and its surrounding applications in-house. By strengthening internal research teams and reducing reliance on technology solutions developed by external vendors, XYZ aims to foster self-sufficiency and innovation. This includes providing specialized training and certification for employees, enhancing IT expertise, and building a robust internal legal team to expedite regulatory adjustments and minimize dependence on costly external legal services. Additionally, conducting hands-on training programs and direct socialization related to the ABC application for participants, integrating participant feedback for system development, and utilizing XYZ's position as a capital market regulator to strengthen communication and collaboration will further bolster the effectiveness of the ABC system.

4. Furthermore, XYZ plans to increase the capacity and capabilities of SID Gen, maintain ISO 27001 certification, and stay abreast of cybersecurity issues to ensure its services' ongoing security and functionality. Intensive cybersecurity and systems management training and recruiting experienced technology talent are crucial steps in this direction. Utilizing XYZ's positioning as LPP and leveraging financial strength and regulatory support, the company aims to develop superior KYC services and establish strong communication with existing KYC service providers to foster industry advancement. Maintaining the company's financial stability through appropriate investment strategies and ensuring the stability of ABC services are also prioritized. Lastly, organizing information dissemination and education through webinars, workshops, investor summits, and social media will promote transparency and security in sharing investor data, solidifying XYZ's competitive advantage and resilience in political uncertainty. By implementing these strategies, PT XYZ seeks to optimize its data centralization and CDD sharing capabilities, ensuring sustained growth and stakeholder confidence.
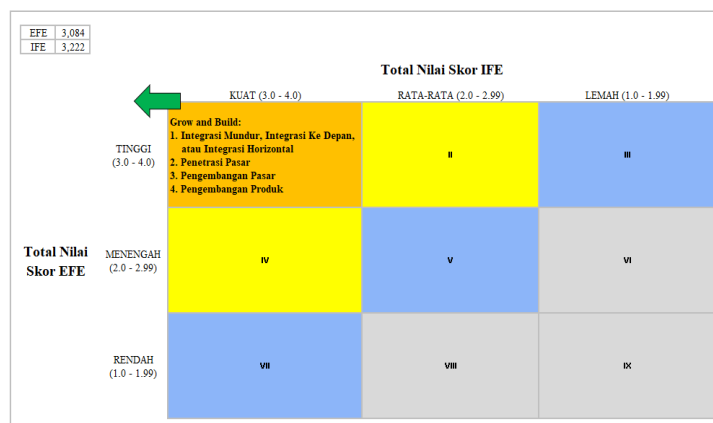
Source: Processed by the author (2024) (David et al., 2020)
Figure 1. Matrix IE

5. The IE matrix analysis (Figure 4) suggests that an intensive strategy focusing on existing markets through market penetration and development, along with product development, is the initial approach XYZ can adopt to optimize the strategy of centralizing investor data and sharing CDD data through the ABC system. The main emphasis of this suggestion is the need to inform and popularize the features and advantages of the ABC system to both future and current users. Intensive and comprehensive socialization efforts aim to raise knowledge and comprehension of this system so that the many and profoundly felt practical advantages and efficiencies it offers can be realized. Among the events are seminars, workshops, and practical training sessions to show how simple the system is and what advantages ABC may offer. Furthermore, the market growth plan investigates new financial industry sectors that can use the ABC system to be included in operational operations, such as the banking sector and IKNB. Also, creating new chances for cooperation and partnerships with organizations in other financial industries that need effective and integrated data management solutions will allow PT XYZ to increase the reach and impact of the ABC system. Furthermore, the study revealed that PT XYZ might consider a long-term plan to include blockchain technology in the ABC system. Blockchain has great promise to enhance user trust, transaction integrity, and data security because of its capacity to deliver a transparent and safe ledger. Applying this technology can be a major competitive advantage, establishing PT XYZ as a leader in cutting-edge technology for capital market data management. To be sure blockchain technology can be integrated with current infrastructure in compliance with XYZ's business plan and backed by relevant laws, more research and technical studies will be needed.

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