



Research on the Working Capital Management of Company M in the Context of Supply Chain Digitalization

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Abstract. With the continuous development of digital technology, the digitalization of supply chains has become an important path for enterprises to enhance operational efficiency and competitiveness. The level of working capital management directly affects the operating efficiency and risk control ability of enterprises. This paper takes Company M as the research object and selects its financial data from 2018 to 2025. It analyzes the impact of supply chain digitalization on working capital management from three channels: procurement, production, and sales. The research finds that supply chain digitalization has improved the efficiency of working capital management in the procurement and production stages of Company M, but there are still problems such as high inventory occupation, rapid growth of accounts receivable, and slow recovery of funds in the sales stage. Based on this, this paper proposes suggestions such as optimizing procurement collaboration, strengthening production control, and improving sales collection and inventory management, in order to provide reference for related enterprises.

Keywords: Supply chain management; Working capital management; Home appliance enterprises.

1 Introduction

Against the backdrop of high-quality economic development and enterprise transformation, the digital transformation of the home appliance industry is of great significance to sustainable growth. For enterprises, working capital plays a fundamental role in capital circulation. From a micro perspective, supply chain-based working capital management improves capital utilization by optimizing each link of the supply chain. From a macro perspective, under a digital supply chain, it can strengthen collaboration among upstream and downstream firms and improve overall capital circulation efficiency and supply chain synergy[4]. Therefore, effective working capital management is essential for home appliance enterprises to adapt to industry characteristics and cope with a complex business environment. This paper focuses on the digital supply chain context, analyzes Company M's working capital management in recent years, identifies existing problems, and proposes optimization measures.

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2 Company Profile and Current Working Capital Status of M

2.1 M Company Profile

Founded in 1968, Company M operates in smart home, industrial technology, building technology, robotics, and digital innovation. Its main products include air conditioners, refrigerators, washing machines, and other household devices. The company went public in 2013 and has undergone expansion, diversification, and internationalization. Since 2012, it has advanced digital transformation through the "632" project, an industrial internet platform, and comprehensive digital up-grades. With several lighthouse factories established, Company M has gained significant experience in intelligent manufacturing and supply chain collaboration, and its T+3 model is a key example of supply chain digitalization in the industry.

2.2 The Current Situation of M Company's Working Capital

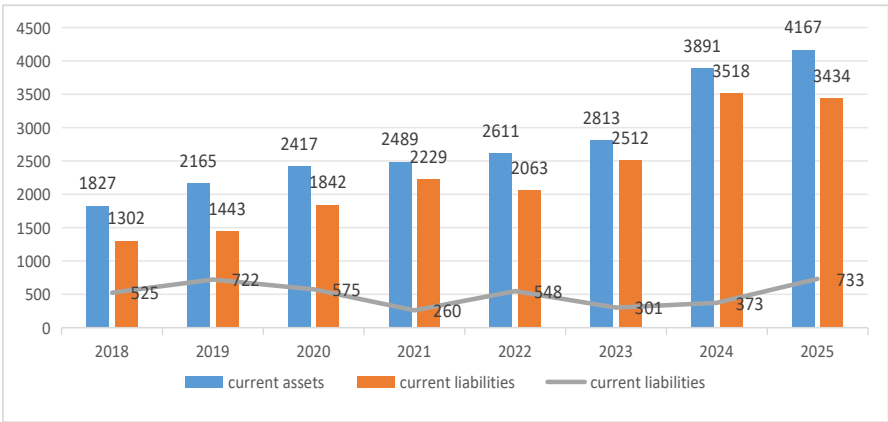


Fig. 1. Operating Capital Status of Company M from 2018 to 2025 (Unit: Billion Yuan).

According to Figure 1, M Company's operating capital data from 2018 to 2025 shows continuous growth in current assets, rising from ¥182.7 billion in 2018 to ¥416.7 billion in 2025, indicating strong liquidity. Current liabilities fluctuated upward, peaking at ¥222.9 billion in 2021, suggesting financial pressure. Operating capital fluctuated significantly, dropping from ¥72.2 billion in 2019 to ¥26.0 billion in 2021, then to ¥30.1 billion in 2023, before rebounding to ¥73.3 billion in 2025. While not negative, the fluctuations highlight instability. Overall, M Company's operating capital showed moderate stability but improved significantly in the past two years, with a 96.5% increase in 2025 compared to 2024, helping reduce liquidity risks and ensure stable business operations.

3 The Impact of Supply Chain Digitalization on Working Capital Management

3.1 Procurement Channel Working Capital Management

Table 1. Operating Capital Status of M Company's Procurement Channels (Unit: Billion Yuan) from 2018 to 2025

Year	Raw materials	Advance payment for goods	Accounts Payable	Accounts Payable	Operating income	Procurement channels consume working capital	Procurement channel turnover period (in days)
2018	51.82	22.16	369.00	233.30	2596.65	-528.32	-73.25
2019	50.09	22.46	425.40	238.90	2782.16	-591.39	-76.5
2020	74.02	27.64	539.30	282.50	2842.21	-719.87	-91.18
2021	95.93	43.53	659.80	327.50	3412.33	-847.84	-89.45
2022	86.75	43.67	642.30	255.70	3439.18	-767.58	-80.35
2023	85.73	33.16	725.30	217.10	3720.37	-823.51	-79.69
2024	110.83	36.86	928.00	259.70	4071.50	-1040.01	-91.96
2025	121.05	29.87	1037.00	271.20	4564.52	-1157.28	-91.27

According to Table 1, from 2018 to 2025, M Company's procurement channel operating capital turnover period decreased from -73.25 days to -91.27 days, indicating stronger utilization of supplier funds and improved commercial credit usage. The most significant decline occurred from 2019 to 2021, showing that the company enhanced procurement efficiency and capital turnover through systems like SRM and the industrial internet platform. Prepaid accounts fluctuated slightly, while accounts payable and notes payable increased, demonstrating a strong ability to occupy supplier funds. Additionally, raw material reserves grew with business expansion, impacting turnover speed. M Company should continue leveraging its digital procurement platform and just-in-time supply model, control raw material inventory, and improve procurement efficiency.

3.2 Management of Working Capital for Production Channels

Table 2 shows that from 2018 to 2025, Company M's production channel working capital turnover period remained negative, ranging from -5.55 to -8.37 days, indicating effective use of external funds and relatively stable management. The continuous decline from 2018 to 2020 suggests that digital systems such as MES and SCADA improved production coordination and capital turnover. Through equipment interconnection, process visualization, and better coordination, the company was able to shorten production cycles and improve product circulation efficiency. After 2021, the indicator fluctuated between -6 and -8 days, showing that digitalization continued to improve production management, though the effect was limited. Meanwhile, the overall rise in

product scale indicates increased capi-tal occupation as business expanded. Overall, Company M has a solid foundation in production channel working capital management, but it still needs to strengthen production planning, process coordination, and inventory linkage to further realize the benefits of digitalization.

Table 2. Operating Capital Status of M Company's Production Channels (Unit: Billion Yuan) for the Period from 2018 to 2025

Year	Regard- ing the product	Other Receiva- bles	Employee Compen- sation	Other Payables	Operating income	Produc- tion channels consume working capital	Produc- tion channel turnover period (in days)
2018	20.40	29.71	57.88	33.46	2596.65	-41.23	-5.72
2019	15.96	27.13	64.36	38.01	2782.16	-59.28	-7.67
2020	18.75	29.74	69.55	45.01	2842.21	-66.07	-8.37
2021	24.07	31.04	75.35	42.88	3412.33	-63.12	-6.66
2022	25.19	22.11	71.52	43.22	3439.18	-67.44	-7.06
2023	31.71	21.82	90.76	44.43	3720.37	-81.66	-7.90
2024	28.64	20.77	91.61	36.87	4071.50	-79.07	-6.99
2025	42.36	31.97	96.45	48.23	4564.52	-70.41	-5.55

3.3 Management of Working Capital for Sales Channels

Table 3. Operating Capital Status of M Company's Sales Channels (in billions of yuan) for the period 2018 to 2025

Year	Inventory goods	Accounts Receiva- ble	Accounts Receiva- ble Bills	Advance Receipts	Operating income	Sales channels consume working capital	Sales channel turnover period (in days)
2018	186.00	193.90	125.60	162.30	2596.65	343.20	47.58
2019	220.47	186.60	47.69	167.80	2782.16	286.96	37.13
2020	217.19	229.80	53.05	0	2842.21	500.04	63.34
2021	336.36	246.40	47.85	0	3412.33	630.61	66.53
2022	347.53	282.40	47.58	0	3439.18	677.51	70.92
2023	352.92	328.80	55.22	0	3720.37	736.94	71.31
2024	489.69	358.00	67.19	0	4071.50	914.88	80.89
2025	478.35	404.50	52.47	0	4564.52	935.32	73.77

According to Table 3, From 2018 to 2025, Company M’s sales channel working capital turnover period increased from 47.58 to 73.77 days, indicating slower fund recovery and rising capital pressure. After a slight decline in 2018–2019, it rose sharply from 2020 and reached 80.89 days in 2024, making sales the most pres-sured link in working

capital management. Meanwhile, inventory and accounts receivable both increased, showing heavier inventory accumulation and more capital tied up in credit sales. Advances from customers fell to zero after 2020, further weakening the company's ability to occupy downstream funds. Although Company M improved sales coordination through intelligent warehousing, smart logistics, and inventory sharing, weaknesses remain in receivables management, inventory control, and sales collection.

4 Problems and Optimization Suggestions in the Working Capital Management of Company

4.1 Problems Existing in M Company's Working Capital Management

The procurement channel relies heavily on suppliers' commercial credit. The continuously negative working capital occupied by the procurement channel indicates that the company depends largely on accounts payable and notes payable to relieve financial pressure. Although this helps improve capital turnover efficiency, it also increases reliance on supplier funds and brings certain repayment risks[1].

Capital occupation in the production channel has increased. Although the working capital turnover period of the production channel has remained negative and overall management has been relatively effective, the overall increase in work-in-progress indicates higher capital occupation in production, suggesting room for further improvement in production planning and process coordination[3].

Capital occupation in the sales channel continues to expand. The overall working capital turnover period of the sales channel has increased, while inventory and accounts receivable have grown rapidly and advances from customers have fallen to zero. This indicates that the company still has deficiencies in customer credit management, accounts receivable collection, and inventory control, and that the sales channel has become the key factor restricting improvements in working capital management performance.

4.2 Suggestions for Optimizing M Company's Working Capital Management

Optimize procurement channel management. Strengthen supplier information sharing and coordination, improve procurement planning and inventory warning accuracy, reduce raw material overstock and prepayment occupation, and control reliance on supplier credit funds to enhance procurement risk resistance[2].

Strengthen production planning and process control. Improve make-to-order and flexible manufacturing, optimize production rhythm, shorten cycles, and enhance process coordination to speed up work-in-progress turnover and reduce capital occupation in production [6].

Strengthen sales channel fund management. Improve customer credit assessment and receivables management to raise collection efficiency; use intelligent warehousing

ing, smart logistics, and inventory sharing to optimize inventory and shipping, reduce overstock, and ease sales channel capital pressure [5].

5 Conclusion

Under the digital supply chain context, working capital management has shifted from traditional financial management to full-process collaborative management. This paper examines M Company's procurement, production, and sales channels. The findings show that digital supply chain solutions have improved working capital management efficiency in procurement and production but that the sales channel still faces issues such as high inventory, fast-growing accounts receivable, and slow fund recovery. This aligns with existing studies, which suggest that digitalization can improve working capital management, though the extent of improvement varies across channels[7]. Overall, M Company still faces challenges in supplier credit dependence in procurement, increased working capital in production, and inventory and receivables pressure in sales. Moving forward, the company should continue leveraging digital supply chains to enhance procurement coordination, optimize production control, and improve sales collection and inventory management to boost working capital efficiency and strengthen competitiveness.

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