

PROEN Corp Public Company Limited and Subsidiaries Management Discussion and Analysis Quarter 3 of 2024

Business overview

PROEN Corp Public Company Limited and its subsidiaries (“the Group”) operate in the field of Information Communication and Technology (ICT), Internet Data Center (IDC), Internet Service Provider (ISP), and Cloud Services, collectively called ICT business, which constitutes the primary source of revenue. Additionally, the Group undertakes telecommunications and infrastructure project contracting services. The Group’s key strategies include:

- Collaborating with partners to expand and develop data center service areas, including the provision of clean energy to sufficiently meet the rapidly increasing demands of cloud and AI technology sectors.
- Promoting comprehensive services by developing new products and services to meet the needs of existing customers, thereby enhancing value and building customer loyalty.
- Expanding the customer base within the telecommunications infrastructure sector.
- Increasing accessibility through the PROEN Power Partner Program and the PROEN Customer Loyalty Program.

External Environment Analysis

Market Overview

The demand for data center services is growing in line with the rising volume of data usage driven by technological innovations that play an increasingly significant role in the digital era.

The global data center service market is projected to expand by approximately 22% year-over-year (YOY), primarily driven by public cloud services. Similarly, Thailand’s data center market is expected to grow by around 24% YOY in 2024, with public cloud services seeing an expansion



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ISO/IEC 27001:2013



ISO 9001:2015

rate of approximately 29% YOY due to increased data usage among consumers and greater adoption of technology by large enterprises, SMEs, and startups.

Colocation services, which involve server hosting where providers supply space and internet connectivity for customers to place their own equipment, are anticipated to grow by about 14% YOY. This growth is supported by numerous organizations shifting to private cloud solutions for data management and the expansion of cloud regions by international providers within Thailand.

2023 Thailand Infrastructure as a Service (IaaS) Market Share

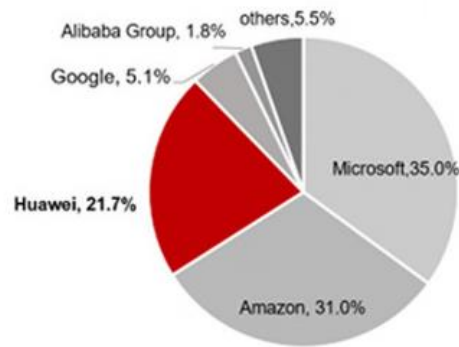


Figure 1 Market Share 2023 Thailand Cloud Infrastructure as a Service, Gartner

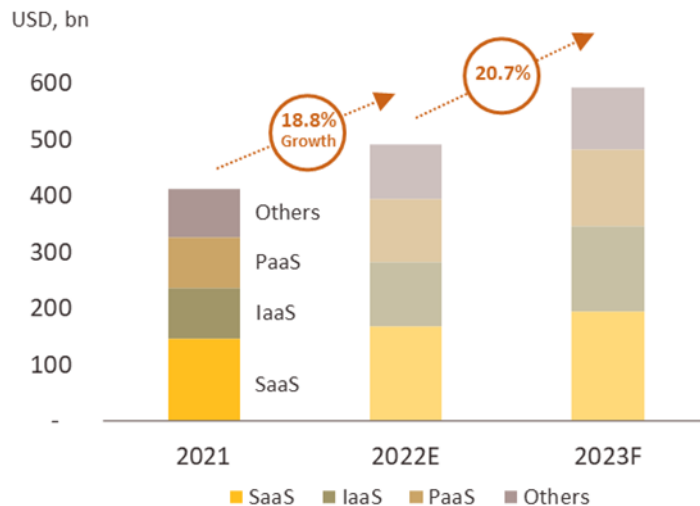


Figure 2 Global Public Service End-User spending by Cloud Type, Gartner, Krungsri Research



Currently, Singapore is considered the data center hub of ASEAN. However, government policies limiting the construction of new data centers have led to a shortage of data storage space to meet rising demand. As a result, data center providers in Singapore are starting to look at nearby countries, including Malaysia, Indonesia, and Thailand, as potential locations for new data center investments.

Although Thailand is an attractive location for investment, leading to a significant increase in foreign investments in data centers, additional government incentives and policies are still needed. These include extending tax benefits, providing additional incentives for data centers located in special economic zones, establishing an ecosystem that aligns with international standards, and enhancing workforce skills. Such measures would help attract more foreign investment and increase Thailand's competitiveness, positioning the country as a leading data center hub in ASEAN.

The growth of data centers has also led to an increase in electricity consumption and greenhouse gas emissions, making sustainability a critical issue for providers to address. Data centers are among the industries with high electricity usage and greenhouse gas emissions, posing significant challenges in managing energy consumption while maintaining electrical stability during peak traffic periods. Achieving sustainability goals involves enhancing energy efficiency, reducing cooling system energy usage, and increasing the proportion of clean energy sources. However, promoting efficient energy use among data center providers requires government policies, such as tax incentives, partnerships with data center providers, and the establishment of energy standards. These measures will help move Thailand's data centers closer to sustainability.

The growth trajectory of data centers, driven by global trends and increasingly evident in Thailand, has seen the global data center service market expanding rapidly, with projections indicating around 22% YOY growth in 2024. This expansion is fueled by both public cloud services and colocation services, in line with growing data usage across consumers, organizations, and businesses. In the digital age, technological innovations have generated massive amounts of data,



most of which is stored and processed in large data centers with extensive storage capacities and high connectivity, ensuring data is accessible at any time. International Data Corporation (IDC), a leading global market research and consulting firm specializing in telecommunications, forecasts that global data storage across networked devices such as mobile phones, computers, and data centers will increase from 10.1 zettabytes (ZB) in 2023 to 21.0 ZB by 2027, representing a compound annual growth rate (CAGR) of approximately 18.5%, with expectations of further increases in the coming years.

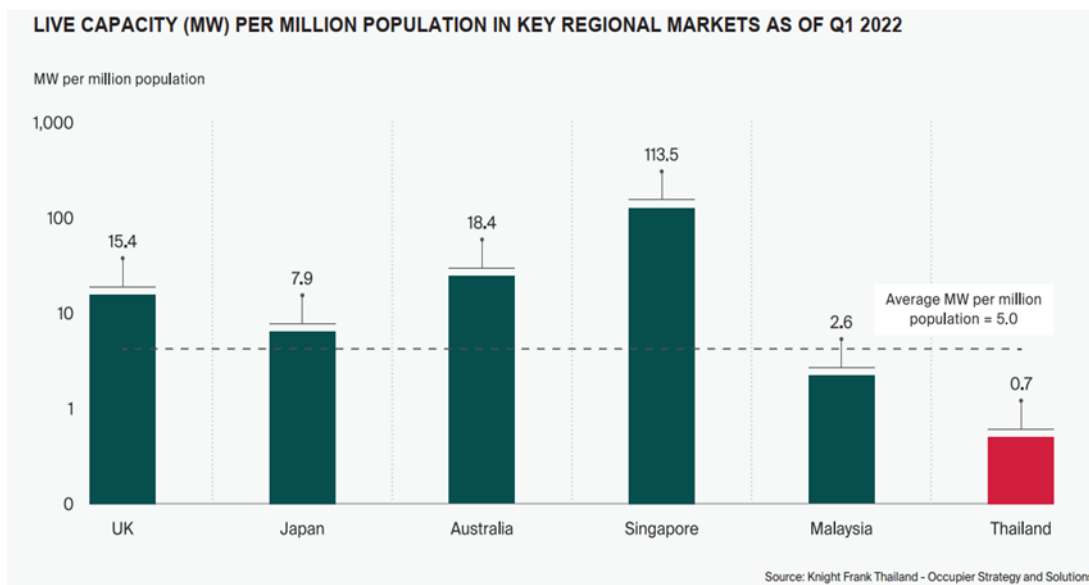


Figure 3 Live Capacity (MW) per Million Population Q1 2022, Knight Frank Thailand

The global public cloud service market is projected to grow by approximately 23% YOY, driven by increased data usage across both consumer and business sectors, especially due to the surge in AI applications. Consumer data usage, including personal data storage such as photos and documents, as well as social media, video/music streaming, and applications, is expected to grow at an estimated 21% CAGR from 2024 to 2029, according to Ericsson’s report on global mobile data usage. Business and enterprise sectors are also increasing their adoption of technology, including the Internet of Things (IoT), robotics, smart devices, and artificial intelligence (AI) technologies, particularly Generative AI, which became a widely discussed trend in 2023 and is anticipated to see further growth.



A McKinsey survey conducted from February 22 to March 5, 2024, of over 1,360 executives from leading companies worldwide, highlighted that AI usage in organizations has risen to 72%, compared to 55% the previous year. Use of Generative AI nearly doubled, increasing from 33% to 65%. Additionally, software developers are increasingly building applications on cloud platforms, as cloud providers continuously introduce new tools that assist with code review and testing, supporting seamless application development on the platform.

มูลค่าตลาด Data Center และ Cloud ของไทย

หน่วย : พันล้านบาท

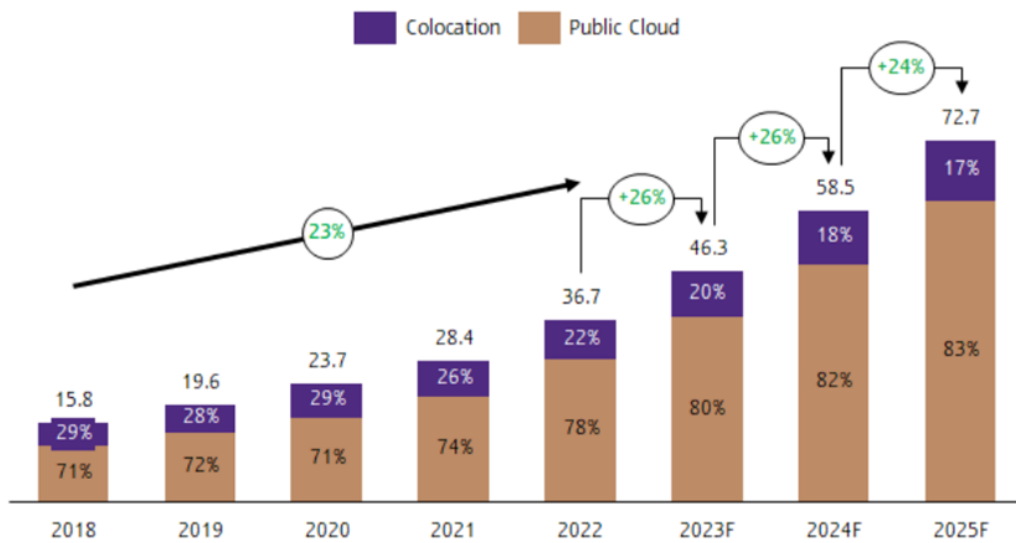


Figure 4 Market Value of Data Center and Cloud. Source: SCB EIC, Gartner, JP Morgan, Grand View Research and Business research

Amid the wave of data center investments positioning Thailand as a regional hub, the Thai data center service market is expected to experience significant growth, aligning with the expanding demand across the ASEAN market. According to Kasikorn Research Center, the Thai data center service market is projected to grow at an average annual rate of over 31.2%, while Malaysia's growth rate is estimated at around 36.8% over the next four years. The data center service market encompasses data storage and maintenance services, network system services, and data processing services.



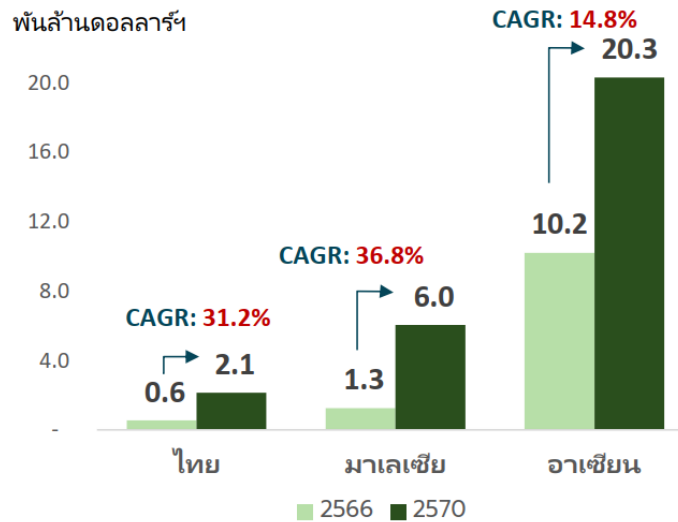


Figure 5: Market Value Trends of Data Center Services in Thailand Compared to Malaysia

(Source: EMIS, Mordor Intelligence, Kasikorn Research Center)

The growth rate of domestic cloud service usage in Thailand is expected to be around 37%. The main user groups are divided into two categories: Digital Natives and Enterprises. Digital Natives include Social Networking, E-Commerce, Fintech, Gaming, Digital Entertainment, and Travel/Hospitality (OTAs), while Enterprises consist of sectors like Communications and Media, FSI (Financial Services Industry), Retail, Manufacturing, and Natural Resources, which are the primary industries adopting cloud technology for business operations.

The structure of Thailand's digital service and software industry comprises three main segments:

1. Digital Service: This includes online transactions or services provided through digital platforms, such as information services, trading, and consulting. These platforms may be developed by the service provider or hosted on a central platform with a complete digital management system, such as marketplaces or social media. Key areas include Online Media, e-Retail (e-Commerce), e-Logistics, e-Tourism, e-Advertising, Fintech, HealthTech, and EdTech.
2. Software and Software Services: This involves the production, sales, services, and rental of software. Software is divided into on-premise solutions, where revenue is generated through licensing fees, and cloud-based software (Software as a Service: SaaS),



accessible via the web. Software services include system integration, customization, development, and consulting. Software businesses are categorized as:

- On-premise software for installation within the office or organization's network, without internet connectivity, generating revenue from selling or leasing software licenses.
 - Cloud-based software hosted on the developer's infrastructure (SaaS), allowing users to access applications over the internet, such as Microsoft Office 365 and Google Drive, with subscription-based pricing. Key players in this segment include System Integration (SI), Software Developers, and Consult/Training services.
3. Digital Content: This involves the production of digital content, information, or creative media in digital formats. It is divided into three main categories:
- Game Providers
 - Animation (including animated feature films, animated TV series, animation on VCD/DVD, mobile content, and visual effects)
 - Character businesses, which develop or design merchandise based on characters from animations.

The total market value of Thailand's digital service and software industry is approximately 440 billion Baht per year.

Operating result

The performance of the Group for the nine-month period ended September 30, 2024, recorded total revenue of 409.46 million Baht, a decrease of 153.48 million Baht, representing a decrease of 27.23% from the same period last year. This decline was due to a decrease in sales revenue by 99.64 million Baht and a decrease in service revenue by 70.14 million Baht, leading to a total decrease in sales and service revenue of 169.78 million Baht. The decline was attributed to delays in project bidding and customer project investments, along with the continued economic slowdown in Thailand. However, revenue from information technology services for Internet Data Center (IDC)



remained unchanged, while revenue from infrastructure projects increased by 16.60 million Baht. The Group's gross profit decreased by 37.25 million Baht, representing a decrease of 30.73%, resulting in a net loss of 39.52 million Baht. The company planned to closely monitor and adjust its operational plans to align with the current situation.

Business Operation Analysis

The cumulative performance comparison for the nine-month periods ending on September 30, 2024, and 2023, can be summarized as follows:

Operating Result (Unit : million Baht)	Quarter 3/2024 (Jan - Sep)		Quarter 3/2023 (Jan - Sep)		Change YoY	
	MB.	%	MB.	%	Increase (Decrease)	%
Revenue from Sale and Service	409.46	100.00%	562.64	100.00%	(153.18)	(27.23%)
Cost of Sale and Service	325.49	79.49%	441.42	78.46%	(115.93)	(26.26%)
Gross profit	83.97	20.51%	121.22	21.54%	(37.25)	(30.73%)
Other income	4.59	1.12%	2.63	0.47%	1.96	74.52%
Other losses	3.48	0.85%	-	-	3.48	100.00%
Selling expenses	15.74	3.84%	18.54	3.30%	(2.80)	(15.10%)
Administrative expenses	113.14	27.63%	69.49	12.35%	43.65	62.81%
Share of loss of associate	-	0.00%	2.84	0.50%	(2.84)	(100.00%)
Profit before interest and income tax expense	(43.80)	(10.70%)	32.98	5.86%	(76.78)	(232.81%)
Finance costs	5.67	1.38%	20.73	3.68%	(15.06)	(72.65%)
Profit before income tax expense	(49.47)	(12.08%)	12.25	2.18%	(61.72)	(503.84%)
Income tax (income) expense	(9.95)	(2.43%)	3.24	0.58%	(13.19)	(407.10%)
(Loss) profit for the period	(39.52)	(9.65%)	9.01	1.60%	(48.53)	(538.62%)



The performance comparison for the three-month periods ending September 30, 2024, and 2023, can be summarized as follows:

Operating Result (Unit: million Baht)	Quarter 3/2024 (Jul - Sep)		Quarter 3/2023 (Jul - Sep)		Change YoY	
	MB.	%	MB.	%	Increase (Decrease)	%
Revenue from Sale and Service	115.87	100.00%	234.68	100.00%	(118.81)	(50.63%)
Cost of Sale and Service	98.47	24.05%	190.96	33.94%	(92.49)	(48.43%)
Gross profit	17.40	4.25%	43.72	7.77%	(26.32)	(60.20%)
Other income	1.87	0.46%	1.41	0.25%	0.46	32.62%
Selling expenses	5.02	1.23%	5.00	0.89%	0.02	0.40%
Administrative expenses	35.87	8.76%	25.88	4.60%	9.99	38.60%
Share of loss of associate	-	0.00%	1.69	0.30%	(1.69)	(100.00%)
Profit before interest and income tax expense	(21.62)	(5.28%)	12.56	2.23%	(34.18)	(272.13%)
Finance costs	1.54	0.38%	5.23	0.93%	(3.69)	(70.55%)
Profit before income tax expense	(23.16)	(5.66%)	7.33	1.30%	(30.49)	(415.96%)
Income tax (income) expense	(4.88)	(1.19%)	1.65	0.29%	(6.53)	(395.76%)
Profit for the period	(18.28)	(4.46%)	5.68	1.01%	(23.96)	(421.83%)

For the performance results for the nine-month period from Jan - Sep 2024, the Group recorded a net loss of 39.52 million Baht. The primary reasons stemmed from a decline in business revenue, an increase in administrative expenses, provisions for expected credit losses, and changes in cash flow due to amendments in the debenture contract. This amendment extended the debenture redemption period by an additional two years and raised the interest rate from 6.50% per annum to 7.00% per annum.

For the performance results for the three-month period from Jul - Sep 2024, the Group had recorded a net loss of 18.28 million Baht for the period, an increase of 421.83% compared to the same period in the previous year. The main reasons for this increase were a decline in business revenue and a rise in administrative expenses.



Revenue, Cost, and Gross Profit

Operating Result (Unit: million Baht)	Revenue				Cost				Gross Profit			
	Jan - Sep 2024 (9 months)	Jan - Sep 2023 (9 months)	Increase (Decrease)	%	Jan - Sep 2024 (9 months)	Jan - Sep 2023 (9 months)	Increase (Decrease)	%	Jan - Sep 2024 (9 months)	Jan - Sep 2023 (9 months)	Increase (Decrease)	%
	ICT Business:											
Revenue from sale	44.28	143.92	(99.64)	(69.23%)	39.96	126.83	(86.87)	(68.49%)	4.32	17.09	(12.77)	(74.72%)
Revenue from service	220.32	290.46	(70.14)	(24.15%)	148.66	195.43	(46.77)	(23.93%)	71.66	95.03	(23.37)	(24.59%)
Total revenue from ICT business	264.60	434.38	(169.78)	(39.09%)	188.62	322.26	(133.64)	(41.47%)	75.98	112.12	(36.14)	(32.23%)
Infrastructure construction business:												
Revenue from construction contracts	144.86	128.26	16.60	12.94%	136.87	119.16	17.71	14.86%	7.99	9.10	(1.11)	(12.20%)
Total revenue from main business	409.46	562.64	(153.18)	(27.23%)	325.49	441.42	(115.93)	(26.26%)	83.97	121.22	(37.25)	(30.73%)

Operating Result (Unit: million Baht)	Revenue				Cost				Gross Profit			
	Quarter 3/2024 (3 months)	Quarter 3/2023 (3 months)	Increase (Decrease)	%	Quarter 3/2024 (3 months)	Quarter 3/2023 (3 months)	Increase (Decrease)	%	Quarter 3/2024 (3 months)	Quarter 3/2023 (3 months)	Increase (Decrease)	%
	ICT Business:											
Revenue from sale	4.86	47.22	(42.36)	(89.71%)	4.05	41.61	(37.56)	(90.27%)	0.81	5.61	(4.80)	(85.56%)
Revenue from service	75.24	114.54	(39.30)	(34.31%)	52.40	88.09	(35.69)	(40.52%)	22.84	26.45	(3.61)	(13.65%)
Total revenue from ICT business	80.10	161.76	(81.66)	(50.48%)	56.45	129.70	(73.25)	(56.48%)	23.65	32.06	(8.41)	(26.23%)
Infrastructure construction business:												
Revenue from construction contracts	35.77	72.92	(37.15)	(50.95%)	42.02	61.26	(19.24)	(31.41%)	(6.25)	11.66	(17.91)	(153.60%)
Total revenue from main business	115.87	234.68	(118.81)	(50.63%)	98.47	190.96	(92.49)	(48.43%)	17.40	43.72	(26.32)	(60.20%)

Revenue

For the nine-month period from Jan - Sep 2024, the Group reported primary business revenue of 409.46 million Baht, which had decreased by 153.18 million Baht, representing a decrease of 27.23% compared to the same period last year. This reduction was primarily due to a drop in sales and service revenue, which had decreased by 169.78 million Baht, representing a decrease of 39.09%, resulting from a decline in customer demand for IT equipment sales, software, and project services. However, revenue from infrastructure clients had increased by 16.60 million Baht, representing an increase of 12.94%, as project revenue from year 2023 had been recognized based on milestones achieved in early year 2024. The additional revenue was recognized from new projects in Q3/2024 and continued to secure new projects.

For the three-month period from Jul - Sep 2024, the Group reported primary business revenue of 115.87 million Baht, a decrease of 118.81 million Baht, representing a decrease of 50.63% compared to the same period last year. This decline was primarily due to a decrease in sales and service revenue, which decreased by 81.66 million Baht, representing a decrease of 50.48%,



resulting from a decrease in customer demand for IT equipment sales, software, and project services. Revenue from infrastructure clients also decreased by 37.15 million Baht, representing a decrease of 50.95%, as the revenue recognition for new projects in Q3/2024 had only begun based on milestone achievements, which required site surveys and design work before project initiation.

Cost of sales and Gross Profit

For the nine-month period from Jan - Sep 2024, the cost of sales decreased in proportion to the decline in revenue, resulting in a total gross profit of 83.97 million Baht, a decrease of 37.25 million Baht, representing a decrease of 30.73%.

For the three-month period from Jul - Sep 2024, the cost of sales decreased in proportion to the decline in revenue, resulting in a total gross profit of 17.40 million Baht, a decrease of 26.32 million Baht, representing a decrease of 60.20%.



Selling and Administrative Expenses

For the nine-month period from Jan - Sep 2024, selling expenses amounted to 15.74 million Baht, a decrease of 2.80 million Baht, representing a decrease of 15.10%, as the Group implemented a policy to reduce expenses. Administrative expenses totaled 113.14 million Baht, an increase of 43.65 million Baht, representing an increase of 62.81% compared to the same period last year. This increase was primarily due to financial advisory fees related to capital increase issuance and the provision for expected credit losses. However, the Group closely monitoring debt collection from these receivables.

For the three-month period from Jul - Sep 2024, selling expenses amounted to 5.02 million Baht, a decrease of 0.02 million Baht, representing a decrease of 0.04%. Administrative expenses totaled 35.87 million Baht, an increase of 9.99 million Baht, representing an increase of 38.60% compared to the same period last year. This increase was primarily due to financial advisory fees related to capital increase issuance.

Other income

For the nine-month period from Jan - Sep 2024, other income amounted to 4.59 million Baht, an increase of 1.96 million Baht, representing an increase of 74.52%, primarily due to interest income from loans to related parties.

For the three-month period from Jul - Sep 2024, other income amounted to 1.87 million Baht, an increase of 0.46 million Baht, representing an increase of 32.62%.

Other losses

For the nine-month period from Jan - Sep 2024, the Group recognized an additional loss of 3.48 million Baht due to changes in cash flow resulting from amendments to the debenture contract. These amendments included extending the debenture redemption maturity by 2 years and increasing the bond interest rate from 6.50% per annum to 7.00% per annum.



Finance costs

For the nine-month period from Jan - Sep 2024, the finance costs amounted to 5.67 million Baht, decreasing of 15.06 million Baht, representing a decrease of 72.65% compared to the same period of the previous year. The finance costs arose from the issuance of debentures amounting to 500 million Baht to be used for the preparation of constructing a new Internet Data Center and for working capital. The interest portion used for the Internet Data Center construction project will be recorded as an asset under construction, and this resulted in a decrease of interest expenses.

For the three-month period from Jul - Sep 2024, the finance costs amounted to 1.54 million Baht, decreasing of 3.69 million Baht, representing a decrease of 70.55% compared to the same period of the previous year. The finance costs arose from the issuance of debentures amounting to 500 million Baht to be used for the preparation of constructing a new Internet Data Center and for working capital. The interest portion used for the Internet Data Center construction project will be recorded as an asset under construction, and this resulted in a decrease of interest expenses.

Income tax income (expense)

For the nine-month period from Jan - Sep 2024, income tax income amounted to 9.95 million Baht, an increase of 13.19 million Baht, representing an increase of 407.10% compared to the same period last year. This increase was due to the recognition of deferred tax assets from accumulated losses that can be carried forward to offset taxable profits in the future.

For the three-month period from Jul - Sep 2024, income tax income was 4.88 million Baht, an increase of 6.53 million Baht, representing an increase of 395.76% compared to the same period last year. This increase resulted from the recognition of deferred tax assets from accumulated losses that can be carried forward to offset taxable profits in the future.



Statement of financial position

Statement of Financial Position (Unit: million Baht)	30 Sep 24	31 Dec 23	Increase (decrease)	%Increase (decrease)
Assets				
Current assets	750.00	1,024.21	(274.21)	(26.77%)
Non-current assets	950.43	776.92	173.51	22.33%
Total assets	1,700.43	1,801.13	(100.70)	(5.59%)
Liabilities and Equity				
Current liabilities	606.74	1,036.47	(429.73)	(41.46%)
Non-current liabilities	529.38	205.36	324.02	157.78%
Total liabilities	1,136.12	1,241.83	(105.71)	(8.51%)
Equity	564.31	559.30	5.01	0.90%
Total liabilities and equity	1,700.43	1,801.13	(100.70)	(5.59%)

As at September 30, 2024, the total assets amounted to 1,700.43 million Baht, decreasing by 100.70 million Baht, representing a decrease of 5.59% from December 31, 2023. This reduction was due to an increase in collections from trade receivables. Liabilities had also decreased by 105.71 million Baht, representing a decrease of 8.51% as a result of a 100 million Baht debenture repayment.



Statement of Cash Flow

Statement of Cash Flows (Unit : million Baht)	30 Sep 24	30 Sep 23	Increase (decrease)	%Increase (decrease)
Net cash generated from (used in) operating activities	45.72	(170.07)	215.79	(126.88%)
Net cash used in investing activities	(164.53)	(321.64)	157.11	(48.85%)
Net cash (used in) generated from financing activities	(41.58)	45.30	(86.88)	(191.79%)
Net increase in cash and cash equivalents	(160.39)	(446.41)	286.02	(64.07%)
Opening balance of cash and cash equivalents	222.53	550.57	(328.04)	(59.58%)
Closing balance of cash and cash equivalents	62.14	104.16	(42.02)	(40.34%)

As at September 30, 2024, the Group had cash and cash equivalents totaling 62.14 million Baht. Net cash generated from operating activities amounted to 45.72 million Baht, primarily due to increasing collections from trade receivables. Net cash used in investing activities was 164.53 million Baht, attributed to investments in constructing a new Internet Data Center. Net cash used in financing activities totaled 41.58 million Baht, stemming from payments for debenture repayments and related extend costs of 102.86 million Baht, as well as repayments of loans from financial institutions amounting to 110.99 million Baht. However, the Group received 139.23 million Baht from bank loan and 46.25 million Baht from issuing additional stocks shares.

Sustainability Development

The Company has a policy to operate its business with the belief that long-term success requires ethical management and adherence to good corporate governance principles, as well as a focus on sustainable growth. This involves balancing economic, social, and environmental considerations. Social responsibility is a key focus for the Group, which is firmly committed to collaborating with stakeholders while considering potential impacts on shareholders, employees, customers, partners, and surrounding communities. The Company also fosters and encourages employees to be socially responsible by participating in activities that benefit society, continuously caring for and preserving the environment sustainably. This approach aligns with the principles set forth by the Stock Exchange of Thailand, driven by a commitment to sustainable business practices.



Strategy	Tactic
Develop products, innovations, and advanced technologies to meet the diverse needs of customers.	Elevate customer collaboration to a partnership level to deliver valuable products and services to the market.
	Design and gather insights information to analyze and accurately meet customer needs.
Enhance the potential of people to align with the business's sustainability direction.	Encourage the development of individual skills for employees to design innovative products that appropriately meet the diverse needs of customers.
	Promote behaviors and enhance employee knowledge to improve work processes that align with eco-efficiency goals.
Manage energy use within the organization to achieve eco-efficiency.	Encourage the use of alternative energy within the organization.
	Promote the use of environmentally friendly materials.

