Palo Alto Networks (PANW US)

Cybersecurity giant poised for new round of growth

Palo Alto Networks (PANW) is a global cybersecurity provider which helps secure enterprise users, networks, clouds and endpoints. It operates business in three key areas, including network security, cloud security, and Security Operation Center (SOC), and its leadership has been recognized in 23 product categories by Gartner, Frost & Sullivan, and GigaOm as of 3QFY24 (July year-end). In our view, PANW is well positioned to benefit from the ever-growing demand for cybersecurity, and its broad and continuously enhanced product portfolio is on track to help reduce customers' total cost of ownership (TCO) by improving operational efficiency and eliminating the need for siloed point products. On a FY23-26E revenue CAGR of 16%, we are forecasting a non-GAAP net profit CAGR of 23%. PANW has a strong financial profile that adheres to the "Rule of 50", which in our view demonstrates its balanced yet industry-leading growth profile in terms of revenue and profitability. We value PANW at US$391.7 per share based on 16.0x 2024E EV/Sales. Initiate coverage at BUY.

- **Cybersecurity market: growing TAM driven by industry demand.** The overall threat landscape is intensifying and the need for cybersecurity software continues to increase. PANW mainly operates its businesses in three key sub-sectors within the cybersecurity market: network security, cloud security, and SOC. According to Omdia, Dell'Oro Group, Gartner, IDC and company data, the TAM of these markets increased from US$38bn in 2018 to US$104bn in 2023, with a 2018-2023 CAGR of 22%, and is expected to expand to US$210bn by 2028E with a 2023-2028E CAGR of 15%, driven by the increased adoption of Secure Access Service Edge (SASE), rising demand for cloud security, as well as for transformation from traditional SOC to a more automated and real-time one.

- **Accelerated Platformization strategy should support further market share gains.** PANW has accumulated a high-quality customer base: as of 2QFY24, 79% of Global 2000 (G2K) customers had transacted with PANW on at least two of its platforms, and 57% on all three. The acceleration of its Platformization strategy since 2QFY24, backed by PANW's quality customer base and strong product portfolio, should enhance PANW's market share gains over the long-term. We see increased adoption of next-generation security (NGS), acceleration in Platformization strategy implementation, international expansion, and potential price hikes with the empowerment of GenAI all are drivers for PANW's future revenue growth.

- **Poised to benefit from the booming GenAI related opportunities.** PANW could potentially benefit from the rapid development of GenAI opportunities in two aspects, in our view: 1) with AI, the attacks are coming at an even faster pace, and the demand for PANW's products and services could increase; and 2) with the empowerment from GenAI, better user experience and improvement in operating efficiency could potentially lead to a price hike for PANW's products and services.

- **Initiate coverage with BUY and TP of US$391.7.** We value PANW based on 16.0x 2024E EV/Sales, which is above the US software and IT services industry average at 10.2x, but is broadly in line with the average of 14.2x for SaaS peers (CrowdStrike, ServiceNow, and Zscaler) that adhere to "Rule of 50" (2024E FCF margin + 2024-26E revenue CAGR > 50%). Two key rationales include: 1) PANW has balanced revenue and profitability growth; 2) PANW has a leading position in security software industry. Our target valuation translates into 50/40/31x FY24E/25E/26E P/FCF multiple, as compared to industry average 2024/2025/2026E P/FCF multiples of 59/34/27x for SaaS companies.

BUY

Target Price	**US$391.70**
Up/Downside	**19.9%**
Current Price	**US$326.81**

Stock Data

Mkt Cap (US$ mn)	104,334.1
Avg 3 mths t/o (US$ mn)	786.1
52w High/Low (US$)	376.90/207.57
Total Issued Shares (mn)	319.3

Source: FactSet

Shareholding Structure

Vanguard Group Inc	29.3%
Blackrock Inc.	24.7%

Source: Nasdaq

Share Performance

	Absolute	Relative
1-mth	0.5%	3.1%
3-mth	12.1%	2.9%
6-mth	-4.6%	-15.0%

Source: FactSet

12-mth Price Performance
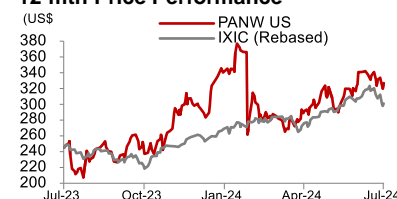
Source: FactSet

Earnings Summary

(YE 31 Jul)	FY22A	FY23A	FY24E	FY25E	FY26E
Revenue (US$ mn)	5,502	6,893	8,003	9,212	10,773
YoY growth (%)	29.3	25.3	16.1	15.1	16.9
Net profit (US$ mn)	(267.0)	439.7	2,431.8	1,235.9	1,632.9
Adjusted net profit (US$ mn)	802.5	1,440.0	1,926.6	2,182.1	2,653.0
YoY growth (%)	30.8	79.4	33.8	13.3	21.6
EPS (Reported) (US$)	(2.63)	1.28	6.87	3.47	4.56
Consensus EPS (US$)	na	na	6.92	3.58	4.82

Source: Company data, Bloomberg, CMBIGM estimates

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Investment thesis

Cybersecurity market: large TAM with mounting industry demand

The overall threat landscape is intensifying and the need for cybersecurity software continues to increase. PANW mainly operates its businesses in three key sub-sectors within the cybersecurity market: network security, cloud security, and SOC. According to data published by Omdia, Dell'Oro Group, Gartner and IDC, the TAM of the three markets has increased from US$38bn in 2018 to US$104bn in 2023, with a 2018-2023 CAGR of 22%, and is expected to increase to US$210bn by 2028E with a 2023-2028E CAGR of 15%, driven by the increased adoption of SASE, rising demand for cloud security, as well as for transformation from traditional SOC to a more automated and real-time one.

PANW: highly recognized industry player with a high-quality customer base

As of 3QFY24, PANW's leadership had been recognized in 23 product categories, by Gartner, Frost & Sullivan, and GigaOm, in 23 different cybersecurity markets, including nine in network security, eight in cloud security, and six in SOC. It provides solid support to the implementation of Platformization strategy and is able to help enterprise customers lower TCO, which we think should aid further market share gains over the long-term.

Compared with peers, we think PANW has a wider product coverage and a larger high-quality customer base, which also in turn enable PANW to generate a larger revenue scale. PANW's well-recognized leadership across three markets is driving strong adoption of PANW platforms in its target G2K markets: as of 2QFY24, 79% of the G2K customers had transacted with PANW on at least two of the platforms, and 57% on all three, which were up from 73% and 47%, respectively, in 2QFY22.

Accelerated platformization strategy should support further market share gains

Management cited the shift to platformization as one of the drivers for the company's success over the past five years. Given that annual recurring revenue (ARR) from fully platformized customers are far higher than that from average landed customers, and that enterprise customers have high willingness to lower their TCO and increase ROI, management decided to accelerate the Platformization strategy from 2QFY24 onward, which in our view may weigh on near-term billings and revenue growth, but should enhance PANW's industry leadership over the long-term. We are expecting a normalization and reacceleration trend in billings and revenue growth in FY26E, after the acceleration of the Platformization strategy reaches a full anniversary. The increased adoption of NGS products and services, acceleration in Platformization strategy, international expansion, and potential price hikes with the empowerment of GenAI all servesas drivers for PANW's future revenue growth, in our view.

Poised to benefit from the booming GenAI-related opportunities

In terms of opportunity brought by the rapid development of GenAI, PANW could potentially benefit in two aspects, in our view: 1) with AI, the attacks are coming at an even faster pace, and the demand for PANW's products and services is increasing; and 2) with the empowerment from GenAI, better user experience and improvement in operating efficiency could potentially lead to a price hike for PANW's products and services.

Strong financial profile provides support for upside in valuation

PANW has a strong financial profile adhering to the "Rule of 50", which demonstrates that PANW has established a competitive edge over peers, and has the ability to maintain a balanced yet industry-leading growth profile measured by revenue and profitability. Also, in terms of valuation, although PANW's current valuation of 29.9x FY25E EV/FCF is not low versus its own five-year average of 26.4x, there is still room to increase, in our view, when compared with the companies with a similar "FCF margin + revenue CAGR" profile (Fig. 2).

Figure 1: "FCF Margin + revenue CAGR" comparison for companies at different scales
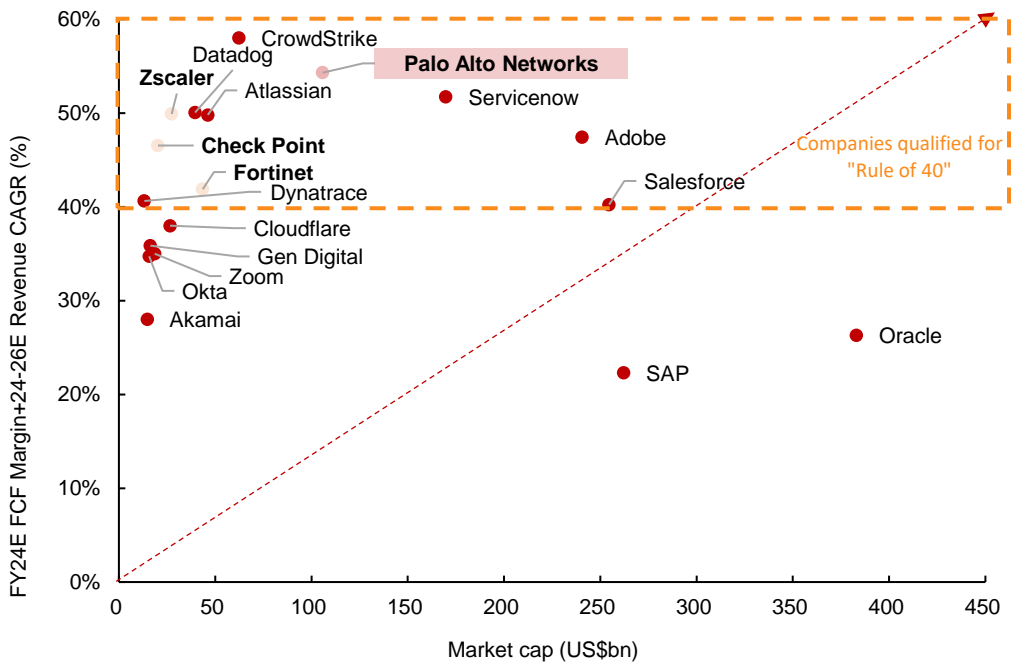
Source: Bloomberg, CMBIGM
Note: data as of 27 July, 2024 market close

Figure 2: "FCF Margin + revenue CAGR" and EV/FCF valuation comparison
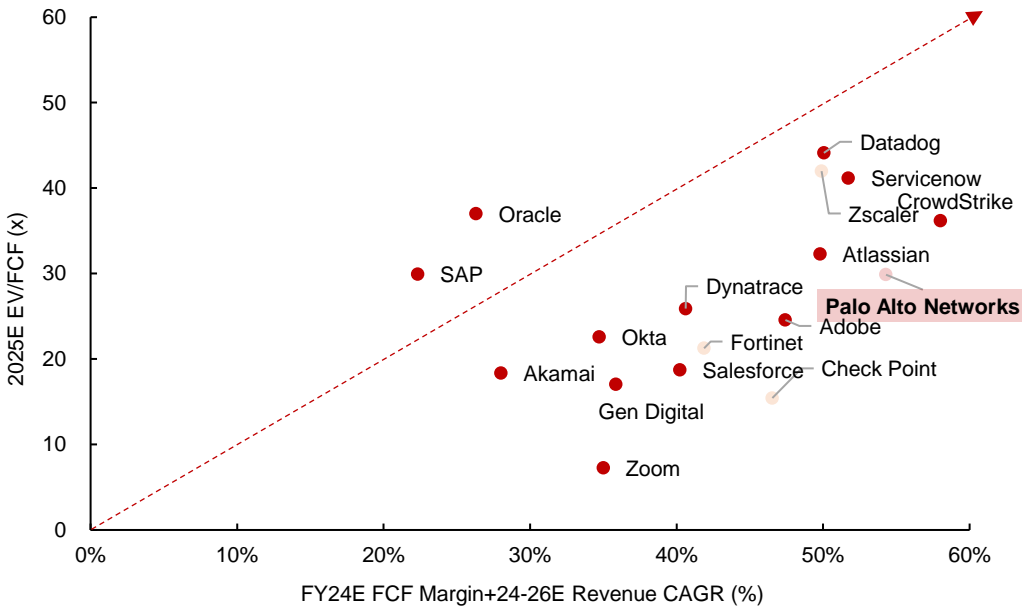
Source: Bloomberg, company data, CMBIGM
Note: data as of 27 July, 2024 market close

Company overview

Founded in 2005, PANW is a global cybersecurity provider with a vision of a world where each day is safer and more secure than the one before. PANW empowers enterprises, organizations, service providers, and government entities to protect themselves against sophisticated cyber threats. PANW's cybersecurity platforms and services help secure enterprise users, networks, clouds and endpoints by delivering comprehensive cybersecurity solutions backed by industry-leading artificial intelligence and automation. PANW focuses on delivering value in four fundamental areas: network security, cloud security, security operations, and security consulting. The company's security solutions are designed to reduce customers' TCO by improving operational efficiency and eliminating the need for siloed point products.

PANW introduced its first firewall in 2007 and has rapidly become the leader in next-generation enterprise security. The company then went public in July 2012. In 2013, it began to focus on cloud security and endpoint protection functions based on the next-generation firewalls. Since 2017, PANW has increased its investment in cloud and AI to develop integrated and automated security solutions from endpoint to cloud. In 2019, PANW launched Prisma, a new cloud security suite, and in the same year, they introduced the extended detection and response (XDR) concept and launched Cortex XDR, which gathers endpoint, network, and cloud data for detection and response. Through a series of acquisitions and self-development, PANW continues to improve its product line to develop an integrated cloud security platform and ecosystem. The company has ultimately formed three core business pillars – Strata (network security), Prisma (cloud security) and Cortex (security operations).

Figure 3: Overview of PANW's three platforms

Source: Company data, CMBIGM

PANW is a pioneer in next-generation firewalls. The company's single-channel architecture has significant advantages in reducing processing delays and improving efficiency, and performs better in the seventh application layer. The company continues to outperform the competition and was 11-time Leader in the Gartner Magic Quadrant for Network Firewalls. In network security, PANW's Prisma Access product line integrates three products, i.e., Cloud Workload Protection Platform (CWPP), Cloud Security Posture Management (CSPM) and Cloud Access Security Broker (CASB). Comprehensive features can be managed and configured through PANW's single platform, while other cloud security products require multiple management consoles to manage different types of user connections and applications.

On the cloud security side, Prisma Cloud provides security practitioners with visibility into the entire application pipeline, enabling security teams to trace thousands of issues reported in the runtime directly back to a few issues in the code phase, dramatically

improving the efficiency of issue discovery and resolution. Comprehensive, unified platform tools inherently guarantee data richness and native integration for process automation.

On the security operations side, PANW can leverage a shared data lake to gain complete context and intelligence across all services, enabling AI and machine learning applications to automatically remediate incidents and inline to stop zero-day threats. The company was the first to introduce the XDR concept, which extends detection beyond the endpoint to provide more visibility and contextual information, eliminating security silos with a holistic detection and response strategy.

Compared with other security vendors, PANW has an edge in product comprehensiveness and integration strength. Its portfolio of platforms consolidates best-in-class capabilities under a single, unified cybersecurity solution. The platforms cover every defense vector with security tools that share intelligence and work together—from prevention to detection and response—to stop the most complex threats. The company is now continuing to strengthen the Platformization strategy.

Figure 4: PANW: business acquisitions helped strengthen Platformization

Year	Company	Business
2023	Talon Cyber Security	Provider of specialized enterprise browser
2023	Dig Security	Offering cloud data security solutions
2023	Zycada Networks	Platform offering e-commerce software solutions for businesses
2022	Cider Security	Provider of networking, managing, and other security services
2021	Bridgecrew	Cloud infrastructure security provider
2020	Sinefa	Cloud-based enterprise traffic monitoring management solution provider
2020	Xpanse	Solutions for network risk assessment and management
2020	Crypsis	Incident response & threat management solutions for enterprises
2020	CloudGenix	Provider of Software-defined WAN solutions
2019	Aporeto	Container security solutions provider
2019	Zingbox	Cloud-based IoT security solutions to prevent threats on internet
2019	PureSec	Security solution for server-less architecture and applications
2019	Twistlock	Enterprise security and monitoring for container-based applications and data
2019	Demisto	Automated incident response & forensics platform solutions
2018	Redlock	Machine learning-based cloud-infrastructure monitoring and security automation
2018	Secdo	Cyber incident validation, investigation and remediation
2018	Evident.io	Platform offering security and compliance automation for public clouds
2017	LightCyber	Behavioral attack analytics-based insider & outsider threat detection
2015	CirroSecure	CASB based cloud security solutions
2014	Cyvera	Threat prevention solutions for endpoints
2014	Morta Security	Countering advanced cyber threats

Source: Company data, CMBIGM

PANW is seeing growing adoption among top customers for its Platformization approach. According to company data, as of 2QFY24, 79% of the G2K customers had adopted more than two of PANW's platforms, and the average life time value (LTV) per G2K customer with two platforms had surpassed US$2mn, which was over five folds of that for a single-platform G2K customer. Also, 57% of the G2K customers had adopted all the three platforms, and the average LTV per G2K customer with three platforms had surpassed US$18mn, which was over 40 folds of that for a single-platform G2K customer.

Figure 5: Platformization approach is seeing growing adoption among top customers
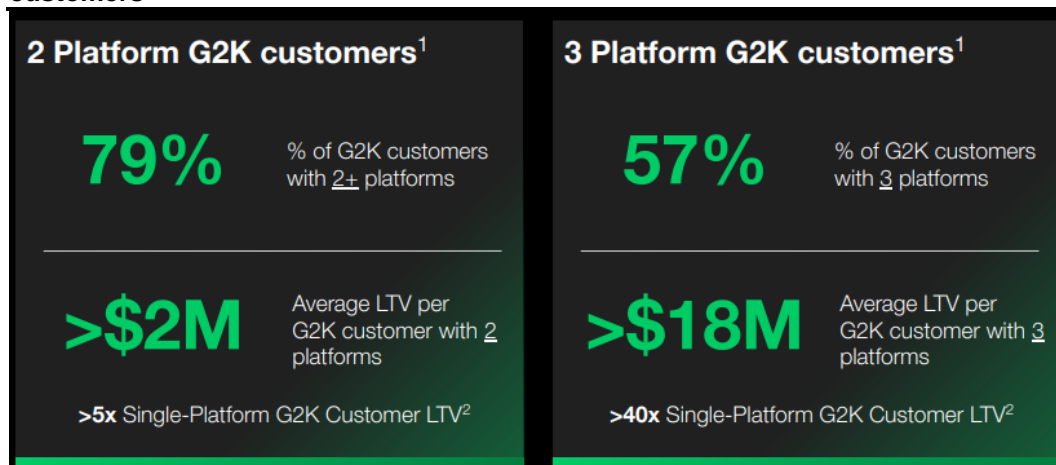
Source: Company data, CMBIGM
Note: The three platforms are Strata, Prisma, and Cortex

# Cybersecurity: mounting industry demand with rising need for lower TCO

The overall threat landscape is intensifying and the need for cybersecurity software continues to increase. PANW mainly operates its businesses in three key sub-sectors within the cybersecurity market: network security, cloud security, and Security Operation Center (SOC). According to Omdia, Dell'Oro Group, Gartner, IDC and company data, the total TAM of the three markets has increased from US$38bn in 2018 to US$104bn in 2023, with a 2018-2023 CAGR of 22%, and is expected to increase to US$210bn by 2028E with a 2023-2028E CAGR of 15%, driven by the increased adoption of SASE, increasing demand for cloud security, as well as for transformation from traditional SOC to a more automated and real-time one.

However, when dealing with the mounting cybersecurity threats, the TCO is high. Enterprise customers have tried to solve cybersecurity challenges by buying point solutions, and the average number of cybersecurity solutions at large companies is ~75, per Microsoft, resulting in complexity and duplication, and there is a rising demand to lower the TCO and increase the ROI. As of 3QFY24, PANW had established leadership in 23 product categories in 23 different cybersecurity markets, including nine in network security, eight in cloud security, and six in SOC. It provides solid support for the implementation of Platformization strategy and is able to help enterprise customers lower TCO, which we think should aid further market share gains over the long-term.

Compared with peers, we think PANW has a wider product coverage and a larger high-quality customer base, which in turn enable it to generate a larger revenue scale. PANW's gross margin still has room to further expand over the long-term, aided by the enlarging scale effect. The expansion of GPM, combined with the optimization in operating expense ratios aided by the unleashing of operating leverage, driven by enhanced customer relationship and deepening of the Platformization strategy, should help drive operating margin expansion over the long-run, in our view.

Cybersecurity: mouting industry demand driving TAM expansion

The overall threat landscape is intensifying and the need for cybersecurity software continues to increase. There is elevated attacker motivation, with CyberCrime Magazine highlighting that cybercrimes cost the world US$8tn on an annual basis in 2023. The evolution of technology has enabled attacks at scale, with over 10mn people and over 1,700 organizations affected by supply chain attacks in 2022. According to Atlas data cited by PANW, the number of malicious programs totaled 1.3bn in 2023, up by 20 folds compared to that in 2014. Moreover, attacks are happening faster than organizations can respond: according to *Unit 42 Cloud Threat Report*, average days from "compromise" to "exfiltration attacks" (the time span from when a system or network is infiltrated to when data exfiltration attacks occur) were shortened from 44 days in 2021 to 5 days in 2023.

Figure 6: The situation of network security is intensifying
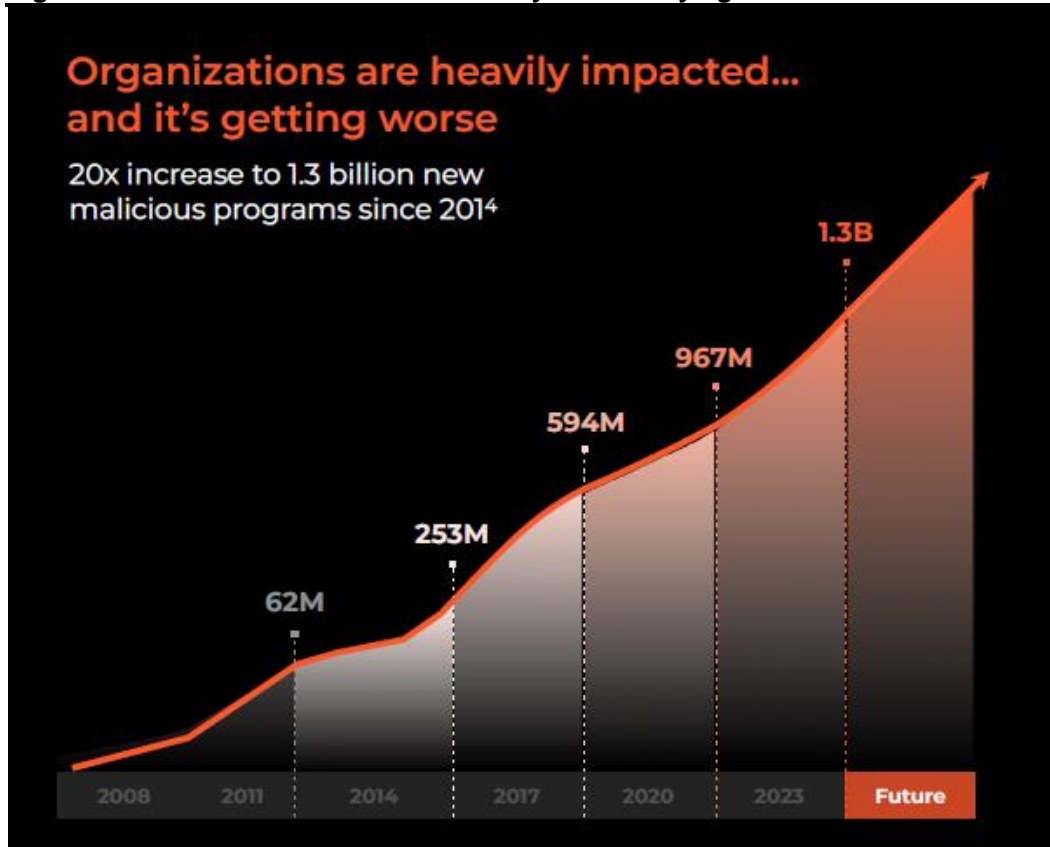
Source: Atlas, Company data, CMBIGM

PANW mainly operates its businesses in three key sub-sectors within the cybersecurity market: network security, cloud security, and security operations. Based on data published by Omida, Dell'Oro Group, Gartner, and IDC: 1) Network security is currently the most mature market with the largest TAM, reaching US$45bn in 2023 with a 2018-2023 CAGR of 19%, and with the evolving trend of zero trust, total market size is expected to reach US$80bn in 2028, with a 2023-2028 CAGR of 12%; 2) the security operation market is transforming from a traditional status to a more autonomous one with market size totalling US$48bn in 2023 and expected to achieve a 2023-2028 CAGR of 13%; 3) the ramp-up of cloud security market is still at the early stage and is expected to deliver the fastest 2023-2028E CAGR of 29%, with market size to potentially expand to US$40bn in 2028. Based on PANW's revenue and our calculation, PANW accounted for 6.8% of the TAM in 2018, and its market share grew to 7.2% in 2023.

Figure 7: Measuring TAM of PANW in security market

The security related industry that PANW has entered	Representative subsectors within the industry	2018 TAM	2023 TAM	2028E TAM	2018-2023 CAGR	2023-2028 CAGR
		(US$bn)				
Network security -> Zero Trust	Adv. Threat, VPN, IOT/OT, SWG, DLP, ZTNA, AIOps, SD-WAN, SASE, CASB, ADEM	19	45	80	19%	12%
Cloud security -> Code to Cloud Platform	CWP, SCA, CNS, IaC, CDS, SAST, CI/CD, CIEM, Secrets Scanning, WAAS, Web App FW	2	11	40	41%	29%
Security Ops -> Autonomous Security Ops	SIEM, MTH, XDR, Threat Intel, ASM, Network Intel, SOAR, Vuln Mgmt.	17	48	90	23%	13%
Total TAM		**38**	**104**	**210**	**22%**	**15%**
PANW's revenue and implied market share*		**US$2.6bn (6.8%)**	**US$7.5bn (7.2%)**			

Source: Omdia, Dell'Oro Group, Gartner, IDC, company data, CMBIGM estimates
Note: 1) PANW's revenue is calculated on a calendar year basis; 2) revenue in 2018 is calculated by adding up revenue from 3QFY18-2QFY19; revenue in 2023 is calculated by adding up revenue from 3QFY23-2QFY24; 3) VPN – Virtual Private Network, IOT/OT – Internet of Things/Operational Technology, SWG – Secure Web Gateway, DLP – Data Loss Prevention, ZTNA – Zero Trust Network Access, AIOps – AI for IT Operations, SD-WAN – Software-Defined Wide Area Network, SASE – Secure Access Service Edge, CASB – Cloud Access Security Broker, ADEM – Autonomous Digital Experience Management, CWP – Cloud Workload Protection, SCA – Software Composition Analysis, CNS – Communication and Network Security, IaC – Infrastructure as Code, CDS – Cross Domain Solution, SAST – Static Application Security Testing, CI/CD – Continuous Integration/Continuous Deployment, CIEM – Cloud Infrastructure Entitlement Management, WAAS – Web Application and API Security, SIEM – Security Information and Event Management, MTH – Multi-Technology Hybridization, XDR – Extended Detection and Response, ASM – Attack Surface Management, SOAR – Security Orchestration, Automation, and Response.

Network security: firewall market is seeing stable growth while SASE is the key driver for future growth

Within the network security market, firewall is largely stable, while the ML-powered next-generation firewall and cloud-delivered secure access service edge (SASE) are the key growth drivers for the industry in the next stage. PANW is a solid market leader in the stable firewall market, per Dell'Oro, with a 27.5% market share in 3Q23, and PANW was ranked a leader by Gartner in the single-vendor SASE market. The increased adoption of SASE should fuel the growth of overall network security market in the coming years, in our view.

According to IDC, the worldwide firewall market size is estimated to have reached US$20.3bn in 2023, up 7.5% YoY, and the market is expected to reach US$22.7bn in 2025E, with a 2023-2025E CAGR of 6%. Within the worldwide firewall market, Dell'Oro estimates PANW took a 27.5% market share in 3Q23, up 4ppts YoY, and ranked the first in the market.

Figure 8: Worldwide: market size and growth of firewall market
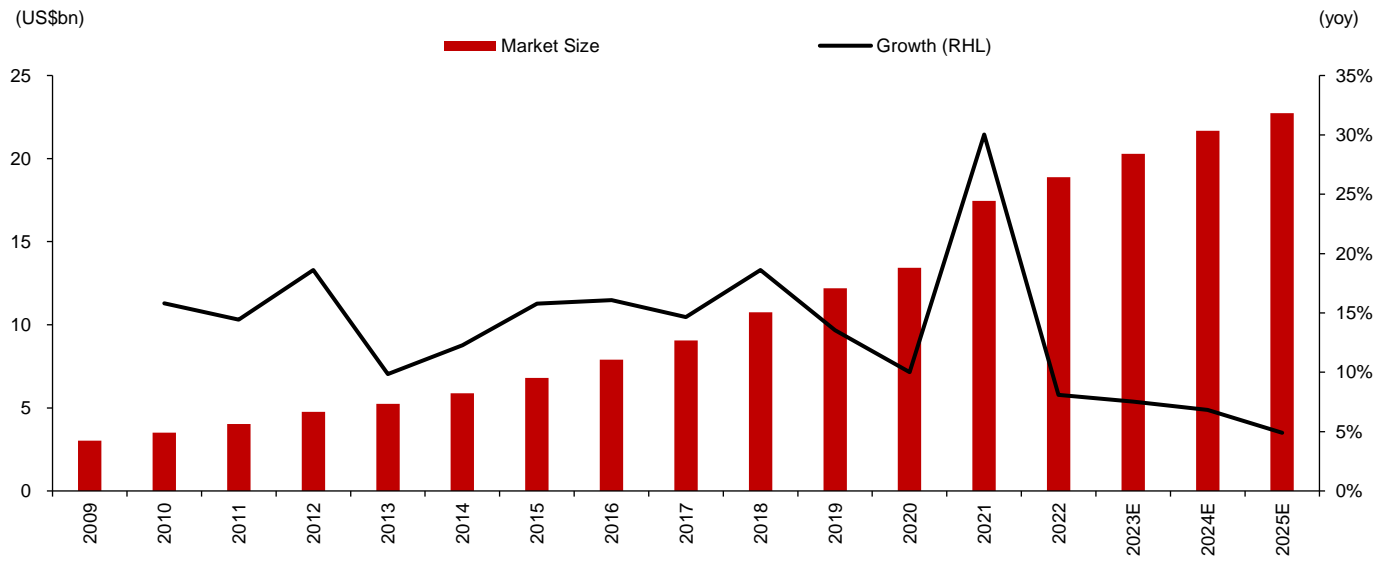
Source: IDC, Dell'Oro, CMBIGM

SASE is a relatively new concept that was first introduced by Gartner in August 2019. The fundamental idea behind SASE is to transform the established network security stack from a centralized architecture based on data centres to a design that "pushes down" identity management to endpoint devices. This allows the security architecture to better support new business scenarios in digital transformation, such as edge computing and hybrid cloud, with dynamic services, software as a service (SaaS), and distributed data processing.

Figure 9: Detailed breakdown of key business pillars within SASE market
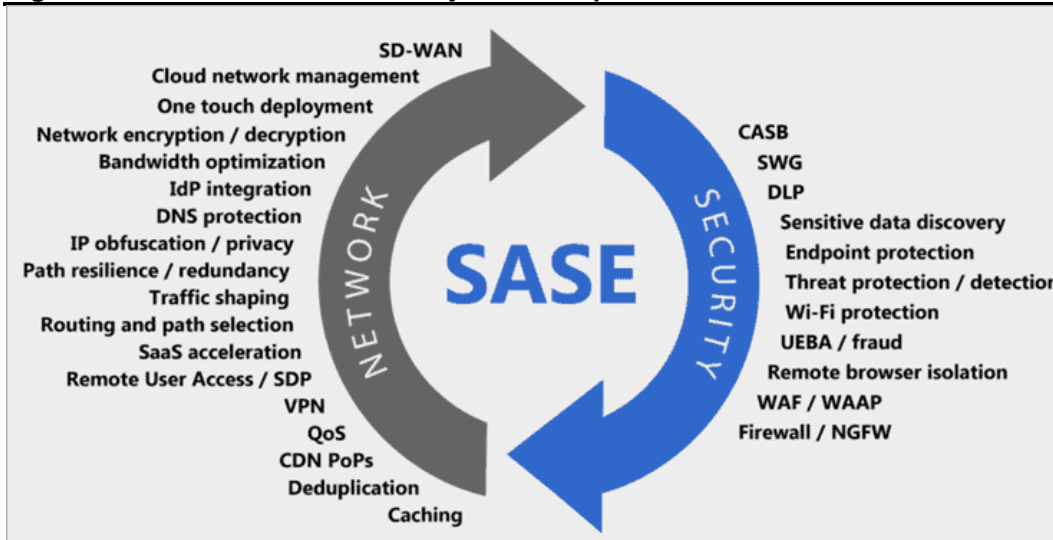

Source: Trustgrid, CMBIGM

Note: SD-WAN – Software-Defined Wide Area Network, DNS – Domain Name System, QoS – Quality of Service, CDN PoPs – Content Delivery Network Points of Presence, UEBA – User and Entity Behaviour Analytics, WAF/WAAP – Web Application Firewall/Web Application and API Protection.

The concept of SASE aligns with the zero-trust security architecture and can be executed within the SASE framework. It represents a convergence trend in enterprise network and security architecture, integrating security and networking for any type of endpoint, without the need for proxies on devices, VPN connections, or rerouting all traffic back to the cloud. Gartner ranked PANW a leader in magic quadrant for Security Service Edge (SSE), SD-WAN, single-vendor SASE, and endpoint protection platform.

Figure 10: SASE convergence trend
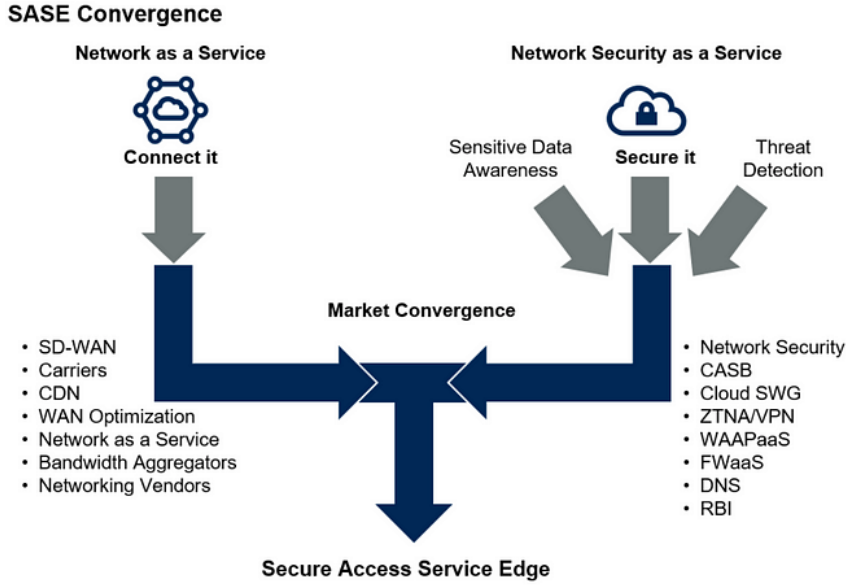
Source: Gartner, CMBIGM

Figure 11: Magic Quadrant for SSE

Source: Gartner, CMBIGM

Figure 12: Magic Quadrant for SD-WAN

Source: Gartner, CMBIGM

Figure 13: Magic Quadrant for Single-Vendor SASE

Source: Gartner, CMBIGM

Figure 14: Magic Quadrant for endpoint protection platform

Source: Gartner, CMBIGM

For network security, there is increased integration for real-time security, and PANW has developed a zero-trust network security platform with best-in-class products to meet evolving demand. PANW has obtained leadership in nine product categories for network security platform across hardware, software and SaaS, according to research published by Gartner and Forrester. We believe the next transformation in network security will centre on unified management and experience, and PANW's zero-trust network security is well positioned to riding on the growth tide.

Figure 15: PANW: zero trust network security platform
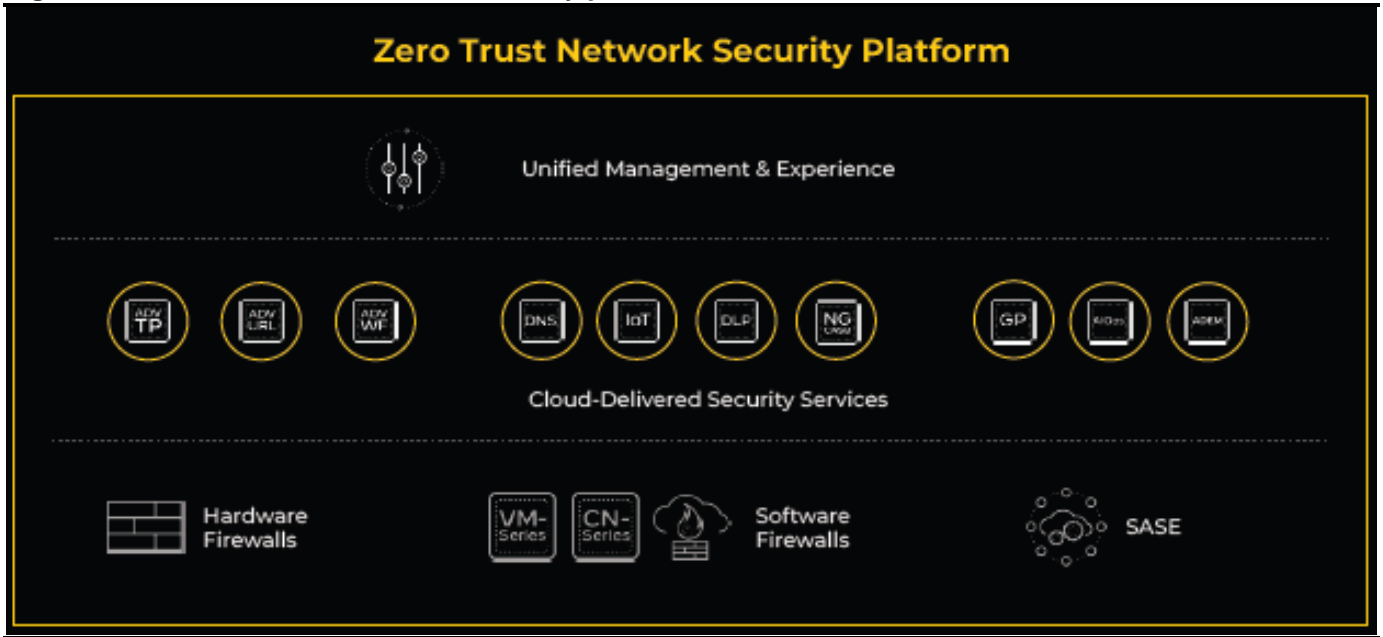
Source: Company data, CMBIGM

Moreover, the introduction of network security copilot by PANW should further enhance user experience, and the increase in user adoption should help drive long-term revenue growth, in our view. According PANW's company presentation, customers with full network security platform reached ~1,700 by the end of FY23, up from ~800 in FY21, and the number of services attached per customer has risen from 2.8 in FY21 to 3.4 in FY23. Aided by the capability to deliver enterprise-wide zero trust security platform related services, as well as through embracing the opportunity brought by the adoption of integrated security services, PANW's network security platform business development is well on track, in our view.

Figure 16: Copilot could enhance the ease of use of cybersecurity solution products
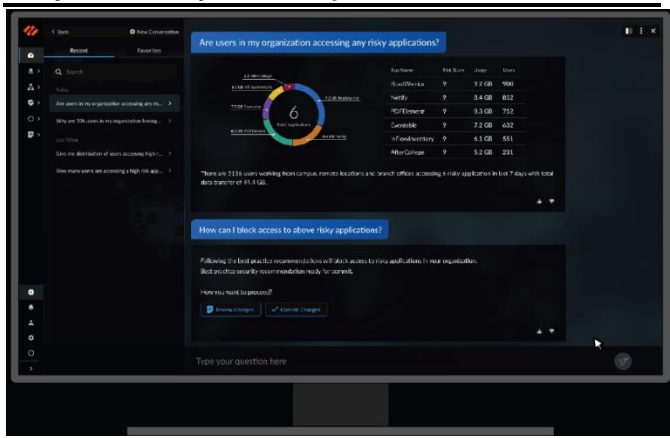
Source: Company data, CMBIGM

Figure 17: PANW: Both the no. of customers and the no. of services attached has potential to increase
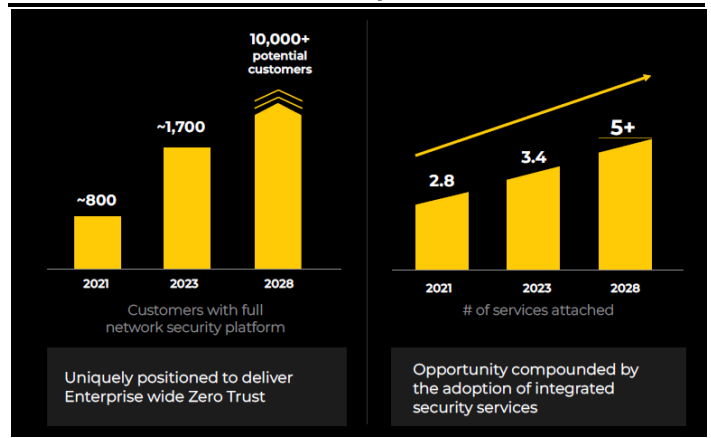
Source: Company data, CMBIGM

Cloud security: an emerging market with rapid revenue growth

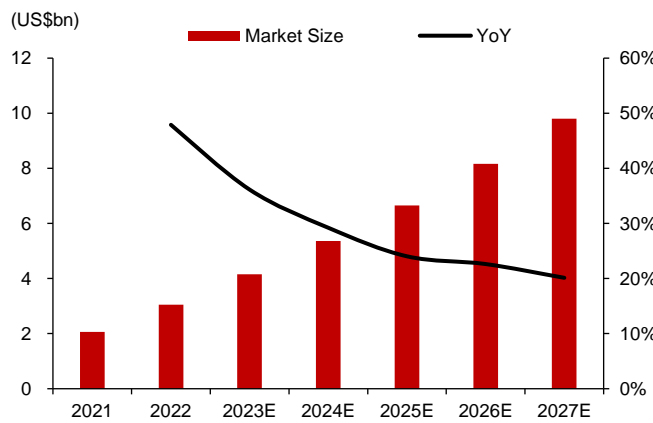According to Frost & Sullivan, global cloud workload protection market totalled US$4.2bn in 2023, up 36% YoY, and is expected to achieve a 2023-2025E CAGR of 27%. Compared with the contribution from security related spending in overall IT spending, that of cloud security spending in total IaaS and PaaS market has the potential to further increase, in our view, which also indicates that the overall cloud security market is still at the early stage of development. Based on IDC data, as a percentage of total IT spending, security related services accounted for c.10% in 2023E, and this compared to c. 1.5% for that of cloud workload security market in IaaS and PaaS market.

Figure 18: Global cloud workload protection platform market size

Source: Frost & Sullivan, CMBIGM

Figure 19: Global: cloud workload security market size as % of IaaS and PaaS market
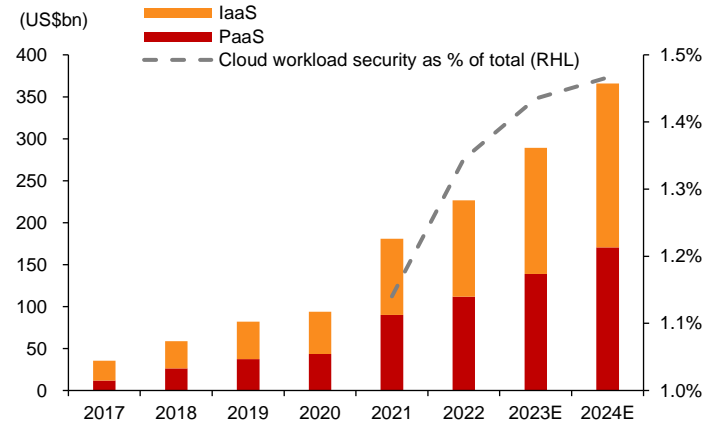
Source: iResearch, Wind, CMBIGM

PANW took leadership in eight product categories in the cloud security market in 1Q24, per research delivered by GigaOm and Frost & Sullivan, including DevSecOps, Cloud Native Application Protection Platform (CNAPP), Cloud Security Posture Management (CSPM), Policy as Code, Cloud Workload Security, Container Security, Cloud Infrastructure Entitlement Management (CIEM), and Data Security Posture Management (DSPM).

Figure 20: Frost Radar: Best Cloud Workload Protection Platforms in 2023
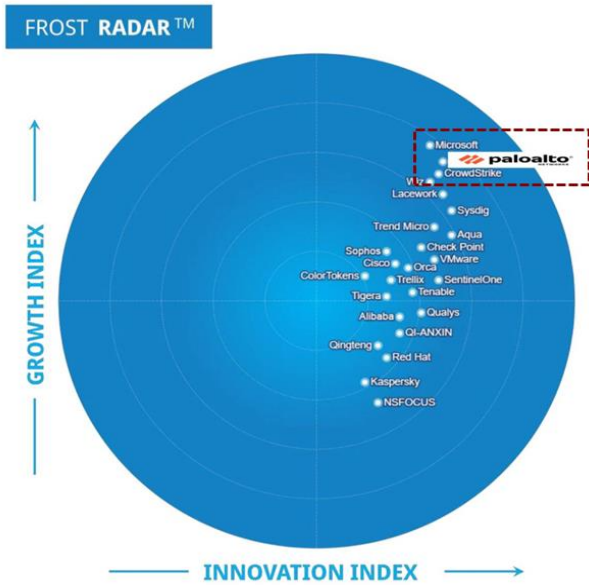
Source: Frost & Sullivan, CMBIGM

Figure 21: The Forrester Wave Cloud Workload Security Magic quadrant (1Q24)

Source: Frost & Sullivan, CMBIGM

Nowadays, organizations are building and using more applications, while securing applications requires a "Code to Cloud" approach, and PANW's opportunity lies in delivering an AI-driven cloud security platform. PANW has seen a trend that customers are expanding rapidly into multiple modules as they adopt the full cloud security platform. Credit consumption should grow along with the expansion across multiple modules, and the number of customers that are using more than five of PNAW's cloud security modules increased from ~80 in FY21 to ~400 in FY23, according to the company.

Figure 22: PANW: the opportunity ahead for cloud security
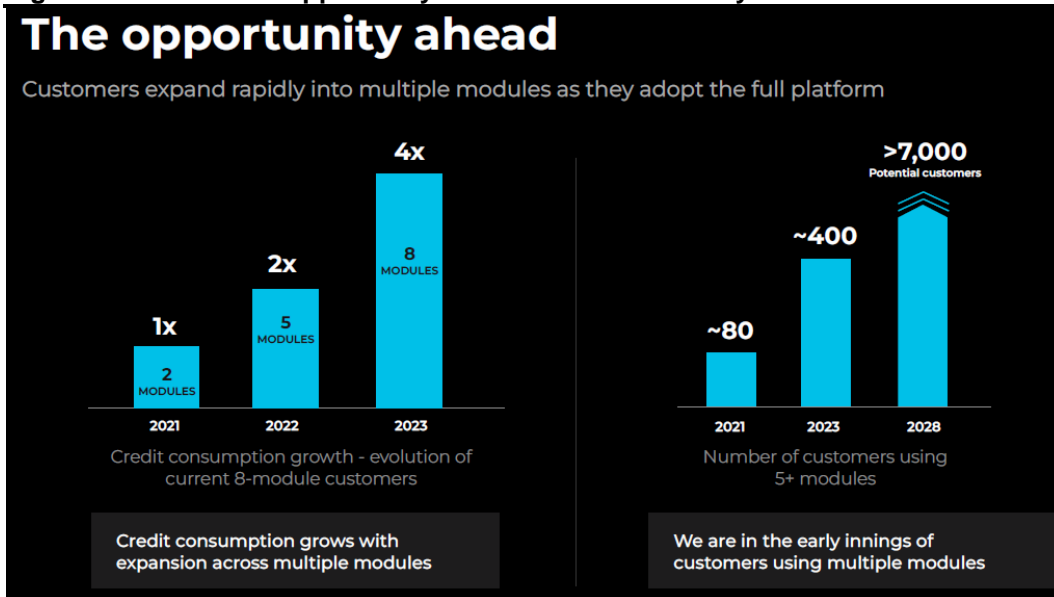
Source: Company data, CMBIGM

SOC: the need for real-time outcomes propels fundamental transformation

Fragmented stack, threats happening at an even faster pace, as well as not enough SOC analysts are the pain points of the SOC industry, and these pain points are driving the demand for transformation from traditional operation process to a more automated and real-time one, which is also driving the TAM growth for the market. PANW has been recognized leadership in six product categories within the SOC market by Gartner, Frost & Sullivan, and GigaOm. The increase in the number of Cortex customers, the migration of customers from Cortex non-XSIAM services offerings to XSIAM services offerings, as well as the addition of more modules to the AI-driven SecOps platform should all drive PANW's SOC revenue growth, in our view.

SOC is seeing three key pain points: 1) fragmented stack leaves processing to a human analyst (93% of SOCs were still dependent on manual process in 2021, per IDC); 2) threats are happening at an even faster pace; and 3) human-driven SOC tools are far too slow and there are not enough SOC analysts globally to keep pace with the threats. The need for real-time outcomes propels fundamental transformation, and real-time security operations require a single data platform powered by AI and automation.

Figure 23: PANW: development roadmap of SOC products
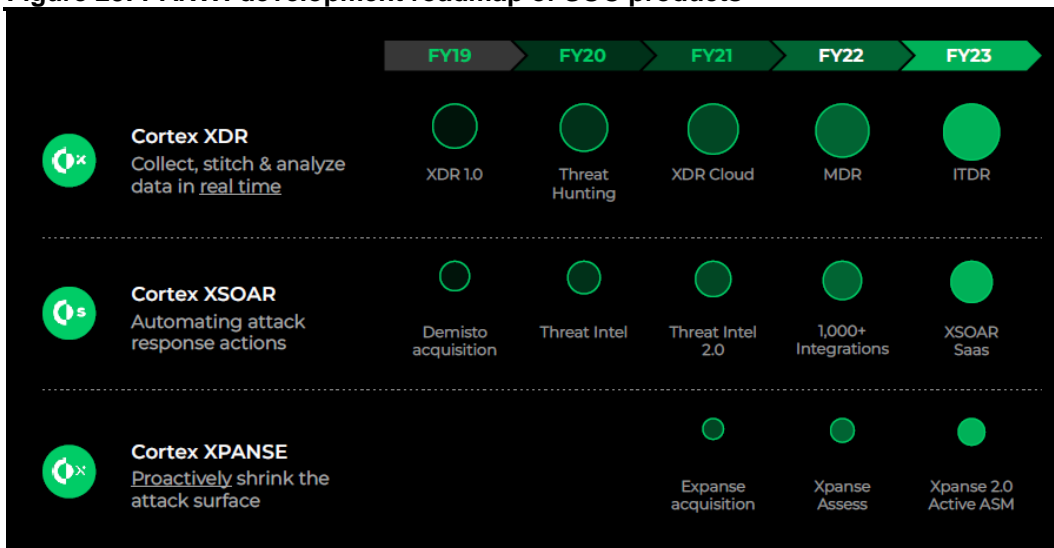
Source: Company data, CMBIGM

PANW delivers the next generation of security automation, security analytics, endpoint security, and attack surface management solutions through its Cortex portfolio, which includes Cortex XSIAM (AI Security automation platform), Cortex XDR (for prevention, detection, and response to complex cybersecurity attacks on the endpoint), Cortex XSOAR (for security orchestration, automation, and response), and Cortex Xpanse (for attack surface management).

Figure 24: Overview of PANW's SOC products

| Product	Introduction	Features
Cortex XSIAM	Transform SOC with an AI-driven platform	Security Information & Event Management; AI - Driven Analytics; Embedded Automation; User Behaviour Analytics; Threat Intelligence Management; Attack Surface Management; Incident Management; Cloud Security Operations
Cortex XPANSE	Secure and shrink the attack surface	Attack Surface Management Automation; Ransomware Exposure Remediation; Vulnerability Testing; Unmanaged Cloud Security; Third-Party Attack Surface Management; M&A Cybersecurity Diligence

Cortex XDR	Accelerate threat detection and response	Endpoint Security; Extended Detection and Response; AI Detection Analytics; Vulnerability Management; Identity Threat Detection and Response; Embedded Forensics
Cortex XSOAR	Automate security operations	Integrated Case Management; Threat Intel Management; Malware Analysis & Response; Rapid Breach Response; Network Security Operations; SaaS, On-Prem and Multitenant Support

Source: Company data, CMBIGM

PANW has been recognized leadership in six product categories within the SOC market by Gartner, Frost & Sullivan, and GigaOm, including: Endpoint Protection Platforms (EPP), XDR, SOAR, Attack Surface Management (ASM), autonomous SOC, and Managed Detection and Response (MDR)

Although PANW's Cortex XSIAM was only launched in 2022, it has already driven outcomes for its customers and see a rapid increase in customer adoption. Before enterprises adopt XSIAM, the median time to resolve (MTTR) a security related issue was 2-3 days, or even months in some corner cases, according to customer inverviews made by PANW, while the MTTR has significantly imporved to 16 mins to 5 hours after XSIAM adoption.

Figure 25: Cortex XSIAM can efficiently help enterprises lower MTTR
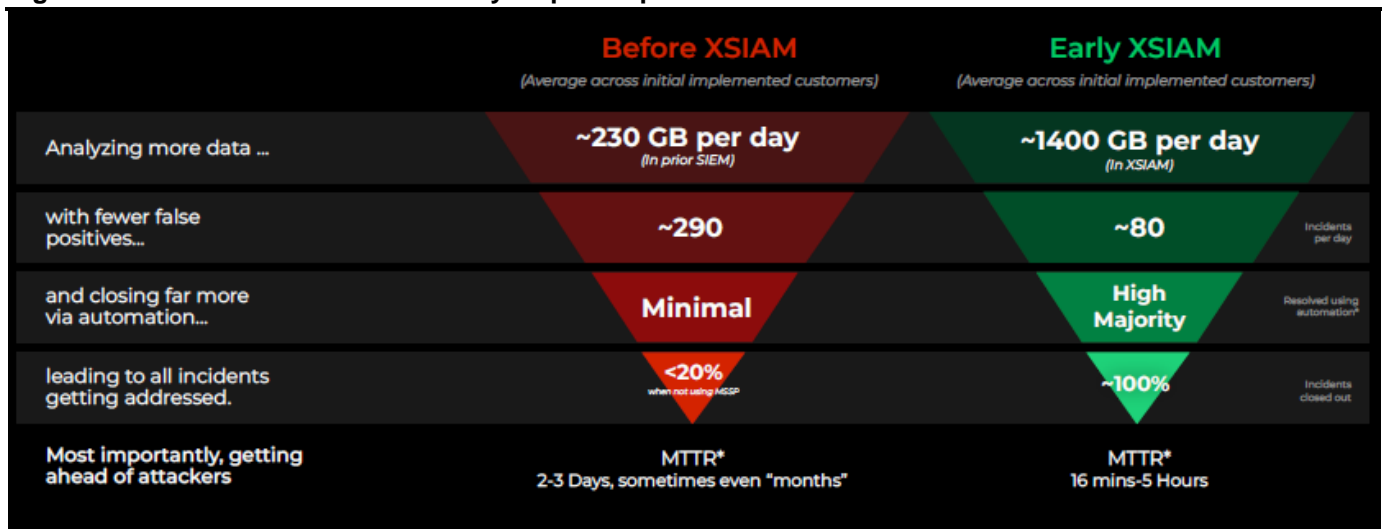
Source: Company data, CMBIGM
Note: MTTR: Median time to resolve

Regarding customer adoption of Cortex and XSIAM, PANW highlighted that: 1) accumulative bookings surpassed US$200mn in FY23, and further increased to US$400mn in 3QFY24; 2) the number of Cortex customers reached over 5,100 in FY23, up from 2,600 in FY21; and 3) with existing Cortex customers moving to XSIAM, their ARR will expand >3 times. The increase in the number of Cortex customers, the migration of customers from Cortex non-XSIAM services offerings to XSIAM services offerings, as well as the addition of more modules to the AI-driven SecOps platform should all drive PANW's SOC revenue growth, in our view.

Figure 26: Future growth opportunities of Cortex
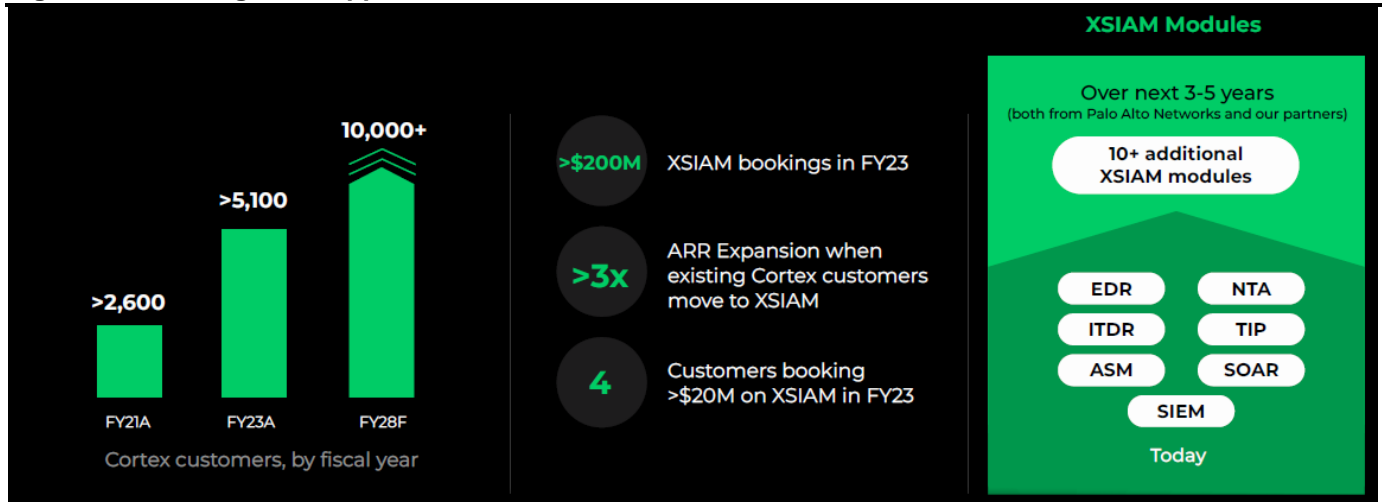
Source: Company data, CMBIGM

Fragmented security solution resulted in high TCO and the demand for higher ROI is rising

According to Microsoft, the average number of cybersecurity solutions at large companies is ~75, resulting in complexity and duplication. Enterprise customers have tried to solve cybersecurity challenges by buying point solutions, and are burdened with stitching together disparate products and data, and facing the problem of overlapping among multiple vendors' products. The situation that security in enterprise customers' estate is fragmented resulted in a high TCO, thus fostering a rising demand to lower TCO and increase ROI.

PANW: a leading player within cybersecurity industry with the largest high-quality customer base

Compared with peers, we think PANW has a wider product coverage and a larger high-quality customer base, which also in turn enable PANW to generate a larger revenue scale. PANW's gross margin still has room to further expand over the long-term, aided by the enlarging scale effect. The expansion of GPM, combined with the optimization in operating expense ratios with the unleashing of operating leverage, driven by enhanced customer relationship and deepening of the Platformization strategy, should help drive operating margin expansion over the long-run, in our view.

In terms of customer positioning, PANW's integrated platform solution has strong competitive edges in large organizations, and it had served over 80% of G2K companies as of 4QFY23, compared to 69% for Fortinet. CrowdStrike and Zscaler have focused more on small and medium-sized organization customers due to their relatively modular products, in our view.

Figure 27: US cybersecurity: the no. of G2K customers served in FY23
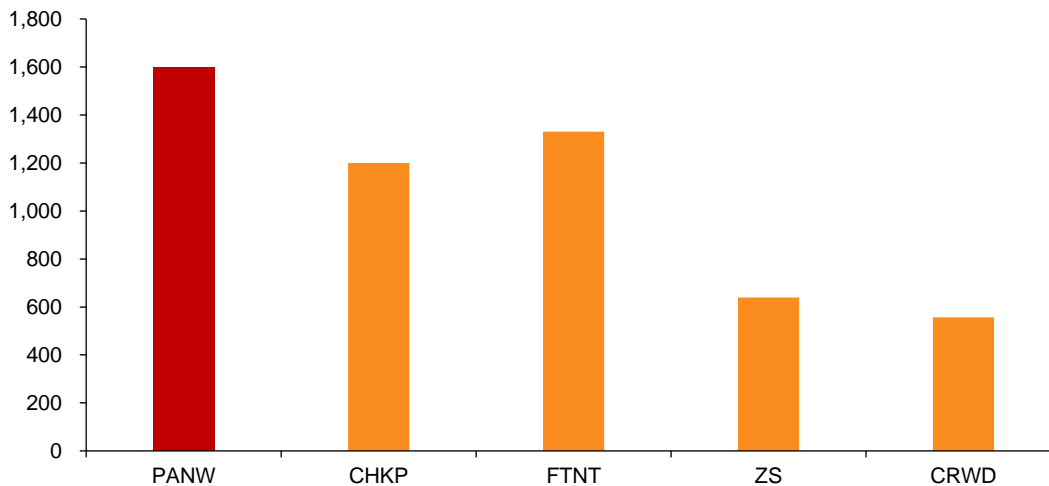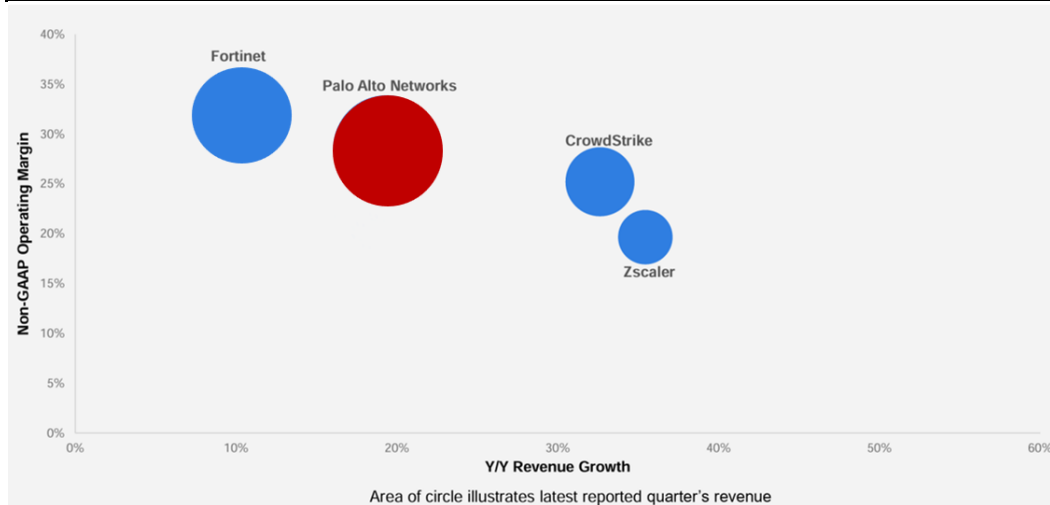

Source: Company data, CMBIGM
Note: 1) companies mentioned within this figure: Check Point (CHKP US); Fortinet (FTNT US); Zscaler (ZS US); CrowdStrike (CRWD US); 2) CRWD's customer count is as of 31 Jan 2023; 3) ZS and PANW's fiscal year ended 31 July; 4) FTNT's fiscal year ended 31 Dec.

In terms of revenue scale, PANW is the highest among peers, realizing a total revenue of US$6.9bn in FY23, followed by Fortinet with total revenue of US$5.3bn in FY23. CrowdStrike and Zscaler's total revenue size are relatively smaller, with revenues in FY23 amounting to US$3.1bn and US$1.6bn respectively.

Figure 28: US cybersecurity: revenue size, growth and non-GAAP OPM comparison

Source: Company data, CMBIGM
Note: The size of the circle represents the size of the latest quarter's revenue

In FY23, the whole industry showed a certain downward trend in revenue growth, reflecting customers' optimization behaviour in IT spending. Cloud-native security vendors Zscaler and CrowdStrike recorded relatively faster growth under a low base. The GPM of PANW was relatively lower than peers' as the company still had more than 20% of total revenue from hardware products, and it continued to expand into new products and services. Those new product lines haven't generated a scale effect yet and led to the dilution of the GPM. However, as the share of revenue from those next-generation products continues to climb, PANW's GPM improved significantly YoY in FY23.

Figure 29: US cybersecurity: YoY rev growth
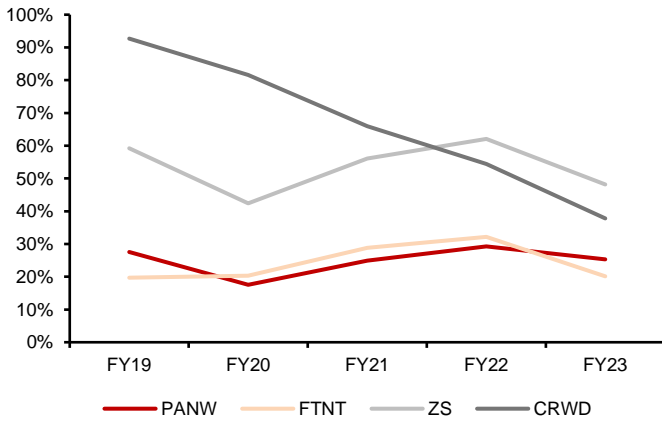
Source: Company data, Bloomberg, CMBIGM
Note: 1) Companies mentioned within this figure: Fortinet (FTNT US); Zscaler (ZS US); CrowdStrike (CRWD US); 2) CRWD's fiscal year ended 31 January each year, and we adjusted the data to one year forward for comparison purposes. ZS and PANW's fiscal year ended 31 July, and FTNT's fiscal year ended 31 Dec.

Figure 30: US cybersecurity: GPM comparison

Source: Company data, Bloomberg, CMBIGM
Note: 1) Companies mentioned within this figure: Fortinet (FTNT US); Zscaler (ZS US); CrowdStrike (CRWD US); 2) CrowdStrike's fiscal year ended 31 January each year, and we adjusted the data to one year forward for comparison purposes. ZS and PANW's fiscal year ended 31 July, and FTNT's fiscal year ended 31 Dec.

The Sales & Marketing (S&M) expense ratio is generally high for companies in the sector, mainly because the products' functional differences are not prominent, while customers are hi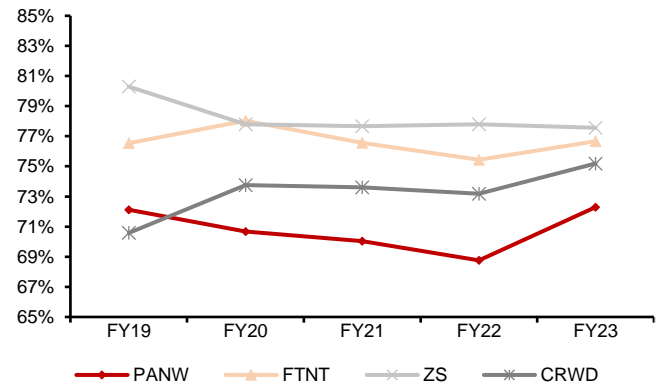ghly concentrated. Zscaler, as an emerging cloud-native security company, has an S&M expense ratio higher than peers, indicating that the company has invested more effort in acquiring new customers and expanding channels to attract relatively smaller organizations. For companies like PANW which have already established deep customer roots, they are currently focusing more on the integrated platform strategy and enhancing the value contribution from every single customer. As a result, the S&M expense ratios of them are showing a steady declining trend.

Figure 31: US cybersecurity: S&M expense ratio

Source: Company data, Bloomberg, CMBIGM
Note: 1) Companies mentioned within this figure: Fortinet (FTNT US); Zscaler (ZS US); CrowdStrike (CRWD US); 2) CrowdStrike's fiscal year ended at 31 January each year, and we adjusted the data to one year forward for comparison purposes. ZS and PANW's fiscal year ended 31 July, and FTNT's fiscal year ended 31 Dec.

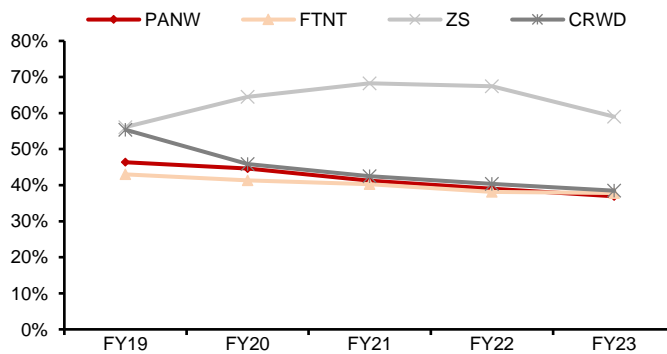**Figure 32: US cybersecurity: R&D expense ratio**

Source: Company data, Bloomberg, CMBIGM
Note: 1) Companies mentioned within this figure: Fortinet (FTNT US); Zscaler (ZS US); CrowdStrike (CRWD US); 2) CrowdStrike's fiscal year ended at 31 January each year, and we adjusted the data to one year forward for comparison purposes. ZS and PANW's fiscal year ended 31 July, and FTNT's fiscal year ended 31 Dec.

PANW's non-GAAP OPM in FY23 improved significantly, increase 9.1pp YoY, primarily driven by the improved gross margin and lower S&M expense ratio. PANW's S&M expense ratio declined by 9.4pp from 46.4% to 36.9% over FY19 to FY23. The sustained high growth in ARR from the NGS products demonstrates PANW improved customer stickiness, in our view, and the steady increase in the percentage of G2K customers adopting multiple

platforms resulted in higher potential in single customer revenue contribution uplift. PANW improved operating margins and optimized vendor payments provided strong support for its FCF margin expansion.
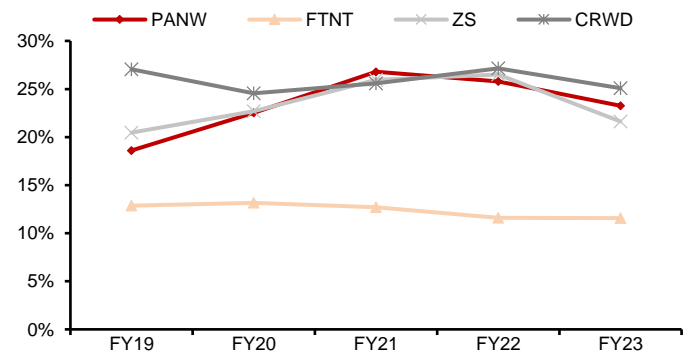
Figure 33: US cybersecurity: Non-GAAP OPM

Figure 34: US cybersecurity: FCF margin
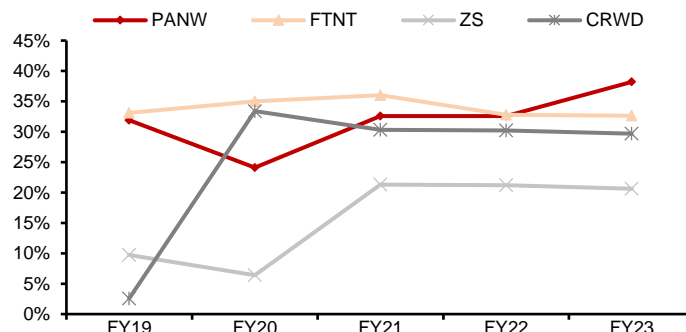
Source: Company data, Bloomberg, CMBIGM
Note: 1) Companies mentioned within this figure: Fortinet (FTNT US); Zscaler (ZS US); CrowdStrike (CRWD US); 2) CrowdStrike's fiscal year ended at 31 January each year, and we adjusted the data to one year forward for comparisons. ZS and PANW's fiscal year ended 31 July, and FTNT's fiscal year ended 31 Dec.
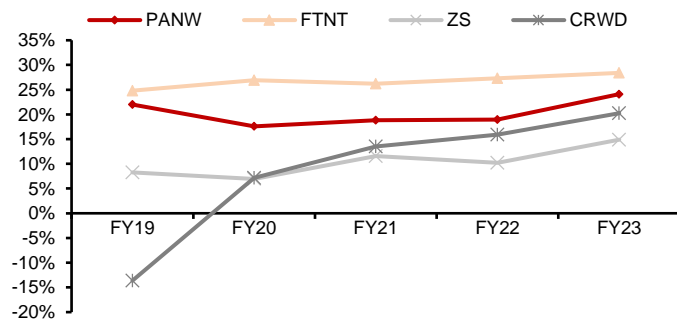
Source: Company data, Bloomberg, CMBIGM
Note: 1) Companies mentioned within this figure: Fortinet (FTNT US); Zscaler (ZS US); CrowdStrike (CRWD US); 2) CrowdStrike's fiscal year ended at 31 January each year, and we adjusted the data to one year forward for comparisons. ZS and PANW's fiscal year ended 31 July, and FTNT's fiscal year ended 31 Dec.

Future development strategies: acceleration in platformization should help market share gains

The increased adoption of NGS products and servcies, acceleration in platformization strategy, international expansion, and potential price hikes with the empowerment of GenAI all serve as drivers for PANW's future revenue growth, in our view.

NGS ARR is seeing rapid growth

PANW is a leading provider of zero trust solutions, starting with next-generation zero trust network access to secure today's remote hybrid workforces and extending to securing all users, applications, and infrastructure with zero trust principles. PANW's security solutions are designed to reduce customers' TCO by improving operational efficiency and eliminating the need for siloed point products. PANW focuses on delivering value in four fundamental areas: network security, cloud security, security operations, and threat intelligence and security consulting.

Figure 35: Overview of PANW's key products

Zero trust platform	Code to cloud platform	Autonomous security operation platforms
Core network security (Strata)	**Prisma Cloud (NGS）**	**Cortex (NGS）**
Hardware firewall	Cloud code security	Cortex XSIAM
Software firewall	Cloud security posture management	- Cortex XDR
Attached subscriptions	Software supply chain security	- Cortex XSOAR
Maintenance	Cloud identity security	- Cortex Xpanse
Prisma SASE (NGS）	Cloud data security	
Prisma Access		
Prisma SD-WAN		
Zero Trust Network Access		
Cloud		
Secure Web Gateway		
Next-Gen CASB		
Firewall-as-a-Service		

Source: Company data, CMBIGM

PANW's Next-Gen Security (NGS) services offerings include Prisma and Cortex (inclusive of the VM-Series and related services), and certain cloud-delivered security services. According to company data, PANW's NGS annual recurring revenue (ARR) reached US$2.96/3.79bn by end-FY23/3QFY24, representing YoY growth of 56%/47%.

Figure 36: PANW: rapid growth in NGS ARR
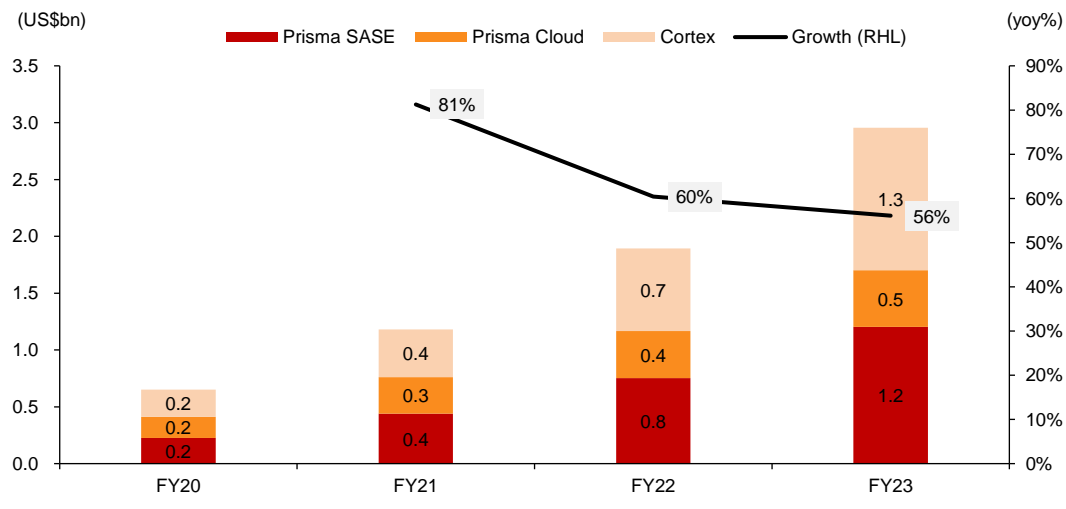
Source: Company data, CMBIGM

Acceleration of Platformization to drive long-term revenue and earnings growth

Management cited the shift to Platformization as one of the drivers for the company's success over the past five years. Given that ARR for fully platformized customers are far higher than that of average landed customers, management decided to accelerate the Platformization strategy starting from 2QFY24, which in our view may weigh on near-term billings and revenue growth, but should enhance PANW's industry leadership over the long-term. We are expecting a normalization and reacceleration trend in billings and revenue growth in FY26E, after the acceleration of Platformization strategy reaches a full anniversary.

PANW has remained committed to investing in innovation to maintain its industry leadership position and platform advantage. As of 3QFY24, PANW had established leadership in 23 product categories in 23 different cybersecurity markets, per Gartner and Frost & Sullivan data, up from 21 in 1QFY24. The well-recognized leadership across three markets is driving strong adoption of PANW platforms in its target G2K markets: as of 2QFY24, 79% of G2K customers had transacted with PANW on at least two of the platforms, and 57% on all three, which were up from 73% and 47%, respectively, in 2QFY22.

Figure 37: PANW: recognized as leader in 23 sub-sectors

Source: Company data, CMBIGM

While PANW's average NGS ARR for its landed customers ranges from US$200,000 to US$300,000 for its land strategy, management noted that ARR for fully platformized customers ranges from US$2mn to US$14mn, depending on how many platforms the customers are standardizing on. This has driven management to accelerate the rollout of its Platformization strategy in 2QFY24.

The acceleration of Platformization is showing early-stage results in 3QFY24. Among the top 5,000 customers on PANW's platform in terms of lifetime value, PANW completed 900 platformization projects in 3QFY24. PANW's effort in 3QFY24 has resulted in 65 incremental platformization sales, up 40% from 2QFY24. Also, management sees a runway to deliver approximately 2,500+ platformization sales up from the current 900 while continuing to land multiple platforms in its customer base and adding new customers.

Management expects platformization related drivers, both larger deals with associated cost of money imapcts and acceleration in platformization programs will impact its billings over a total of a 12-18 month period. Management expects that this will persist through FY25, as PANW reaches the anniversary of rolling out the initiative to accelerate Platformization and resulting in lower billings and to a lesser degree, revenue. However, mangement is expecting a reacceleration trend in revenue growth post the inititial 12-18 month of accelerated platformization, and acceleration of platformization should help drive long-term revenue and earnings growth, in our view.

International expansion serves as a long-term revenue growth driver

International expansion remains a long-term growth driver for PANW, in our view. In 9MFY24, revenue generated from Americas, EMEA, and JPAC (Japan & Asia Pacific) was US$4.0bn/1.2bn/0.7bn, up 18/19/16% YoY (FY23: 24/29/26%), and accounted for 68/20/12% of total revenue, as compared to 70/18/12% in FY17.

Figure 38: PANW: revenue growth by geography
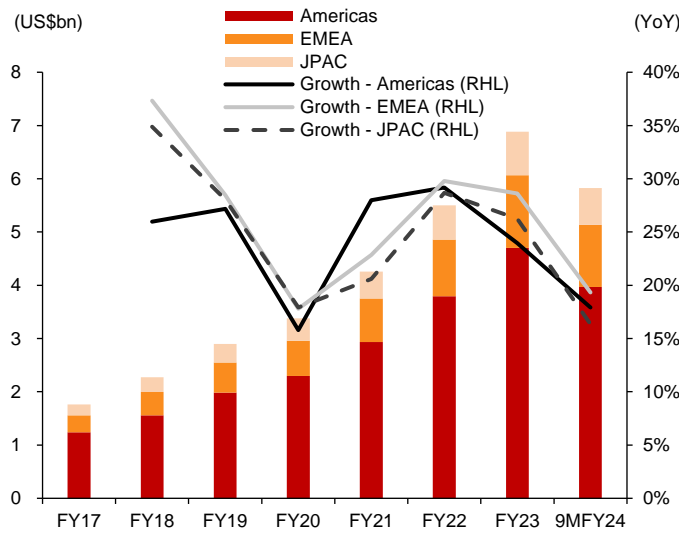
Source: Company data, CMBIGM

Figure 39: PANW: breakdown by geography

Source: Company data, CMBIGM

Poised to benefit from the booming GenAI related opportunities

In terms of opportunity brought by the rapid development of GenAI, PANW could potentially benefit in two aspects, in our view: 1) with AI, the attacks are coming at an even faster pace, and the demand for PANW's products and services is increasing; and 2) with the empowerment from Generative AI, better user experience and improvement in operating efficiency could potentially lead to a price hike for PANW's products and services.

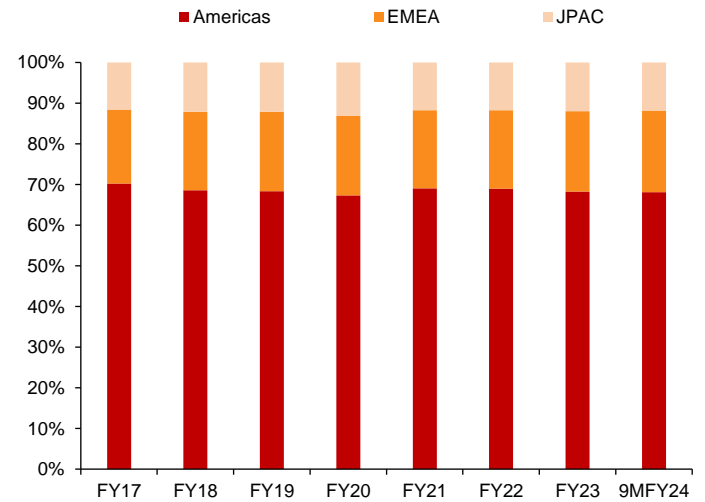PANW highlighted that almost 50% of the employees of most companies are using some AI applications, LLMs, or Copilot to explore, learn and make themselves more productive. Whilst this is helpful for the evolution and adoption of AI, it is introducing a whole new set of threats and should drive an increase in demand for cybersecurity products and servcies.

Also, PANW has seen the early benefits of AI in its newly developed product offerings. In early May 2024, PANW announced its comprehensive suite of AI security offerings and management believes that it wil be the first to market with capabilities to protect a range of its customers' AI security needs. It has rolled out three products to safely enable the use of AI from employees using AI to enterprises building AI into their applications: AI Access Security, AI SPM and AI Runtime Security. Also, PANW's co-pilots across its three platforms are context-aware, and can perform and automate user action, surface alerts and best practices and provide in-product support with good accuracy. Moreover, PANW has announced its Precision AI security bundle to leverage in-line AI to counter AI Attacks with AI Defense. The increase in enterprise adoption of AI-empowered security products, as well as increasing consumption of related products and services should help unleash their monetization potential over the long-term, in our view. In 2QFY24, PANW's AI offerings, which include XSIAM, Autonomous Digital Experience Management (ADEM), and AIOps, crossed the US$100mn ARR milestone.

Business segement analysis and financial forecast

We forecast PANW's total revenue to grow by 16/15/17% YoY to US$8.0/9.2/10.8bn in FY24/25/26E, mainly driven by the deepening of Platformization strategy which should aid steady average revenue per user (ARPU) expansion, as well as new customer acquisition. As the initial ramp-up stage of Platformization passes, we anticipate a reacceleration in revenue growth in FY26E. Also, we expect the increase in enterprise adoption of AI empowered products to also provide support for revenue growth. We estimate PANW's non-GAAP net income to grow 34/13/22% YoY to US$1.9/2.2/2.7bn in FY24/25/26E, primarily driven by solid revenue growth.

Figure 40: PANW: revenue growth and forecast
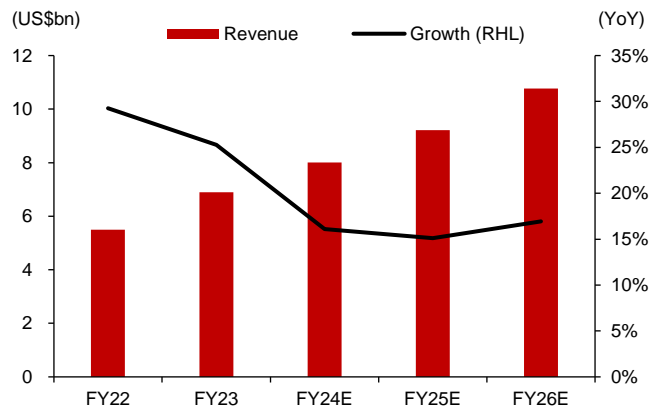
Source: Company data, CMBIGM estimates

Figure 41: PANW: non-GAAP net income and forecast

Source: Company data, CMBIGM estimates

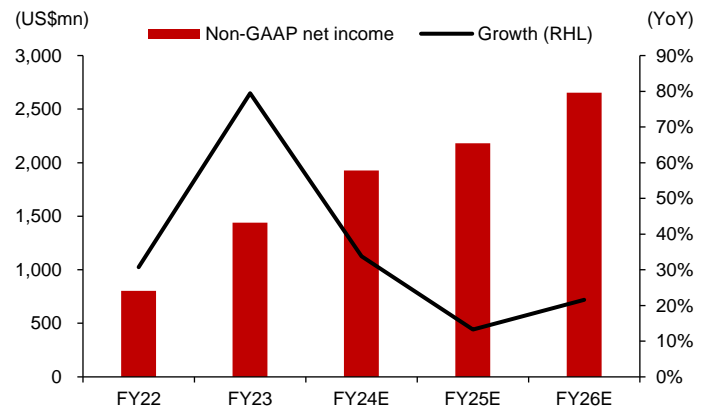### Figure 42: PANW: key financial forecast

(US$mn)	FY22	FY23	FY24E	FY25E	FY26E
Revenue	**5,502**	**6,893**	**8,003**	**9,212**	**10,773**
Growth - YoY	*29.3%*	*25.3%*	*16.1%*	*15.1%*	*16.9%*
Product revenue	1,363	1,578	1,629	1,611	1,662
Growth - YoY	*21.7%*	*15.8%*	*3.2%*	*-1.1%*	*3.1%*
Subscription and support revenue	4,138	5,314	6,373	7,600	9,111
Growth - YoY	*32.0%*	*28.4%*	*19.9%*	*19.3%*	*19.9%*
Subscription revenue as % of total revenue	*75.2%*	*77.1%*	*79.6%*	*82.5%*	*84.6%*
NGS ARR	**1,893**	**2,955**	**4,076**	**5,197**	**6,846**
Growth - YoY	*60.4%*	*56.1%*	*37.9%*	*27.5%*	*31.7%*
Gross profit	**3,783**	**4,983**	**5,952**	**6,859**	**8,055**
GAAP R&D expenses	1,418	1,604	1,785	2,033	2,301
GAAP S&M expenses	2,149	2,544	2,812	3,213	3,674
GAAP G&A expenses	405	448	668	505	552
Operating profit - GAAP	**(189)**	**387**	**688**	**1,108**	**1,528**
Net profit - GAAP	**(267)**	**440**	**2,432**	**1,236**	**1,633**
Operating profit - non-GAAP	**1,043**	**1,660**	**2,153**	**2,507**	**3,054**
Operating profit - non-GAAP	**803**	**1,440**	**1,927**	**2,182**	**2,653**

Margins	FY22	FY23	FY24E	FY25E	FY26E
GPM	**68.8%**	**72.3%**	**74.4%**	**74.5%**	**74.8%**
R&D expenses ratio	25.8%	23.3%	22.3%	22.1%	21.4%
S&M expenses ratio	39.1%	36.9%	35.1%	34.9%	34.1%
G&A expenses ratio	7.4%	6.5%	8.3%	5.5%	5.1%
OPM	-3.4%	5.6%	8.6%	12.0%	14.2%
NPM	-4.9%	6.4%	30.4%	13.4%	15.2%
Non-GAAP OPM	19.0%	24.1%	26.9%	27.2%	28.3%
Non-GAAP NPM	14.6%	20.9%	24.1%	23.7%	24.6%

Source: Company data, CMBIGM estimates

Subscription and support revenue (80% of FY24E revenue)

PANW's subscription and support revenue is derived from sales of its subscription and support offerings. The subscription and support contracts typically range from one to five years. PANW's subscription and support revenue achieved YoY growth of 28.4% in FY23, driven by increased demand for subscription and support offerings from end-customers. With the introduction of new subscription offerings, renewals of support services, and increased sales to new and existing end-customers, we forecast PANW to achieve FY23-26E CAGR of 19.7% for subscription and support services revenue, with total segmental revenue to reach US$9.1bn in FY26E.

Figure 43: PANW: subscription and support revenue and forecast
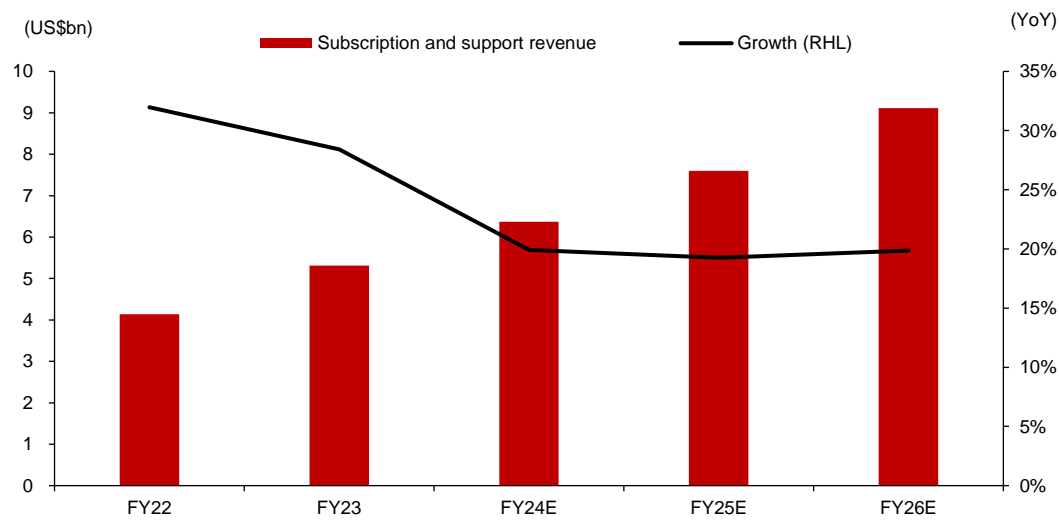
Source: Company data, CMBIGM estimates

Product revenue (20% of FY24E revenue)

PANW's product revenue is derived from sales of its appliances, primarily ML-powered next-generation firewalls. Products revenue also includes revenue derived from software licences of Panaroma, SD-WAN, and the VM-series. PANW's appliances and software license includes a broad set of built-in networking and security features and functionalities, and PANW recognizes product revenue at the time of hardware shipment or delivery of software license. PANW's product revenue reached US$1.6bn in FY23, up 16% YoY, mainly driven by increased demand for PANW's new generation of hardware products, increased software revenue primarily fuelled by a new go-to-market strategy for certain network security offerings and an increased demand for PANW's VM-series virtual firewalls, partially offset by decreased revenue from its prior generation of hardware products.

However, management stated on 4QFY23 earnings call that industrywide hardware growth is returning to a normalized growth level of low-to-mid single digit after the industry has experienced several positive and negative fluctuations since 2020, including the COVID pandemic, the reopening related hardware demand catchup, post-COVID supply chain challenges, price changes and backlog release following supply chain easing. Management noted that the normalized growth is also happening against the backdrop of a broader transition from hardware to software in network security and growth in new security markets. Hence, we are expecting a more normalized revenue growth for PANW's product revenue in FY24-26E. We forecast segmental revenue to achieve a FY23-26E CAGR of 2%, with total revenue to reach US$1.7bn in FY26E, which is largely in line with the industry growth trend, but PANW has the potential to outperform, in our view, aided by its industry leadership and strong customer recognition within the firewall industry.

Figure 44: PANW: product revenue growth and forecast
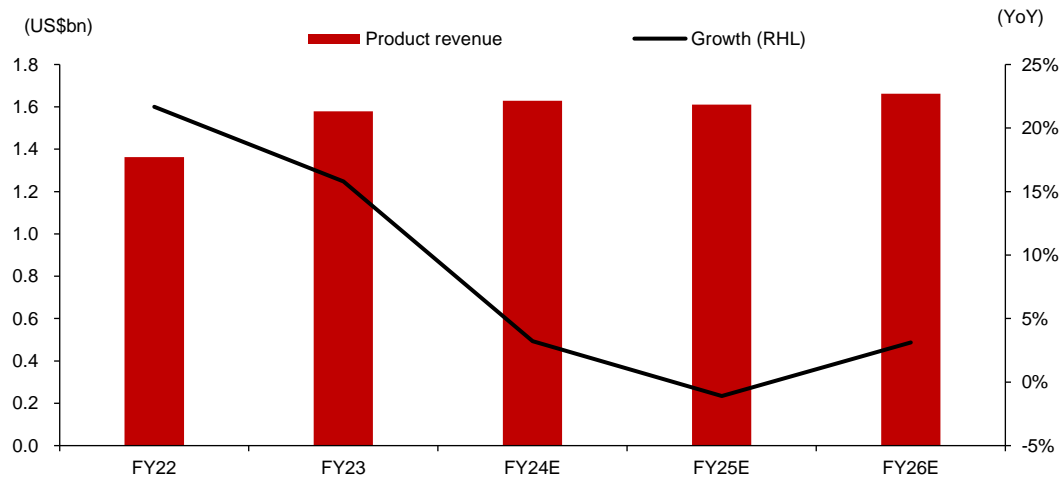
Source: Company data, CMBIGM estimates

Margin analysis

PANW's gross margin has been affected by a variety of factors, including the introduction of new products, manufacturing costs, the average sales price of products, cloud hosting services costs, personnel costs, the mix of products sold, and the mix of revenue between product and subscription and support offerings. PANW's virtual and higher-end firewall products generally have higher gross margins than its lower-end firewall products within each product series.

PANW's overall GPM expanded from 68.8% in FY22 to 72.3% in FY23, driven by increases in both product GPM and subscription and support GPM. GPM of the product segment rose from 66.6% in FY22 to 73.5% in FY23, primarily due to increased software revenue and a favourable hardware product mix. GPM of subscription and support segment expanded from 69.5% in FY22 to 71.9% in FY23, as the growth in subscription and support revenue outpaced that of the subscription and support costs. We estimate GPM to further expand to 74.4% in FY24E, driven by a further increase in software revenue, as well as an enlarging scale effect of the subscription and support segment, and to expand further to 74.5%/74.8% in FY25E/FY26E. GPM should resume a quicker expansion pace after the impact of acceleration of Platformization fades, in our view.

Figure 45: PANW: gross margin by segment
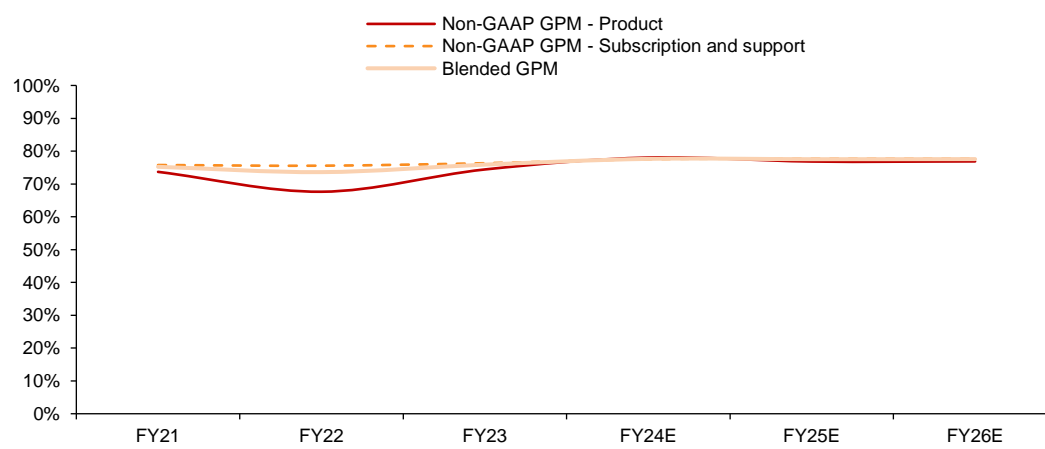
Source: Company data, CMBIGM estimates

As a percentage of total revenue, non-GAAP sales and marketing expenses/G&A expenses has optimized from 34%/6% in FY21 to 31/4% in FY23, driven by the unleashing

of operating leverage amid robust revenue growth, while that of R&D expenses has maintained relatively stable at 16%, as management is committed to enhancing R&D capabilities, in order to achieve long-term revenue and earnings growth. Overall, we estimate PANW to ink non-GAAP NPM of 24.1/23.7/24.6% in FY24E/25E/26E.

Figure 46: PANW: Non-GAAP Opex and operating expense ratio
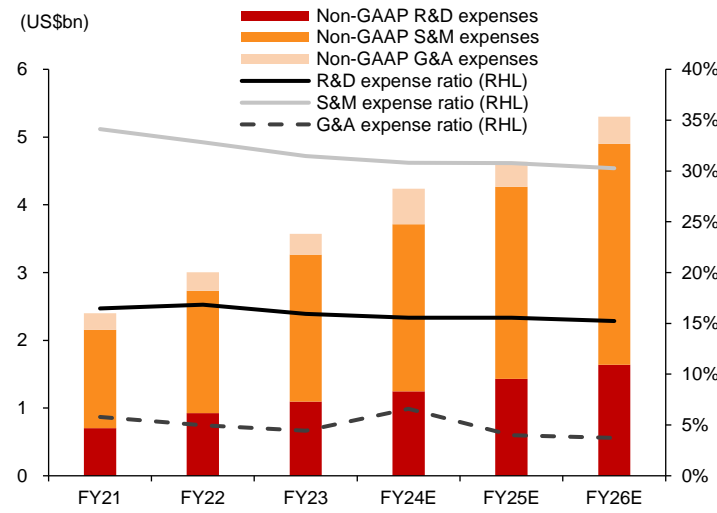
Source: Company data, CMBIGM estimates

Figure 47: PANW: margin trend
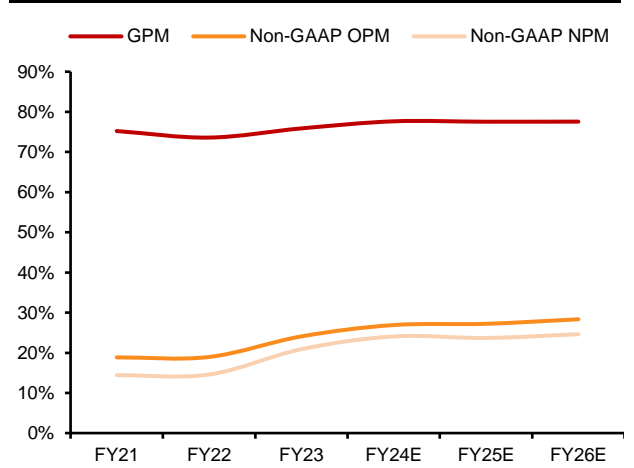
Source: Company data, CMBIGM estimates

Valuation: US$397.1 per share based on 16.0x EV/Sales

We value PANW at US$138.7bn (US$391.7 per share) based on 16.0x 2024E EV/Sales, which is above the US software and IT services industry average at 10.2x, but is broadly in line with the average of 14.2x for peers (Crowdstrike, ServiceNow, and Zscaler) that adhere to the "Rule of 50" (2024E FCF margin + 24-26E revenue CAGR > 50%), which in our view is justified by: 1) PANW's balanced revenue and profitability growth; and 2) its leading position in the security software industry. Our target valuation translates into 50/40/31x FY24E/25E/26E P/FCF multiple, as compared to industry average 2024/2025/2026E P/FCF multiples of 59/34/27x for SaaS companies. Key catalysts for PANW include: 1) better-than-expected margin expansion aided by better-than-expected opearting efficiency improvement; and 2) more rapid-than-expected ramp-up in revenue generation from AI-related services.

Figure 48: PANW: target valuation

EV/S Valuation (US$mn)	2024E
2024E revenue (3QFY24-2QFY25)	8,563
Target 2024E EV/Sales	16.0x
Enterprise value	137,013
+ net cash	1,657
Equity value	138,670
No. of shares outstanding (diluted; mn)	354
Target price (US$)	391.7

Source: Company data, CMBIGM estimates

Figure 49: PANW: Comps table

Company	Ticker	Price (Local)	Rev CAGR 2024E-2026E	FCF Margin 2024E	FCF margin +Revenue CAGR	EV/Sales (x) 2024E	EV/Sales (x) 2025E	EV/Sales (x) 2026E	EV/EBITDA (x) 2024E	EV/EBITDA (x) 2025E	EV/EBITDA (x) 2026E
CrowdStrike	CRWD US	256.2	26%	32.1%	58.0%	15.0	11.9	9.8	56.7	42.9	34.5
ServiceNow	NOW US	827.6	21%	31.1%	51.7%	15.3	12.7	10.6	43.9	37.6	31.7
Zscaler	ZS US	181.4	26%	24.1%	49.9%	12.4	10.1	8.2	54.4	42.8	33.4
Average						**14.2**	**11.6**	**9.5**	**51.7**	**41.1**	**33.2**
Adobe	ADBE US	542.4	11%	36.3%	47.4%	11.0	9.9	8.9	24.0	21.3	19.6
Check Point	CHKP US	182.7	6%	41.0%	46.5%	6.8	6.4	6.1	14.9	14.1	13.5
Fortinet	FTNT US	57.0	12%	29.8%	41.9%	7.3	6.4	5.7	24.8	21.5	18.7
Gen Digital	GEN US	26.1	3%	33.0%	35.9%	6.2	6.0	5.8	10.6	10.2	9.3
Dynatrace	DT US	44.3	17%	23.9%	40.6%	7.5	6.5	5.5	25.6	21.6	17.7
Cloudflare	NET US	78.1	27%	10.8%	38.0%	15.9	12.5	9.9	88.4	65.8	46.0
Akamai	AKAM US	97.0	7%	21.3%	28.0%	4.3	4.0	3.7	10.2	9.4	8.8
Overall average						*10.2*	*8.6*	*7.4*	*35.3*	*28.7*	*23.3*
Palo Alto Networks	**PANW US**	326.8	15%	38.8%	54.3%	12.8	11.3	9.7	42.5	38.3	31.1

Source: Bloomberg, CMBIGM
Note: data as of 27 July, 2024

Figure 50: SaaS: EV/FCF valuation comparison

Company	Ticker	Price (Local)	P/E (x) 2024E	2025E	2026E	EV/FCF (x) 2024E	2025E	2026E
CRM								
Salesforce	CRM US Equity	262.7	32.1	26.5	23.9	21.6	18.7	16.1
HubSpot	HUBS US Equity	492.7	67.0	56.8	44.8	67.0	51.8	37.5
Five9	FIVN US Equity	46.8	21.4	17.8	13.5	32.3	22.8	15.3
Security								
CrowdStrike	CRWD US Equity	256.2	86.6	64.3	52.7	46.7	36.2	26.9
ZScaler	ZS US Equity	181.4	60.3	54.0	44.6	51.4	42.0	32.5
Fortinet	FTNT US Equity	57.0	32.1	28.9	24.8	24.4	21.3	17.2
ERP								
SAP	SAP US Equity	213.5	42.5	31.0	24.0	66.6	29.9	26.2
Oracle	ORCL US Equity	139.0	24.9	22.2	19.3	51.0	37.0	27.5
Collaboration								
Twilio	TWLO US Equity	58.9	19.3	17.3	14.7	12.6	11.0	8.8
Ring Central	RNG US Equity	34.9	9.6	8.4	7.7	11.8	9.2	7.7
Zoom	ZM US Equity	60.1	12.2	11.9	11.8	7.9	7.3	6.8
ITSM								
ServiceNow	NOW US Equity	827.6	60.3	50.2	41.3	49.2	41.2	32.9
Atlassian	TEAM US Equity	177.3	61.8	54.2	42.0	36.2	32.3	25.9
Collaboration								
Datadog	DDOG US Equity	118.3	75.5	62.7	44.1	54.7	44.1	34.5
Dynatrace	DT US Equity	44.3	37.8	34.6	29.7	31.5	25.9	20.9
Average			*33.7*	*26.6*	*21.7*	*58.8*	*33.5*	*26.9*

Source: Bloomberg, CMBIGM
Note: data as of 27 July, 2024 market close

Figure 51: PANW: EV/Sales band
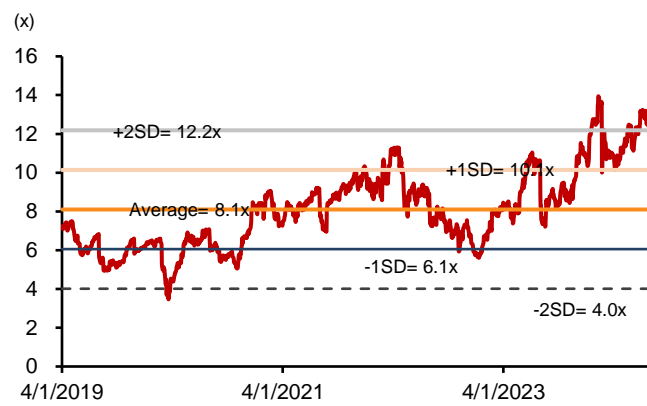
Source: Bloomberg, CMBIGM
Note: data as of 27 July, 2024 market close

Figure 52: PANW: EV/EBITDA band
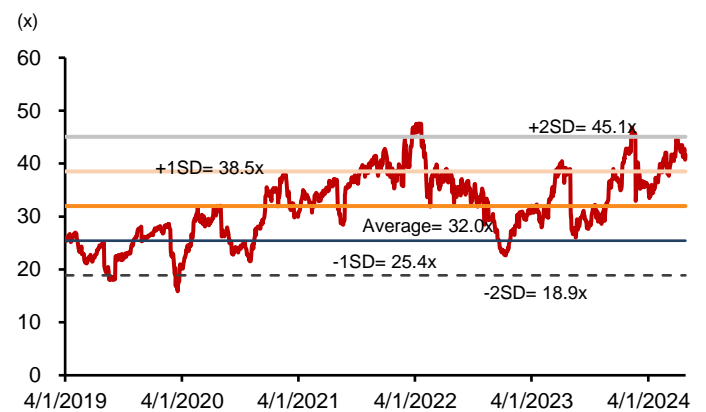
Source: Bloomberg, CMBIGM
Note: data as of 27 July, 2024 market close

Figure 53: PANW: EV/FCF band
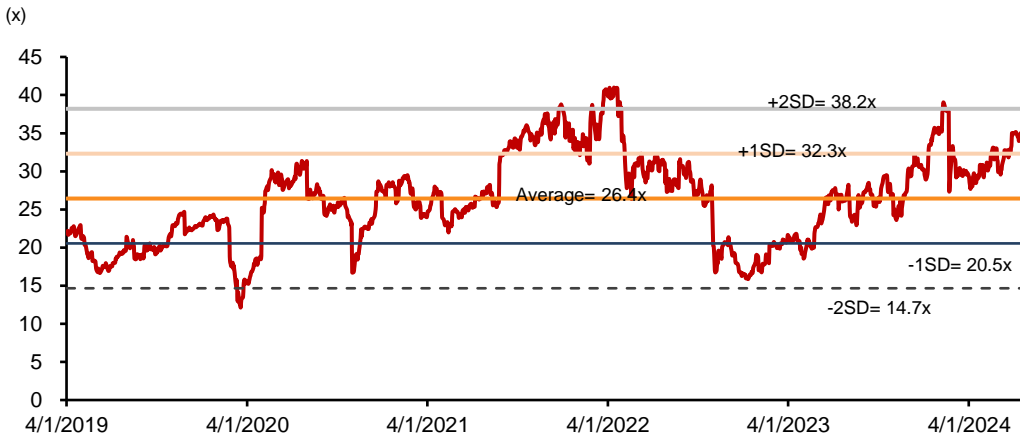
Source: Bloomberg, CMBIGM
Note: data as of 27 July, 2024 market close

PANW: strong financial profile adhering to the "Rule of 50"

PANW has a strong financial profile which adheres to the "Rule of 50", and this in our view demonstrates that PANW has established competitive edges over peers, and that it has the ability to maintain a balanced but industry-leading growth profile measured by revenue and profitability. Also, in terms of valuation, although PANW's 2025E EV/FCF valutaion of 29.9x is not low versus its own five-year average, we still see room to increase, when compared with the companies with a similar "FCF margin + revenue CAGR" profile.

Figure 54: "FCF Margin + revenue CAGR" comparison for companies at different scales
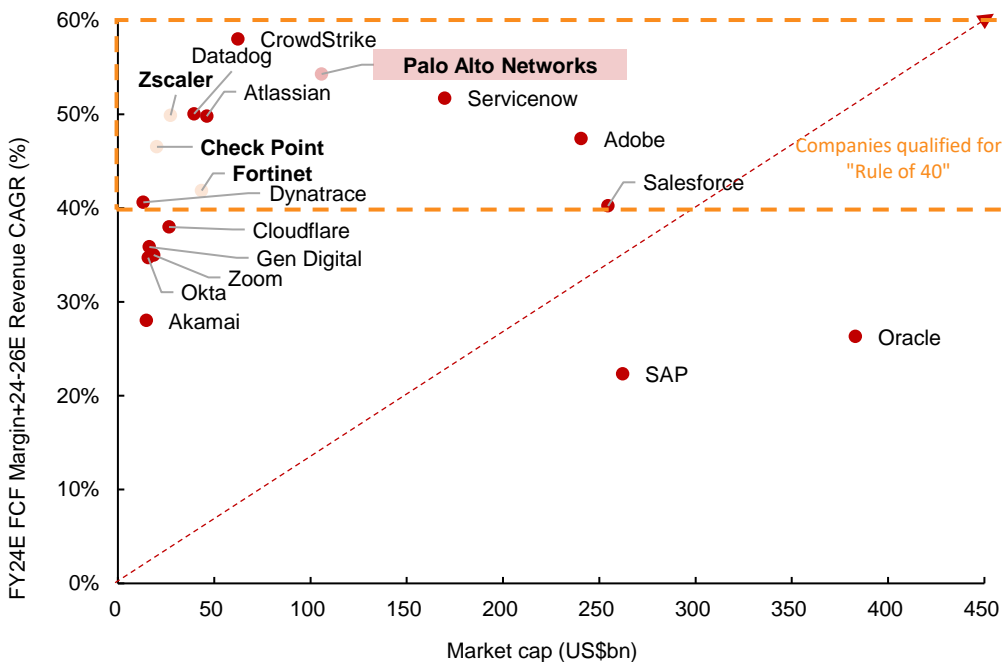
Source: Bloomberg, CMBIGM
Note: data as of 27 July, 2024 market close

Figure 55: "FCF Margin + revenue CAGR" and EV/FCF valuation comparison
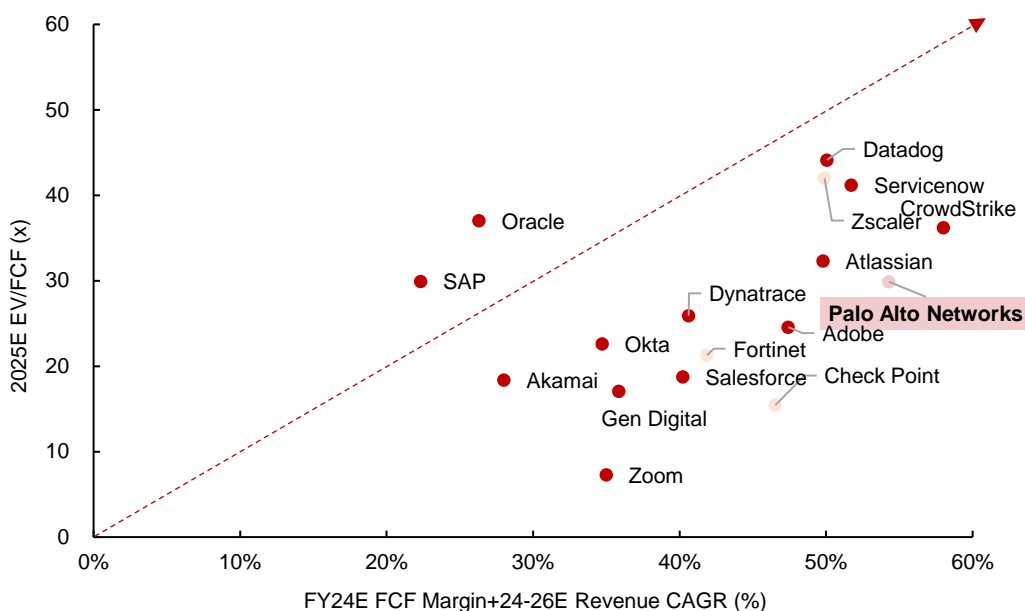
Source: Bloomberg, company data, CMBIGM
Note: data as of 27 July, 2024 market close

Risks

1) Slower-than-expected margin expansion owing to intensify market competition;

2) Slower-than-expected revenue growth owing to slower-than-expected customer acquisition and ramp-up in cross-selling and Platformization.

Appendix

Figure 56: PANW: management profile

Name	Position	Prior experience
Nikesh Arora	Chief Executive Officer	Nikesh Arora has served as the Chair of the Board and Chief Executive Officer since June 2018. Prior to joining Palo Alto Networks, from 2016 through 2018, Mr. Arora was an angel investor and from June 2016 through December 2017, Mr. Arora served as an advisor to SoftBank Group Corp., a multinational conglomerate company ("SoftBank"). From July 2015 through June 2016, Mr. Arora served as president and chief operating officer of SoftBank and from July 2014 through June 2015, Mr. Arora served as vice chair and chief executive officer of SoftBank Internet and Media, a subsidiary of SoftBank. Prior to SoftBank, from December 2004 through July 2014, Mr. Arora held multiple senior leadership operating roles at Google, Inc., including serving as senior vice president and chief business officer, from January 2011 to June 2014. Mr. Arora also serves on the board of Compagnie Financiere Richemont S.A., a public Switzerland-based luxury goods holding company. Mr. Arora previously served on the boards of Sprint Corp., a communications services company, from November 2014 to June 2016, Colgate-Palmolive Company, a worldwide consumer products company focused on the production, distribution and provision of household, health care and personal care products, from March 2012 to September 2014, SoftBank from 2014 to 2016, and Yahoo! Japan, an internet company, from 2015 to 2016. Mr. Arora holds an M.S. in Business Administration from Northeastern University, an M.S. in Finance from Boston College, and a B.Tech in electrical engineering from the Institute of Technology at Banaras Hindu University.
Nir Zuk	Chief Technology Officer and Director	Nir Zuk is one of the company's founders and has served as Chief Technology Officer and as a member of the Board since March 2005. From April 2004 to March 2005, Mr. Zuk was Chief Security Technologist at Juniper Networks, Inc., a supplier of network infrastructure products and services. From September 2002 until its acquisition by Juniper in April 2004, Mr. Zuk was Chief Technology Officer at NetScreen Technologies, Inc., a provider of ASIC-based Internet security systems. In December 1999, Mr. Zuk co-founded OneSecure, Inc., a provider of prevention and detection appliances, and was Chief Technical Officer until its acquisition by NetScreen in September 2002. From 1994 to 1999, Mr. Zuk served in several technical roles, including Principal Engineer at Check Point Software Technologies Ltd., an enterprise software security company. Mr. Zuk attended Tel Aviv University where he studied Mathematics.
Judson Althoff	Executive Vice President and Chief Commercial Officer	Mr. Althoff was appointed Executive Vice President and Chief Commercial Officer in July 2021. He served as Executive Vice President, Worldwide Commercial Business from July 2017 until that time. Prior to that, Mr. Althoff served as the President of Microsoft North America. Mr. Althoff joined Microsoft in March 2013 as President of Microsoft North America.
Dipak Golechha	Executive Vice President and Chief Financial Officer	Dipak Golechha has served as Chief Financial Officer since March 2021. Mr. Golechha joined the Company in December 2020 as Senior Vice President, Finance. Prior to joining the Company, from August 2020 until December 2020, Mr. Golechha served as senior advisor at Boston Consulting Group, a management consulting firm. From December 2016 to April 2020, Mr. Golechha was President and Chief Executive Officer of Excelligence Learning Corporation, a tech-enabled platform company in early childhood education. From August 2014 through July 2016, Mr. Golechha served as the chief financial officer of NBTY Inc., also known as The Nature's Bounty Company, a manufacturer of vitamins, minerals and health supplements. During 2014, Mr. Golechha served as the chief financial officer of Chobani, a yogurt company. Prior to Chobani, Mr. Golechha worked at The Procter & Gamble Company, an American multinational consumer goods corporation, for 18 years, most recently serving as chief financial officer / chief operating officer of the Global Feminine Care / Adult Care Division from August 2012 to December 2013. Mr. Golechha holds a bachelor's degree and a master's degree from St. John's College, Cambridge University in Economics.
William "BJ" Jenkins	President	William "BJ" Jenkins has served as President since August 2021. Prior to joining the Company, Mr. Jenkins served as President and CEO of Barracuda Networks, Inc., a computer security and data storage company, from November 2012 through July 2021. Prior to this position, Mr. Jenkins held multiple business unit and sales and marketing leadership roles at EMC Corporation, a provider of enterprise storage systems, software, and networks. Mr. Jenkins holds an engineering degree from the University of Illinois and an M.B.A. from Harvard Business School.
Lee Klarich	Chief Product Officer	Lee Klarich has served as Chief Product Officer since August 2017. Prior to this appointment, Mr. Klarich served as Executive Vice President of Product Management, a role he held since November 2015. From November 2012 to November 2015, Mr. Klarich served as Senior Vice President, Product Management and Vice President, Product Management from May 2006 to November 2012. Prior to joining us, Mr. Klarich held various positions at NetScreen Technologies, Juniper Networks, Excite@Home, and Packard Bell-NEC. Mr. Klarich holds a B.S. in Engineering from Cornell University.

Source: Company data, CMBIGM

Financial Summary

INCOME STATEMENT	2021A	2022A	2023A	2024E	2025E	2026E
YE 31 Jul (US$ mn)						
Revenue	**4,256**	**5,502**	**6,893**	**8,003**	**9,212**	**10,773**
Cost of goods sold	(1,275)	(1,719)	(1,910)	(2,051)	(2,353)	(2,718)
Gross profit	**2,981**	**3,783**	**4,983**	**5,952**	**6,859**	**8,055**
Operating expenses	**(3,285)**	**(3,972)**	**(4,596)**	**(5,264)**	**(5,751)**	**(6,526)**
Selling expense	(1,754)	(2,149)	(2,544)	(2,812)	(3,213)	(3,674)
Admin expense	(391)	(405)	(448)	(668)	(505)	(552)
R&D expense	(1,140)	(1,418)	(1,604)	(1,785)	(2,033)	(2,301)
Operating profit	**(304)**	**(189)**	**387**	**688**	**1,108**	**1,528**
Other income	2	9	206	303	294	344
Interest expense	(163)	(27)	(27)	(10)	(6)	0
Pre-tax profit	**(465)**	**(207)**	**566**	**981**	**1,396**	**1,873**
Income tax	(34)	(60)	(127)	1,451	(160)	(240)
Others	0	0	0	0	0	0
Net profit	**(499)**	**(267)**	**440**	**2,432**	**1,236**	**1,633**
Adjusted net profit	**614**	**803**	**1,440**	**1,927**	**2,182**	**2,653**

BALANCE SHEET	2021A	2022A	2023A	2024E	2025E	2026E
YE 31 Jul (US$ mn)						
Current assets	**4,647**	**6,415**	**6,048**	**7,418**	**9,390**	**14,417**
Cash & equivalents	1,874	2,119	1,135	1,303	1,866	5,399
Account receivables	1,240	2,143	2,463	3,127	3,817	4,604
Other current assets	1,533	2,154	2,450	2,989	3,707	4,414
Non-current assets	**5,594**	**5,839**	**8,453**	**12,327**	**12,803**	**13,141**
PP&E	318	358	355	367	494	570
Deferred income tax	0	0	0	0	0	0
Investment in JVs & assos	888	1,052	3,048	3,504	3,504	3,504
Intangibles	499	385	315	375	243	112
Goodwill	2,710	2,748	2,927	3,373	3,373	3,373
Other non-current assets	1,179	1,297	1,809	4,708	5,189	5,582
Total assets	**10,242**	**12,254**	**14,501**	**19,746**	**22,193**	**27,558**
Current liabilities	**5,117**	**8,306**	**7,738**	**8,179**	**8,663**	**10,382**
Account payables	57	128	132	138	158	183
Other current liabilities	4,300	7,318	6,666	7,001	7,111	8,692
Accrued expenses	760	860	939	1,041	1,394	1,507
Non-current liabilities	**4,361**	**3,737**	**5,015**	**6,835**	**8,050**	**9,569**
Long-term borrowings	1,668	0	0	0	0	0
Other non-current liabilities	2,693	3,737	5,015	6,835	8,050	9,569
Total liabilities	**9,478**	**12,044**	**12,753**	**15,014**	**16,713**	**19,951**
Retained earnings	(1,667)	(1,667)	(1,227)	1,204	2,440	4,073
Other reserves	2,430	1,877	2,976	3,527	3,040	3,534
Total shareholders equity	**764**	**210**	**1,748**	**4,732**	**5,481**	**7,607**
Minority interest	0	0	0	0	0	0
Total equity and liabilities	**10,242**	**12,254**	**14,501**	**19,746**	**22,193**	**27,558**

CASH FLOW	2021A	2022A	2023A	2024E	2025E	2026E
YE 31 Jul (US$ mn)						
Operating						
Profit before taxation	**(465)**	**(207)**	**566**	**981**	**1,396**	**1,873**
Depreciation & amortization	260	283	282	278	281	281
Tax paid	(34)	(60)	(127)	1,451	(160)	(240)
Change in working capital	349	521	563	657	980	1,371
Others	1,393	1,448	1,492	(413)	1,267	1,375
Net cash from operations	**1,503**	**1,985**	**2,778**	**2,953**	**3,764**	**4,659**
Investing						
Capital expenditure	(116)	(193)	(146)	(164)	(276)	(226)
Others	(1,365)	(741)	(1,888)	(1,232)	0	0
Net cash from investing	**(1,481)**	**(933)**	**(2,034)**	**(1,396)**	**(276)**	**(226)**
Financing						
Share repurchases	(1,178)	(892)	(273)	(792)	(925)	(900)
Others	74	86	(1,454)	(597)	(1,999)	0
Net cash from financing	**(1,104)**	**(807)**	**(1,726)**	**(1,389)**	**(2,924)**	**(900)**
Net change in cash						
Cash at the beginning of the year	2,958	1,874	2,119	1,142	1,303	1,866
Exchange difference	0	0	0	0	0	0
Others	(2)	(0)	6	(8)	0	0
Cash at the end of the year	**1,874**	**2,119**	**1,142**	**1,303**	**1,866**	**5,399**

Source: Company data, CMBIGM estimates. Note: The calculation of net cash includes financial assets.

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