



# An Analysis of Working Capital Management in S Company Based on the Value Chain

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**Abstract.** Working capital management is central to corporate finance, directly affecting cash flow stability and market competitiveness. Taking S Company, a cosmetics and personal care enterprise, as the research subject, this paper analyzes its working capital management from 2019 to 2023 based on value chain theory. The study examines three internal stages, including procurement, production, and sales, along with two external dimensions: upstream suppliers and downstream customers. The findings reveal structural issues across the internal value chain: procurement excessively relies on supplier credit while maintaining insufficient raw material reserves; production recovers capital faster than it invests, yet suffers from poor management and inventory backlogs; sales face slow accounts receivable collection and high inventory levels, prolonging the cash conversion cycle. Externally, procurement amounts fluctuate with high supplier dependency, while downstream sales are overly concentrated, limiting management flexibility. To address these issues, this paper proposes optimization measures across internal process improvement, external collaboration, and supporting management systems. The study suggests that optimizing working capital management from a value chain perspective should focus on coordinating capital allocation across all stages. This research provides practical guidance for S Company and offers insights for similar enterprises.

**Keywords:** value chain; working capital management; S Company; cosmetics and personal care industry; turnover efficiency

## 1 Introduction

Amidst deepening global economic integration and intensified market competition, the cosmetics and personal care industry faces multiple challenges, including upgraded consumer demand, accelerated product iteration, and channel transformation. Working capital, as the "lifeblood" of daily operations, directly determines cash flow stability, market responsiveness, and core competitiveness. It also serves as a key pillar for enterprises to withstand operational risks and achieve sustainable development<sup>[1]</sup>.

S Company, a century-old leading enterprise in China's beauty and personal care sector, was established in 1898. It has developed a diversified product portfolio cover-

ing skincare, personal care, home cleaning, and maternal and infant products, with well-known domestic brands such as Liushen, Herborist, and Meijiaying. The company holds a pivotal position in the industry, and its management model serves as a benchmark for peers<sup>[2]</sup>. As competition intensifies, both domestic and international beauty companies are enhancing their core competitiveness by optimizing working capital management. Value chain theory breaks down business operations into interrelated value-creation stages. By integrating internal and external value chain resources and optimizing capital allocation, enterprises can maximize value. The integration of value chain theory with working capital management has become a significant trend in corporate financial management<sup>[3]</sup>.

Against this backdrop, this study investigates the current status, existing issues, and optimization pathways of value chain-based working capital management at S Company. By adopting a value chain perspective, the analysis offers a more comprehensive view of how capital flows across different stages. The findings provide practical guidance for S Company and serve as a reference for similar enterprises, holding both theoretical and practical significance.

## 2 Analysis of Current Working Capital Status at S Company

### 2.1 Analysis of Working Capital Scale

The scale of working capital directly reflects the adequacy of short-term funds and operational flexibility, significantly impacting daily business activities<sup>[4]</sup>. This paper analyzes the ratios of current assets and current liabilities to total assets for S Company from 2019 to 2023, as shown in Table 1.

**Table 1.** Changes in Capital Structure and Net Working Capital at S Company

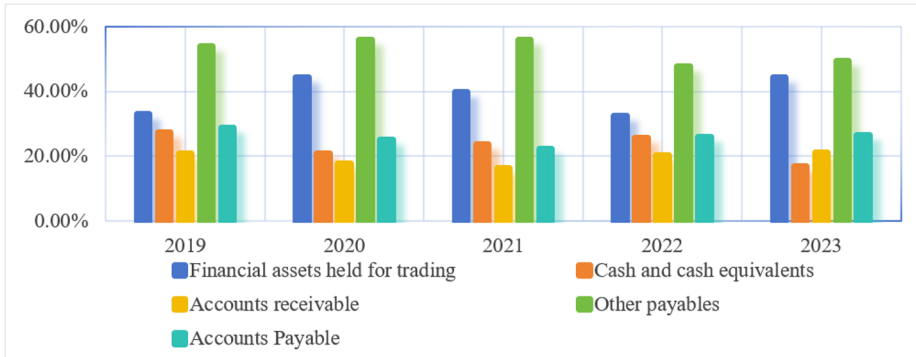
Item/Year	2019	2020	2021	2022	2023	Average
<b>Assets (billion yuan)</b>						
Current assets	58.78	61.55	67.80	65.55	55.82	61.90
Total assets	111.47	112.95	121.46	122.69	117.30	117.18
Percentage of current assets	52.73%	54.49%	55.83%	53.42%	47.58%	52.81%
<b>Liabilities (billion yuan)</b>						
Current liabilities	28.65	28.76	32.10	35.33	28.48	30.66
Current liabilities as a percentage	25.70%	25.46%	26.43%	28.80%	24.28%	26.13%
<b>Net working capital (billion yuan)</b>	<b>30.13</b>	<b>32.79</b>	<b>35.70</b>	<b>30.22</b>	<b>27.34</b>	<b>31.24</b>

From 2019 to 2021, the proportion of current assets increased from 52.73% to 55.83%, reflecting the company's strategy to ensure sufficient funds for daily operations amid market uncertainty. After 2021, this ratio declined to 47.58% in 2023, indicating a shift in financial strategy toward long-term investments such as R&D and brand building. Current liabilities remained stable, fluctuating around an average of

26.13%, demonstrating a prudent financing strategy. However, the declining trend in current assets warrants attention to short-term solvency risks.

## 2.2 Analysis of Working Capital Structure

The rationality of working capital structure directly impacts turnover efficiency and is a core indicator of working capital management. This paper analyzes the key components of current assets and liabilities from 2019 to 2023, as illustrated in Fig. 1.



**Fig. 1.** Key Components of Current Assets and Liabilities at S Company

Trading financial assets consistently account for the highest proportion among current assets, reflecting the company's liquidity strategy but also exposing cash flow risks during periods of significant market volatility. Cash equivalents declined from 27.38% to 16.83% over the five-year period, while trade receivables rose to 21.00% by 2023. This shift indicates slower cash collection from sales and a corresponding increase in bad debt risk. Other payables, primarily composed of marketing-related expenses, remained high at around 50% throughout the period, tying up significant capital and potentially squeezing profit margins if marketing strategies are poorly executed<sup>[5]</sup>. In contrast, accounts payable remained relatively stable at around 28%, suggesting that the company has not fully utilized supplier credit to optimize its capital structure.

## 2.3 Analysis of the Enterprise Value Chain

S Company's value chain begins with a sharp awareness of market trends and consumer demand. Through its information collection and analysis systems, the company continuously captures shifts in the market and changes in consumer preferences, ensuring that product development stays closely aligned with actual needs<sup>[6]</sup>. At the workflow level, S Company focuses on end to end quality control and efficiency, from raw material procurement and production all the way to sales. By optimizing production processes, raising automation levels, and implementing lean management, it reduces costs while maintaining product quality.

Another distinctive feature is the coordinated management of logistics, capital flow, and information flow. An efficient logistics system ensures that products reach consumers quickly and accurately. Meticulous capital management keeps the company's cash flow stable. Information technology enables real time data sharing and efficient processing, providing strong support for decision making. These three flows are not separate; they reinforce each other across the three core stages of the internal value chain: procurement, production, and sales. Each stage has its own working capital components, as illustrated in Fig. 2. Procurement involves raw materials, prepayments, accounts payable and notes payable. Production involves work in process, other receivables, payroll payable, and other payables. Sales involves finished goods, notes receivable, accounts receivable, advances from customers, and taxes payable.

Externally, S Company builds close and long term relationships with both upstream suppliers and downstream customers. Upstream, it works with suppliers on joint R&D and resource sharing, achieving collaborative optimisation of the supply chain. Downstream, it maintains strong ties with customers through market research and consumer feedback, which feed directly into product development and marketing strategies. The company also engages in technical cooperation and brand alliances with partners inside and outside the industry, jointly exploring markets and sharing resources.

Taken together, the value chain framework reveals that working capital management at S Company is not a set of isolated tasks. It is a continuous process linking suppliers, internal operations, and customers. An imbalance in any stage will ripple through the entire chain. Therefore, optimising working capital requires a holistic perspective that aligns internal processes with external relationships.

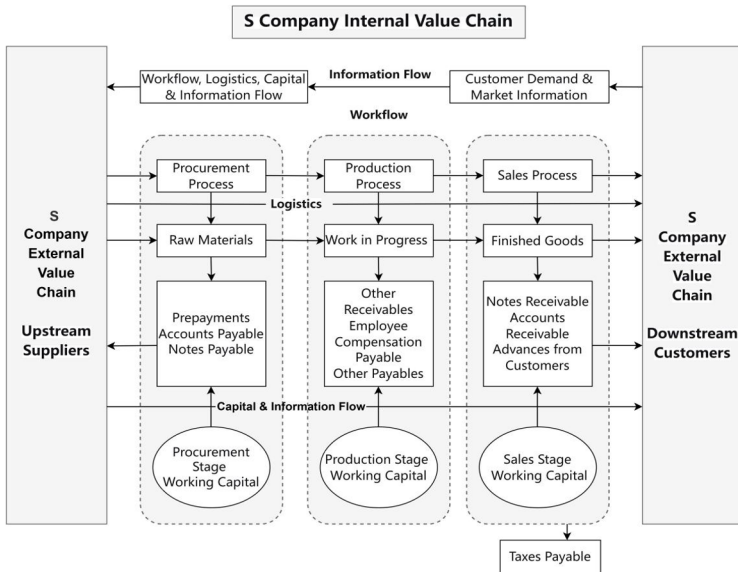


Fig. 2. S Company Value Chain Structure

## 2.4 Current Status of Value Chain-Based Working Capital Management

**Internal Value Chain.** From the perspective of the internal value chain, the key aspects of Company S's working capital management are centred on the three core stages of procurement, production and sales; the characteristics of capital turnover and allocation at each of these stages directly impact overall operational efficiency, as shown in Table 2.

**Table 2.** Working Capital Turnover Days by Stage at S Company

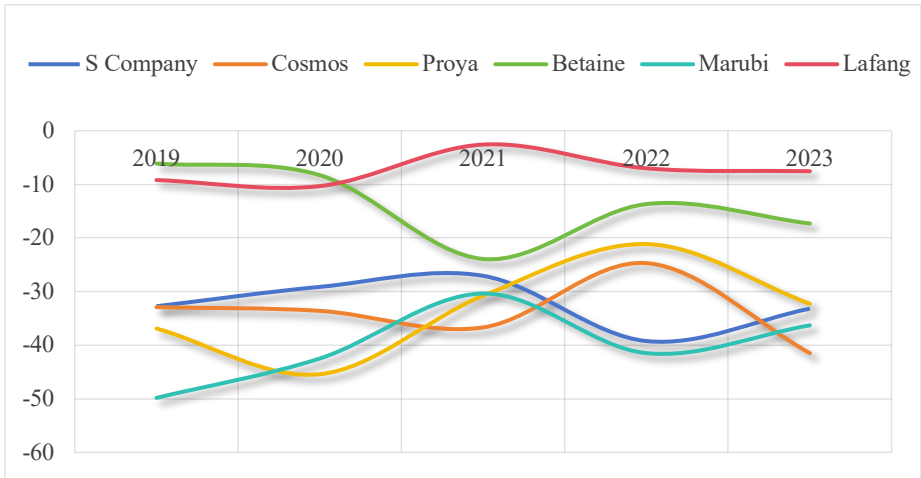
Item	2019	2020	2021	2022	2023	Average
Days of inventory in the procurement process	-32.74	-29.13	-27.07	-39.24	-33.19	-32.28
Days in production cycle	-78.93	-86.38	-89.30	-89.88	-80.96	-85.09
Days sales in inventory	81.87	82.79	80.25	99.58	95.94	88.09

In the procurement function, persistent negative turnover days indicate that accounts payable far exceed the combined value of raw materials and prepayments. This demonstrates the company's strategic use of supplier credit to optimize capital structure, yet it also poses risks to supplier relationships and supply chain stability. Accounts payable peaked in 2022, further extending procurement turnover days, while targeted adjustments in 2023 brought noticeable improvement.

In the production segment, consistent negative turnover days suggest that capital recovery outpaces capital investment, driven largely by fluctuations in other payables. After 2021, the company began proactively managing other payables to address supply chain stability concerns arising from excessively rapid capital recovery. Among industry peers, S Company records the highest absolute value of production turnover days, indicating relatively lower operational efficiency in this link.

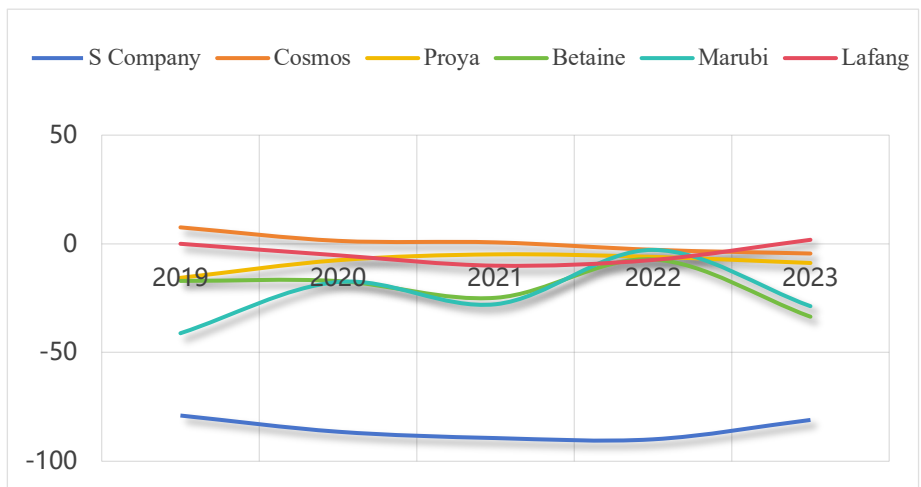
In the sales phase, turnover days consistently range from 80 to 100 days, reflecting substantial capital tied up in inventory and trade receivables. The peak in 2022 underscores notable challenges in inventory backlog and slow receivables collection. Although modest improvement appeared in 2023, capital utilization efficiency in the sales link remains low.

To better assess S Company's working capital efficiency within the industry context, this section compares its turnover days from 2019 to 2023 with those of five comparable enterprises and the industry average. The analysis examines the dynamic trends across the procurement, production, and sales stages.



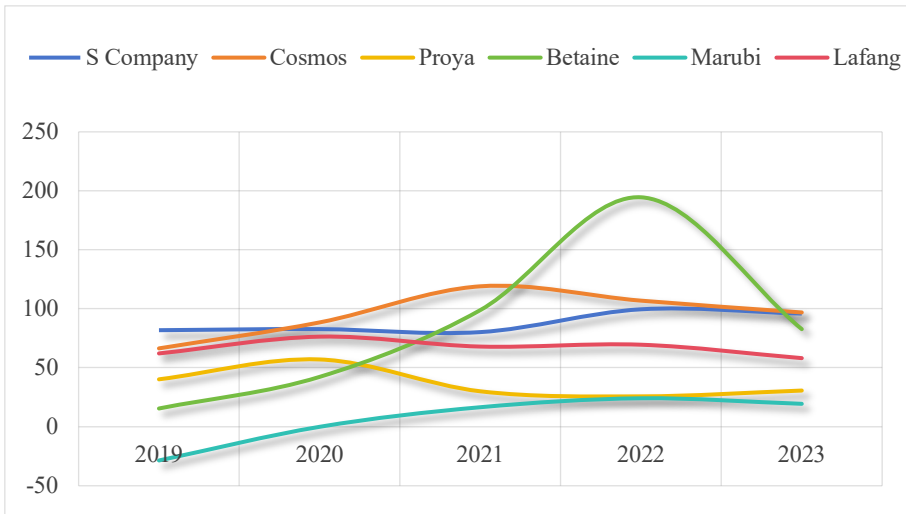
**Fig. 3.** Turnover days in the procurement stage by company (2019-2023)

As shown in Fig. 3, Looking at the procurement side, all six companies recorded negative turnover days throughout 2019-2023, confirming that the industry widely relies on supplier credit. S Company’s figures generally stayed in the mid-range among the six, hovering around -30 days. However, a sharp drop occurred in 2022, when its turnover days fell to -39.24 days. Fortunately, it recovered somewhat in 2023. Over the five year period, S Company’s procurement turnover days showed a rough downward trend, indicating that it has been actively reducing its excessive use of supplier credit. Yet the volatility in 2022 suggests that its supplier relationship management remains vulnerable to sudden pressures.



**Fig. 4.** Turnover days in the production stage by company (2019-2023)

As illustrated in Fig. 4, When it comes to the production stage, S Company stands out as an extreme case. Its turnover days were consistently the most negative among all six companies, with a five year average of -85.09 days, far below the industry average. This extraordinary efficiency is mainly driven by other payables. Over the years, S Company’s production turnover days continued to decline, meaning capital recovery kept outpacing investment. After 2022, however, the trend began to reverse slightly. This suggests that S Company may have started to recognise the risks of squeezing partners too hard and is making cautious adjustments. In contrast, most peers showed more moderate and stable patterns.



**Fig. 5.** Turnover days in the sales stage by company (2019-2023)

According to Fig. 5, On the sales front, S Company’s performance is the most concerning. Its turnover days generally rose from 81.87 in 2019 to 99.58 in 2022, and even after a slight drop to 95.94 in 2023, it remained far above competitors like Proya and Marubi. The industry as a whole has been accelerating cash collection, but S Company has been moving in the opposite direction. This prolonged inefficiency in collecting receivables and managing inventory has become the biggest drag on its working capital.

In short, the dynamic trends across the three stages reveal a clear picture: procurement is moderately stable but volatile; production is extremely efficient yet potentially unsustainable; and sales is the chronic bottleneck that urgently needs improvement. These observations lay a solid groundwork for the optimization measures proposed later.

### External Value Chain.

**Table 3.** Procurement from top five suppliers by company (unit: RMB million)

Company	2019	2020	2021	2022	2023	Average
S Company	59.89	341.33	47.02	50.20	35.27	106.74
Cosmos	–	14.66	14.27	27.01	19.38	18.83
Proya	30.59	26.10	30.71	39.31	51.34	35.61
Betaine	–	22.91	59.56	68.10	78.15	57.18
Marubi	29.38	25.19	24.27	19.86	25.35	24.81
Lafang	14.71	16.22	17.06	16.66	15.52	16.03

Upstream suppliers form a central link in Company S's working capital chain, directly influencing cost control and capital utilisation efficiency. Company S adopts a direct procurement model, settling accounts with suppliers in accordance with contractual agreements. For imported raw materials with long procurement cycles, it implements a phased inventory strategy and maintains advance stockpiles of scarce materials. From 2019 to 2023, Company S's procurement expenditure remained at a relatively high level overall, peaking in 2020, with the average exceeding that of most peers, demonstrating a significant scale advantage in procurement; the share of procurement from the top five suppliers remained stable at 13%-16%, indicating moderate concentration and minimal fluctuation. This not only ensures a stable supply of raw materials and cost optimisation but also demonstrates strong supplier relationship management capabilities, reflecting robust management of the upstream segment, as detailed in Table 3.

**Table 4.** Sales to top five customers by company (unit: RMB million)

Company	2019	2020	2021	2022	2023	Average
S Company	119.18	133.41	169.87	129.73	126.06	135.65
Cosmos	–	62.86	62.24	109.21	153.25	96.89
Proya	46.96	56.53	70.26	79.83	111.76	73.07
Betaine	–	56.11	82.53	97.01	105.87	85.38
Marubi	58.76	60.09	48.48	47.04	32.48	49.37
Lafang	16.52	14.35	14.16	15.36	8.62	13.80

Cash management in the downstream customer segment directly determines the efficiency of cash collection on the sales side. From 2019 to 2023, Company S's sales revenue showed an overall upward trend, peaking in 2021, with both scale and growth rate outperforming peers; The top five customers accounted for a stable 15%-22% of sales revenue, indicating a relatively concentrated sales profile and a certain degree of reliance on key clients. However, the minimal fluctuation in this proportion suggests a robust sales structure, reflecting strong capabilities in market expansion and customer retention whilst mitigating operational risks arising from fluctuations in individual clients. The company's strengths in downstream customer management are particularly evident, as summarized in Table 4.

### 3 Working Capital Management Issues from a Value Chain Perspective

The issues in S Company's working capital management span internal procurement, production, sales, and external collaboration. These interconnected links ultimately constrain the overall efficiency of capital operations.

In the procurement stage, the main issue lies in excessive use of supplier funds while maintaining insufficient raw material reserves. The turnover days in this stage have remained negative for an extended period, indicating that accounts payable consistently exceed raw materials and prepayments—a gap that was particularly pronounced in 2022, when accounts payable approached six times the value of raw materials. Although this approach alleviates short-term cash pressure, over-reliance on supplier credit may undermine supply chain stability. At the same time, the relatively low level of raw material reserves exposes production continuity to risk in the event of upstream disruptions<sup>[7]</sup>.

In the production stage, capital recovery appears efficient on the surface, but in reality capital is tied up and inventory accumulates. While turnover days in production have remained negative, turnover days in sales have been rising. This suggests that funds released from production are not being converted into sales receipts, but instead become trapped in finished goods inventory. The disconnect between production and sales locks up a substantial amount of capital in inventory, preventing it from being directed toward areas such as R&D and brand building.

The sales stage represents the main bottleneck in capital efficiency. Over the past five years, turnover days in sales have shown an overall upward trend, approaching 100 days in 2022—far higher than peers such as Proya and Marubi. Meanwhile, the share of accounts receivable rose to over 21% in 2023, reflecting relatively lenient credit policies and weak collection mechanisms, accompanied by increased bad debt risk. The combination of inventory backlog and slow receivables recovery further exacerbates capital tie-ups, raising the risk of product obsolescence and sluggish sales<sup>[8]</sup>.

Looking at the external value chain, upstream procurement volumes have fluctuated significantly from year to year. Purchases from the top five suppliers surged to over RMB 300 million in 2020 before declining sharply, posing challenges to cash flow stability. Although supplier concentration is not excessively high, such volatility in procurement volumes raises concerns about bargaining power with core suppliers and overall supply chain resilience.

Downstream, customer concentration is relatively high, with sales to the top five customers accounting for 15% to 22% of total revenue. Fluctuations in any major customer could therefore have a considerable impact on sales collections. Combined with the trend of lengthening receivables turnover in the sales stage, this indicates a lack of flexibility and responsiveness in the company's customer credit management and cash recovery mechanisms<sup>[9]</sup>.

## 4 Measures to Optimize Working Capital Management

To address the identified issues, optimization measures are proposed across three dimensions.

In terms of internal process optimization, procurement should establish a linkage mechanism between procurement plans, production needs, and cash flow, optimize payment cycles, and reduce costs through bulk purchasing. Production should adopt a make-to-order model, strengthen demand forecasting, and clear excess inventory through promotions or upgrades<sup>[10]</sup>. Sales should refine credit assessment, implement differentiated credit terms, and establish dedicated collection teams to accelerate cash recovery.

Regarding external collaboration, long-term strategic partnerships should be built with upstream suppliers, with information-sharing platforms to monitor price fluctuations. Supplier evaluation systems should be refined to diversify the supplier base<sup>[11]</sup>. For downstream customers, an accounts receivable early warning mechanism should be established to track overdue payments and optimize customer structure to diversify risks.

On the supporting management front, working capital management should be integrated across all value chain stages. Internally, information silos should be broken down through sharing platforms; externally, information channels with partners should be opened to promote business and financial synergy. Risk early warning mechanisms should be strengthened, with reasonable bad debt provisions and inventory loss controls. Professional training for finance staff should also be enhanced to ensure effective implementation.

## 5 Conclusions and Outlook

This paper analyses Company S's working capital management from 2019 to 2023 from a value chain perspective. The study found that issues were present throughout the entire process, spanning internal procurement, production and sales, as well as external collaboration with upstream and downstream partners. In the procurement phase, the company excessively ties up suppliers' funds whilst maintaining insufficient raw material reserves; in production, although funds are recovered efficiently by utilising other payables, management is lax and inventory builds up; in sales, slow recovery of accounts receivable and inventory backlog act as dual constraints, creating efficiency bottlenecks. Externally, upstream procurement volumes fluctuate significantly and there is high dependence on suppliers, whilst downstream sales are overly concentrated and cash management lacks flexibility. To address these issues, this paper proposes internal optimisation of the coordination between procurement and production, alongside differentiated credit policies and debt collection mechanisms. Externally, it recommends strengthening strategic cooperation, information sharing and accounts receivable early warning systems, complemented by improved cash management philosophies, information coordination and risk early warning mechanisms.

The contribution of this study lies in applying value chain theory to working capital management practice, revealing the capital allocation issues faced by Company S at various stages and providing a reference for enterprises in the same industry. Its limitations include the limited generalisability of a single case study and the lack of quantitative assessment of the optimisation effects. Future research could expand the sample scope, test the optimisation effects using operational data, and further refine the relevant theoretical framework.

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