



Targeting several very large market opportunities

FirstWave Cloud Technology (ASX:FCT) is a provider of network management and cybersecurity software. The company's legacy product is CyberCision, a 'cybersecurity-as-a-service' platform. While CyberCision remains a market-relevant solution, FCT changed significantly in 2021 when it acquired network management software company Opmantek.

Opmantek has been a pivotal acquisition

FCT's network management business has 3 main products: NMIS, Open-Audit and Secure Traffic Manager. These products help network administrators manage and automate the availability, performance and compliance of their IT infrastructure – including IoT devices and Cloud/hybrid environments. FCT's clients tend to be medium-to-large enterprises and Managed Service Providers. Some of the highest profile clients include Microsoft, Telmex and NASA, with the latter using NMIS for network monitoring associated with the Artemis missions to the moon and Mars.

Several large market opportunities for FCT

FCT has been disregarded by many investors for several reasons, including the global Tech Correction triggered by interest rate increases around the world and the company's lack of growth and profitability. It has not changed its name or branding since diversifying – arguably giving rise to the view that the company is the same one it was 4 years ago.

There are also perceptions that the market for Cloud Services (including Cloud network management software) has little to no room for growth left. In reality, as will be demonstrated in this report, the market is only just getting started. Both markets are opportunities of over US\$150bn as measured by total global enterprise spending.

Finally, the company is making progress in improving its bottom line, reaching cash flow positivity during the first half of FY25 and is looking to reach that milestone with a cash-flow positive H1 to strengthen its position going forward.

Valuation of \$0.04-\$0.058 per share

Accounting for future dilution, we value FCT at \$0.04 per share in our base case and \$0.058 per share in our optimistic (or bull) case. We expect the company to re-rate as it strengthens its cash flow position and as sales momentum of NMIS grows globally, particularly in Latin America. The Telmex relationship will be instrumental in this respect. Please see page 21 for more details on our rationale and page 25 for the key risks to our thesis.

Share Price: A\$0.022

ASX: FCT

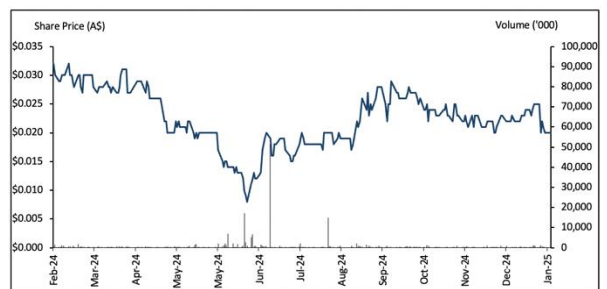
Sector: Technology

4 February 2025

Market cap. (A\$ m)	37.7
# shares outstanding (m)	1,713.5
# shares fully diluted (m)	1,713.5
Market cap ful. dil. (A\$ m)	37.7
Free float	100%
52-week high/low (A\$)	0.032 / 0.008
Avg. 12M daily volume ('000)	740.4
Website	https://firstwave.com/

Source: Company, Pitt Street Research

Share price (A\$) and avg. daily volume (k, r.h.s.)



Source: Refinitiv Eikon, Pitt Street Research

Valuation metrics	
Fair valuation range (A\$ per share)	0.04-0.058
WACC	13.1%
Assumed terminal growth rate	2%

Source: Pitt Street Research

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Disclosure: Pitt Street Research directors own shares in FCT



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FCT has important network management and cybersecurity products that are used by Blue-Chip clients.

The Firstwave Cloud Technology Investment Case

- 1) **FCT has important network management and cybersecurity products that are used by Blue-Chip clients.** Clients include Microsoft, NASA, US Airforce, John Deere, Telmex, Raytheon, Macquarie Telcom and Services Australia. FCT's products are very important for their clients and form a key part of their IT operations and view of their critical (and non-critical) systems.
- 2) **FCT generates sticky recurring revenues,** both from new clients and existing clients upgrading existing contracts.
- 3) **FCT is a changed company compared to a few years ago.** Since acquiring Opmantek, the company has undergone a significant transformation. It has streamlined its operations to the point where the company has lower Opex than it did when it operated just as FirstWave with the CyberCision product. It has overhauled and renewed its board and management team, exited or renegotiated unprofitable contracts, and it has added a direct sales model to its go to market to complement its current channel model through Telcos and Managed Service Providers. This is particularly relevant for its owned IP for network management for which revenue is 100% FCT's IP as it does not have to pay license fees as it has had to for CyberCision.
- 4) **The Network Management and Cybersecurity Software markets represent major opportunities and FCT is one of the few ways to gain exposure to these sectors on the ASX.** Moreover, we would not be surprised to see FCT become the subject of takeover interest down the track – either for the entire business or perhaps for just one of its areas of operation, given the intense M&A activity in recent years as IT services companies seek to stand out from the competition ranging from IBM's purchase of Red Hat to the Thales takeover of Tesseract.
- 5) **FCT's individual pipeline is extensive.** FCT states that its current sales pipeline is more than 100% of current ARR (A\$10m) and the Total Addressable Market (TAM) is extremely large. Gartner has estimated total spending on network management technology and cybersecurity to be in excess of US\$100bn per annum.
- 6) **FCT has high gross margins.** FCT's network management products are 100% margin with minimal internal support costs. The software is developed once and sold to multiple clients under an on-premise subscription model meaning FirstWave does not host or maintain the software. This is in contrast with CyberCision which has COGS from global suppliers such as Cisco Systems and higher levels of support given its deployment as a cloud service. As FCT continues to transition to a greater proportion of sales from the Network Management Products, gross margins and bottom-line profitability will increase.
- 7) **FCT is making progress towards profitability.** The company aims for cash-flow break even in FY25 and is on track to achieve that milestone, having recorded cash-flow positive in H1 of FY25. This is being achieved through optimised spending and some increase in customer adoption.
- 8) **FCT has a quality leadership team** led by Managing Director Danny Maher who was previously the CEO and Exec Chairman of Opmantek. He also owns ~15% of FCT making FCT a founder led business with a very experienced founder. We also note Director John Grant who was managing director of Data#3 for ~20 years and was also the Inaugural Chair of the Australian Rugby League Commission.



FirstWave Cloud Technology

- 9) **We believe FCT is undervalued** at its current market capitalisation, which is barely over \$30m. We foresee the company being re-rated as it increases sales from its network management suite of products and consequently improves its margins. Our valuation and rationale can be found on p.19.

Overview of FirstWave Cloud Technology

In this section we recap how FirstWave Cloud Technology (FCT) built itself into the company it is today, a very broad overview of its services, and the company's commercialisation strategy. We also delve into FCT's products and services in greater detail including how they specifically help customers and how they operate.

FCT's history

FCT was formed in the early 2000s as a roll-out from Telstra Research and listed on the ASX in 2016. At the time its flagship product was CCSP, a unique cloud-based platform offering security orchestration and management for telcos and service providers enabling them to sell, deliver, bill and support advanced cloud security gateway services and solutions. These solutions were supported by a combination of FirstWave's IP and proprietary technology from a variety of cyber security vendors including Cisco, Fortinet, Palo Alto and Trend Micro.

The selling point of CCSP, which was renamed CyberCision in 2021, was that it provided an automated cybersecurity-as-a-service orchestration and management platform for service providers that virtualized, multi-tenanted and integrated enterprise-grade email, web and firewall virtual appliances, and endpoint protection services from global security leaders into a complete cost-effective, scalable and flexible perimeter security solution for end-user customers. FirstWave boasted over 300 customers including Australian financial institutions, state and federal government, utilities, ASX200 listed and private companies in the mining and retail sectors. Operating exclusively in the Australian domestic sector, the major partner in terms of customer acquisition was Telstra, with FCT and Telstra sharing a long-term relationship. FCT's growth strategy was to replicate this domestic offering with other Telcos around the world. However, the company lacked the growth capital to build an international sales and partner support network and to maintain product leadership and by 2021, this strategy was languishing. The acquisition of Opmantek in 2021 breathed new life into FCT providing an additional suite of products compatible with CyberCision, and new channels to Telcos and managed services providers in the US, Canada and Latin America.

Opmantek had been founded 11 years prior, in 2010, and had been developing the commercial potential of a product called NMIS, short for Network Management Information System. NMIS provides network management and monitoring, configuration and compliance, anomaly detection and automation. It had originated as open-source, 'freemium' software in 1999, but Opmantek had developed a commercial version for enterprise-level use.

In buying Opmantek, FCT gained:

- Opmantek's founder, major shareholder and Exec Chairman Danny Maher as FCT's MD and a 15% shareholder of FCT
- An expanded product portfolio

FCT's original business was CCSP (later renamed CyberCision). FCT acquired Opmantek in late 2021 and this suite of products has become its primary focus.



FirstWave Cloud Technology

- Diversified revenues – both in terms of products and new sales channels including North America and Latin America;
- Improved overall margins with NMIS being wholly developed and owned by FCT under the terms of the acquisition and generating sales margin of 100%, and
- Operational synergies – with the total opex for the combined entity today being lower than FCT's was prior to the acquisition.

The Opmantek brand was phased out in September 2022, with all services previously offered by Opmantek consolidated under the FirstWave brand. The company aimed, and aims, to position itself as an integrated solutions provider for network discovery, management and cybersecurity for enterprises, managed service providers (MSPs) and telecommunication carriers globally.



FCT's businesses

FCT offers 4 software solutions:

- NMIS,
- Open-Audit,
- Secure Traffic Manager (STM), and
- CyberCision.

The first 2 of these were developed by Opmantek and acquired by FCT through the acquisition of Opmantek. STM joined the product suite when FCT acquired Saisei Networks in September 2023. FCT's clients may use only one, multiple, or all of these products. Through these products, FirstWave offers an end-to-end solution for network discovery, management and cybersecurity.

Before we delve into these specific services, we need to note a number of traits common to all of them.

FirstWave Cloud's network management software clients are mostly Telcos and Managed Service Providers as a channel, and medium-to-large enterprises as direct clients that typically employ more than 300 staff.

Who uses FirstWave's software and how does FirstWave make money?

FirstWave's network management software clients are mostly Telcos and Managed Service Providers as a channel, and medium-to-large enterprises as direct clients that typically employ more than 300 staff. Notable enterprise clients include Microsoft, Telmex, Claro, NextLink and NASA. NASA is using NMIS for network monitoring associated with the Artemis missions to the moon and Mars, which is testimony to the high-level capabilities of the technology.

FCT's clients run the software on-premise in their data centres, and the Telcos/MSPs combine it with further services to onsell to their own clients. The Telco/MSP pays a base subscription fee and then a usage-based fee dependant on how many clients and the size of the clients they add to the system. Most NMIS and Open-Audit licenses are for 12 months and paid upfront. Some customers pay for multi-year licenses upfront to secure discounts (~20% for a 3-year license). By late 2021, it is estimated that the open source (free) solutions of these technologies had been downloaded by over 150,000 companies in more than 175 countries. The company has a conversion rate from 'freemium' to pay of approximately 0.1% but wants to increase it to >1% representing an untapped opportunity with significant blue sky as the conversion rate increases.

As NMIS and Open-Audit are open source 'freemium' products (meaning that the core software is downloadable for free but more powerful/useable modules are paid-for), knowledge of the products has spread far and wide. The commercialisation success with important customers such as Telmex, NASA and Microsoft is testament to the willingness of customers to pay for power and efficiency. We also note that FirstWave was able to sign Macquarie Telecom Group to a five-year contract in July 2022, and that the company announced an expanded relationship with Telmex as a reseller in December 2023 with the first customer under this expanded relationship worth at least \$1m.

NMIS and Open-Audit have high Gross margins. The company achieves very high gross margins given the development and licensing model, and the fact that the software is managed on-premises by their clients not by FirstWave. With CyberCision, given licence fees paid to global security vendors, gross margins are 50-90%, whereas NMIS and Open Audit are 100% margin.



Network Management Software Industry to grow strongly

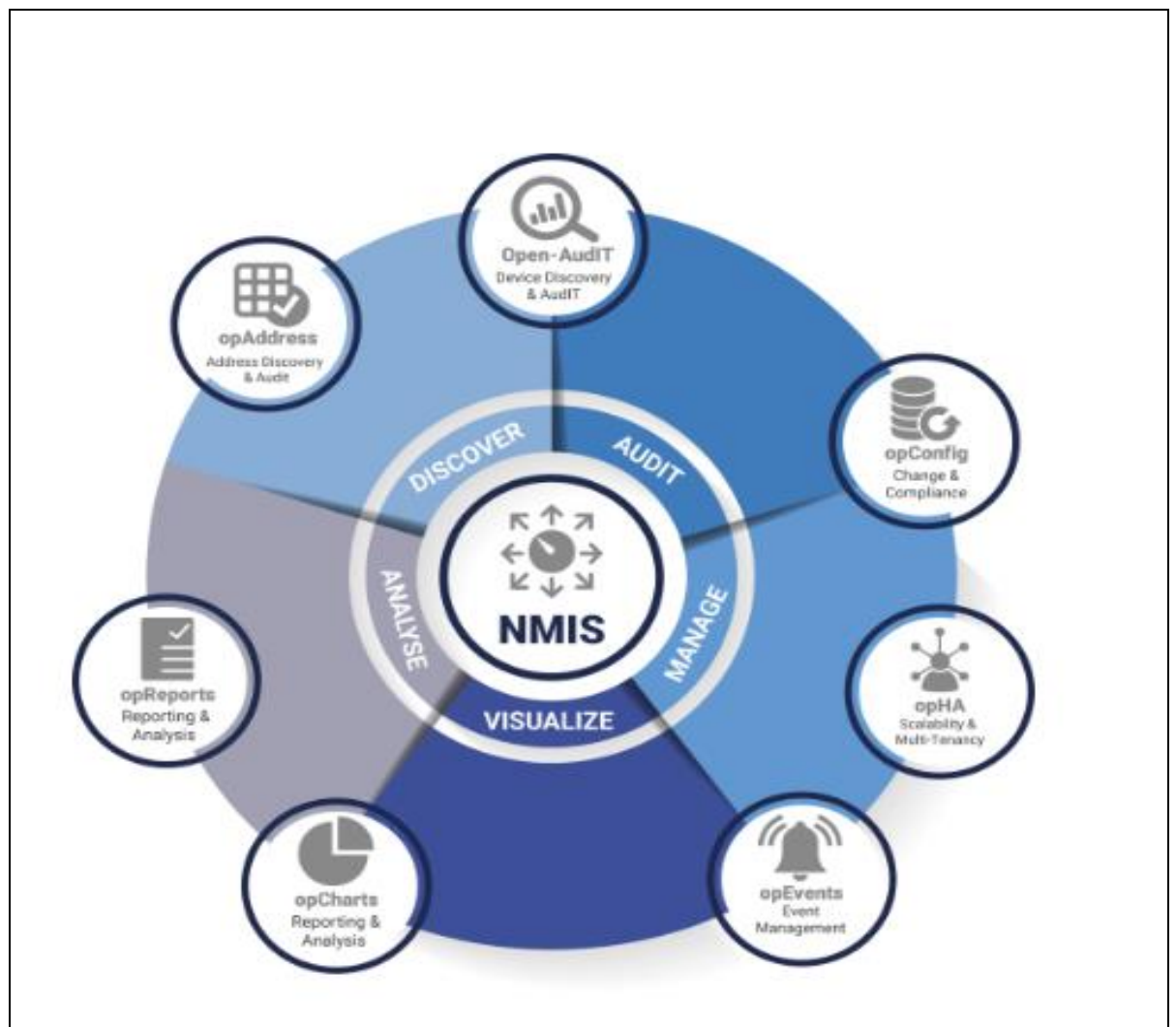
NMIS

NMIS helps administrators of networks to better manage and monitor their networks.

NMIS helps administrators of networks to better manage and monitor their networks (Figure 1 and Figure 2). NMIS Version 9 released in 2020, monitors the status and performance of an organisation's IT environment, identifying faults, automating provisioning, reviewing current and historical network performance, and predicting where future failures are likely to occur. In doing so, the IT departments of FCT's customers can respond to issues quickly and proactively work to prevent issues arising in the first place, and plan IT changes and expenditure.

It is important to note that NMIS has no 3rd party costs or license fees as it is 100% FCT's IP, hence the high gross margins – this includes operating systems, databases and end user interfaces.

Figure 1: Overview of NMIS



Source: Company



Figure 2: Features of NMIS



Source: Company

In an environment of ever-increasing device numbers and the rapid rise of IoT and the Cloud, NMIS can provide automation at scale and with flexibility.

Why is NMIS important? NMIS is increasingly important in network management circles because networks and their criticality are growing quickly driven by increasing device numbers and the rapid rise of IoT and the Cloud. In this environment high levels of automation are required to help network administrators scale their capabilities in a cost-effective manner. NMIS provides automation at scale and with high flexibility. FirstWave has started building AI into its network management modules to better cope with the volumes of data going through networks, and that has added to the product's appeal.

Who are some of NMIS' customers and how has NMIS helped them?

- **Microsoft.** FCT announced an expansion of its relationship with Microsoft in August 2024. The fact that Microsoft has adopted a product like NMIS to manage its vast network reach rather than a competitive product or developing an effective solution in-house suggests NMIS has vast commercial potential.
- **NASA.** In July 2021, NASA partnered with Opmantek as part of the Artemis missions, which aim to land the first woman and person of colour on the surface of the moon, and eventually the first human on Mars. Although the exact nature of how NASA is using the software is secret, it was selected to handle events in real-time in a mission-critical setting. One of the key features of FirstWave's solution is the software's automated resolution of events which can be applied in any environment. The partnership has been recently renewed for another 12 months.
- **Telmex.** Telmex is Mexico's dominant telco and the company that made Carlos Slim Helu currently the 11th richest person in the world and richest



in Latin America with a net worth of over US\$100bn¹. FCT has partnered with Telmex since 2011 and has utilised a vast range of FCT products since 2011, but only in late 2023 completed its first bundling of the NMIS platform for sale. In other words, it bundles the software with its network sales and provides its customers with all the benefits of the platform. The first contract including NMIS promised to deliver ~\$1m in revenue over the following 3 years.

- **Sinch** is a company that powers voice communications for communication service providers such as Zoom, Twilio and 8x8. It handles more than 300 billion minutes of voice calling per year and there are over 100 million active phone numbers that are registered on behalf of its customers' users. As Sinch is so large, it needs to monitor an exponential number of devices and be able to tell quickly when any faults occur on the network. Sinch hired Opmantek prior to its acquisition by FirstWave and uses NMIS to monitor, maintain and optimise the network. Sinch can see how device performance is impacting the health of a single device, a group of devices or the whole network. NMIS also allows for customised alert escalation to suit any end-user scenario, and for proactive event management – Sinch is instantly alerted and can act quickly to avoid problems from causing a significant impact on customers.

The fact that organisations such as NASA, Microsoft, Telmex and Sinch are relying on FCT's NMIS depicts the utility and importance of its software.

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How is FCT's NMIS different from its competitors? We see two key reasons.

1. **It is powered by an Open Source foundation at its core.** This allows FCT's clients to adapt, customise and extend the platform to meet their own requirements. Moreover, it enables them to benefit from continuous innovation and contributions from a global community of developers and users dedicated to enhancing network management. NMIS can adapt to any network size, and it has support for over 10,000 different vendors with an extraordinary number of devices including routers, switches, firewalls, servers and IoT devices being able to be identified and managed.
2. **It is quick to deploy, lower cost and higher scale.** NMIS can be rapidly deployed and can scale to an environment of any size. This makes NMIS particularly attractive to large organisations and Managed Service Providers. FirstWave's commercial model mirrors the model of Managed Service Providers and pricing grows as the number of devices managed grows.

¹ Bloomberg Billionaires Index 2023.



Saisei's software, provides network managers with the ability to see network insights and then manage their customers in real time.

Saisei Networks/FirstWave STM (Secure Traffic Networks)

In September 2023, FCT purchased the assets of Silicon Valley founded network automation software company, Saisei Networks. Saisei's software provides network managers with the ability to have deep network insights and manage their customers bandwidth and quality of service in real time (Figure 3 and Figure 4). It operates based on pre-configured rule sets together with machine learning and is highly automated in order to increase capability while reducing operational expenditure.

What can customers do with STM?

Examples include:

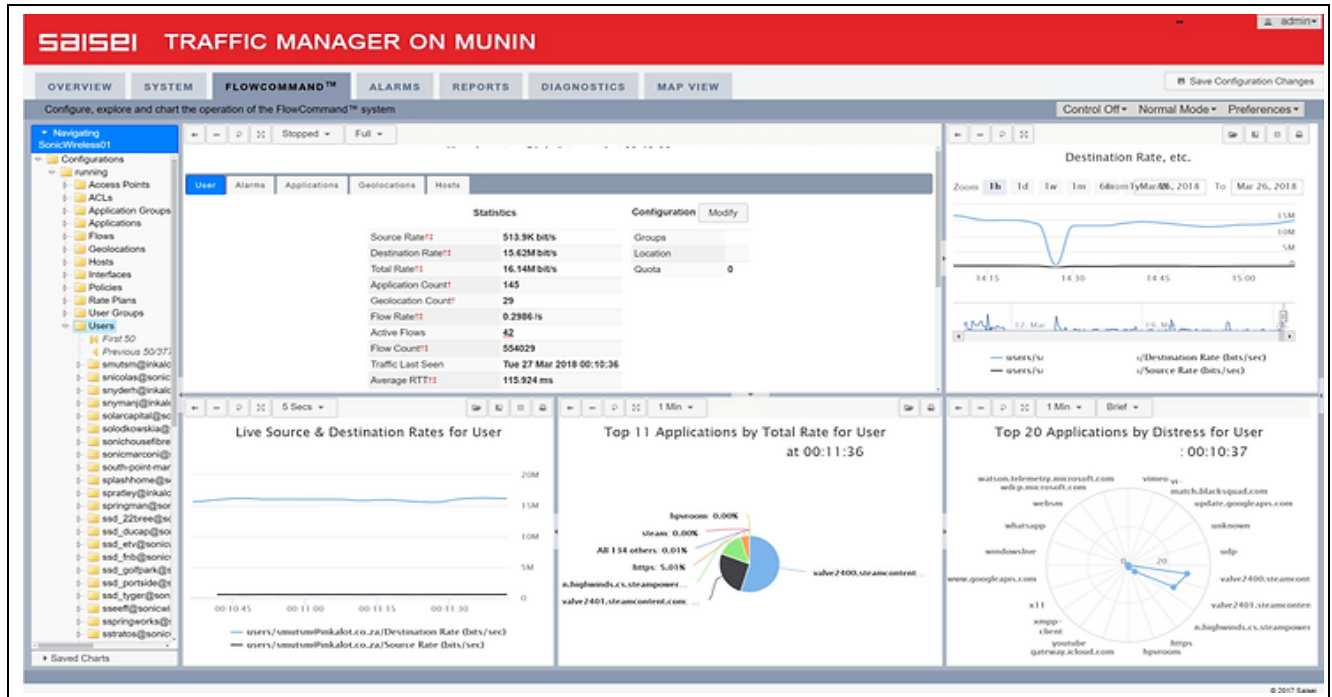
- Ensuring customers are on the correct plans for their data usage, potentially enabling upselling opportunities to plans that may better meet their needs,
- Determining if issues are related to a single customer, application or a sector on the network, and thus fix issues causing poor performance in a targeted and efficient way; and,
- Answering regulator queries on services delivered.

Following the 2023 acquisition of Saisei, its STM software was merged into the NMIS suite. This deal added A\$1m to FCT's annual revenue, through over 50 new clients (mostly North American telecommunications organisations) and provided complimentary technology to the company's NMIS product.

One client of FirstWave STM is Speedcast, a leading provider of satellite communications and IT services. It is the first authorised integrator globally of Starlink's low-latency, low Earth orbit for the enterprise and maritime sectors. Speedcast uses the platform to improve its network performance and enhance the end-user experience, enabling increased throughput and reduced support calls. This is particularly important as bandwidth demands continue to increase in conjunction with the usage of applications that rely on satellites.

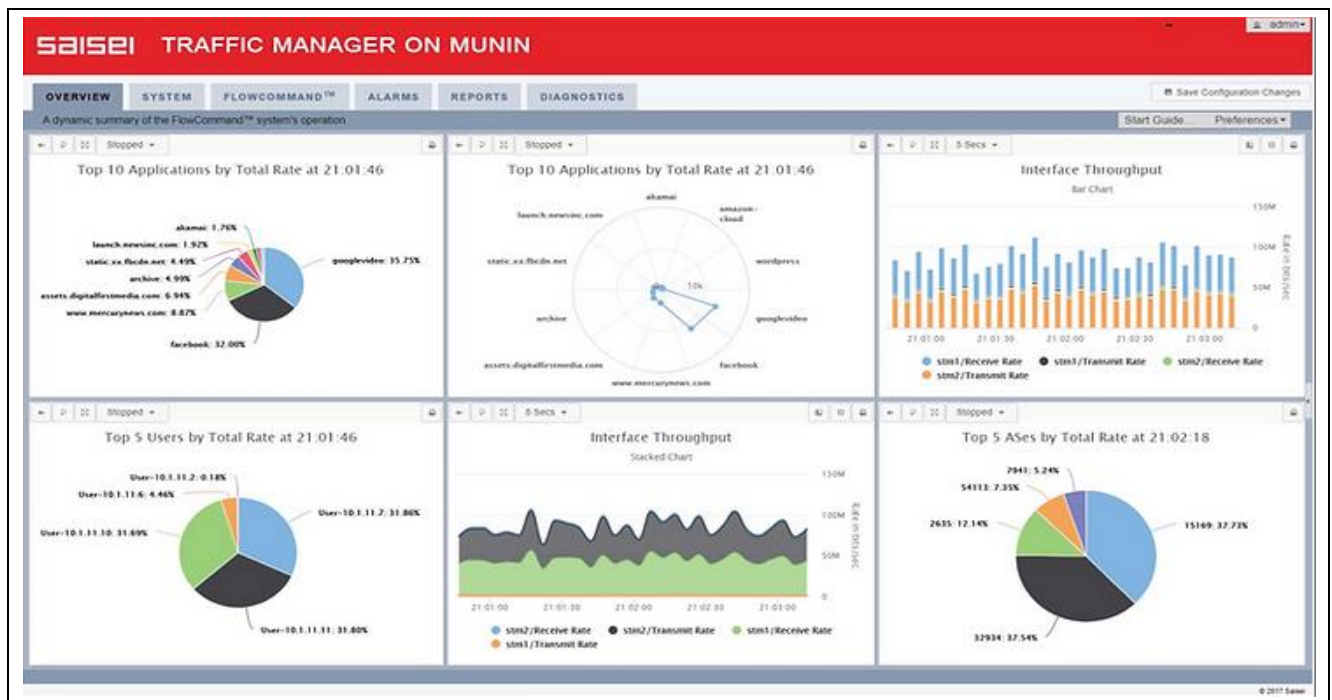


Figure 3: Overview of Saisei (now branded Secure Traffic Manager)



Source: Company

Figure 4: Overview of Saisei (STM)



Source: Company



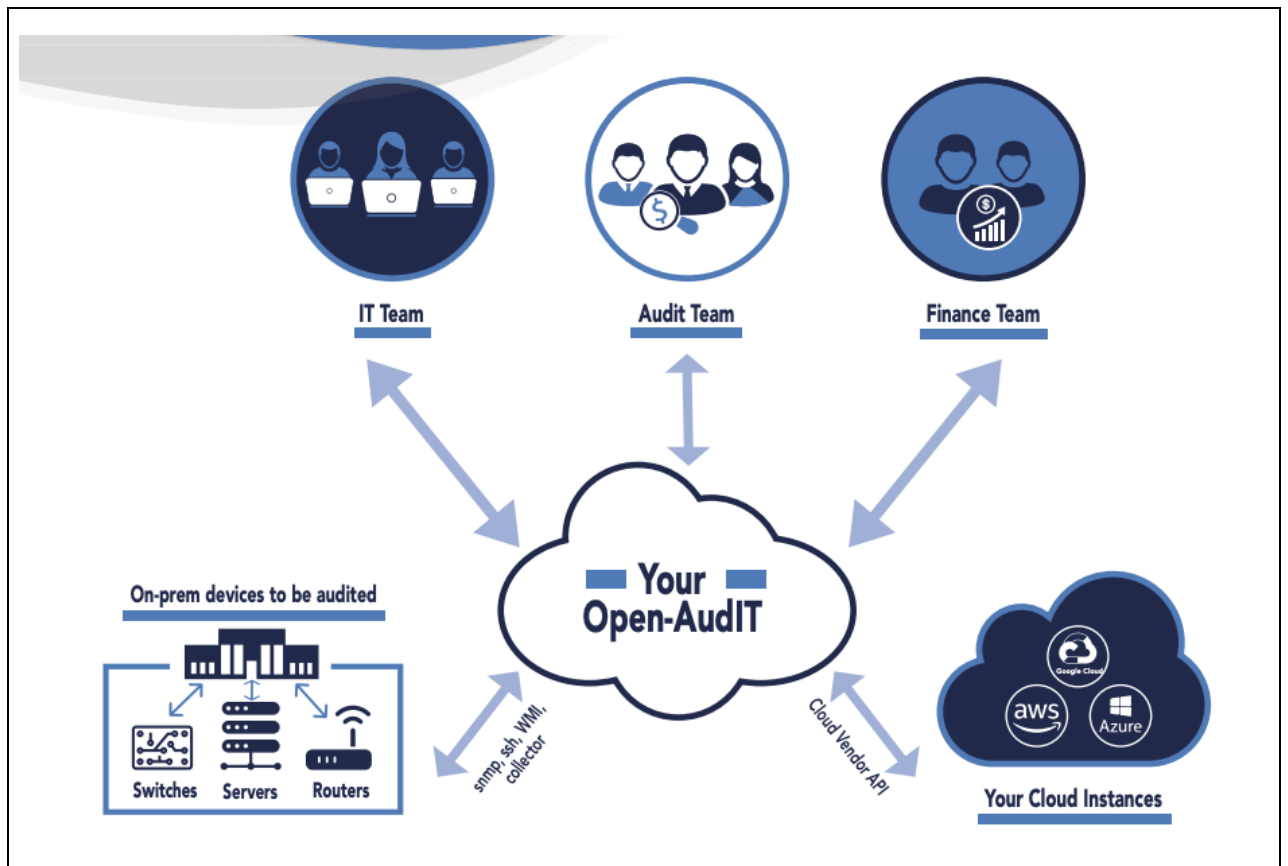
Open-Audit audits everything attached to a network cost-effectively and tells customers what is on their network, how it is configured and when it changes.

Open-Audit

Open-Audit (Version 5.0) is a discovery, audit, asset tracking and reporting system. It audits everything attached to a network cost-effectively and tells customers what is on their network, how it is configured and when it changes (Figure 5 and Figure 6). Once a device is found, Open-Audit runs a series of queries to it and stores the resulting data in a database. This data could include definitive lists of all software licensing, IT configuration changes and hardware warranty status.

The data can be used for various reporting purposes, both internal and external. The software comes with 50 pre-set report formats and users can create custom reports as needed. The software can be run on Windows Server and Linux, and there is a cloud SaaS version available. There is a free on-premises Community Edition, which includes asset discovery, but there are significant advantages to upgrade to the paid/ commercial versions which are packaged as Professional and Enterprise.

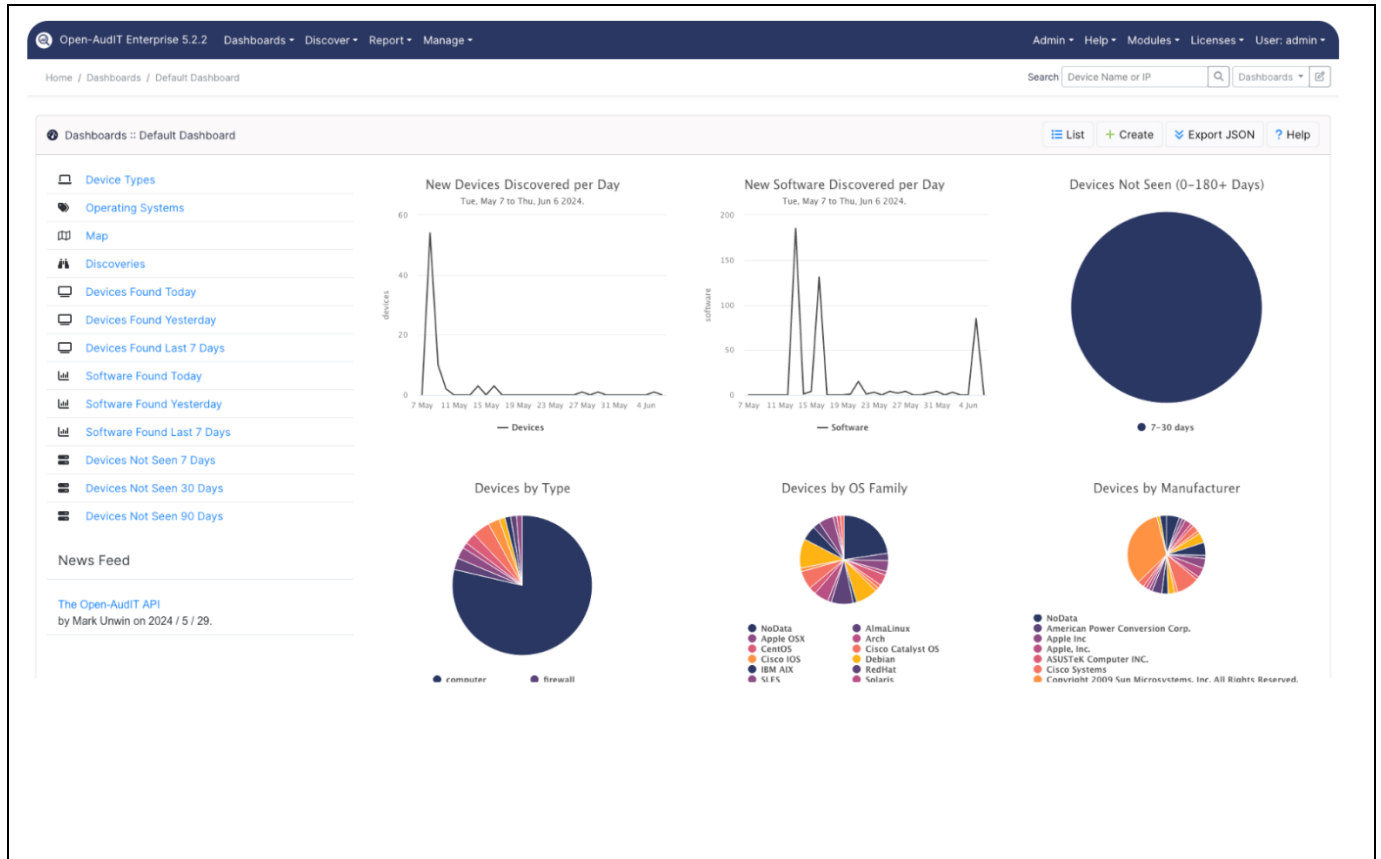
Figure 5: Open-Audit



Source: Company



Figure 6: Open-Audit's interface



Source: Company

Open-Audit enables clients to monitor that their networks are secure and to comply with cybersecurity regulations.

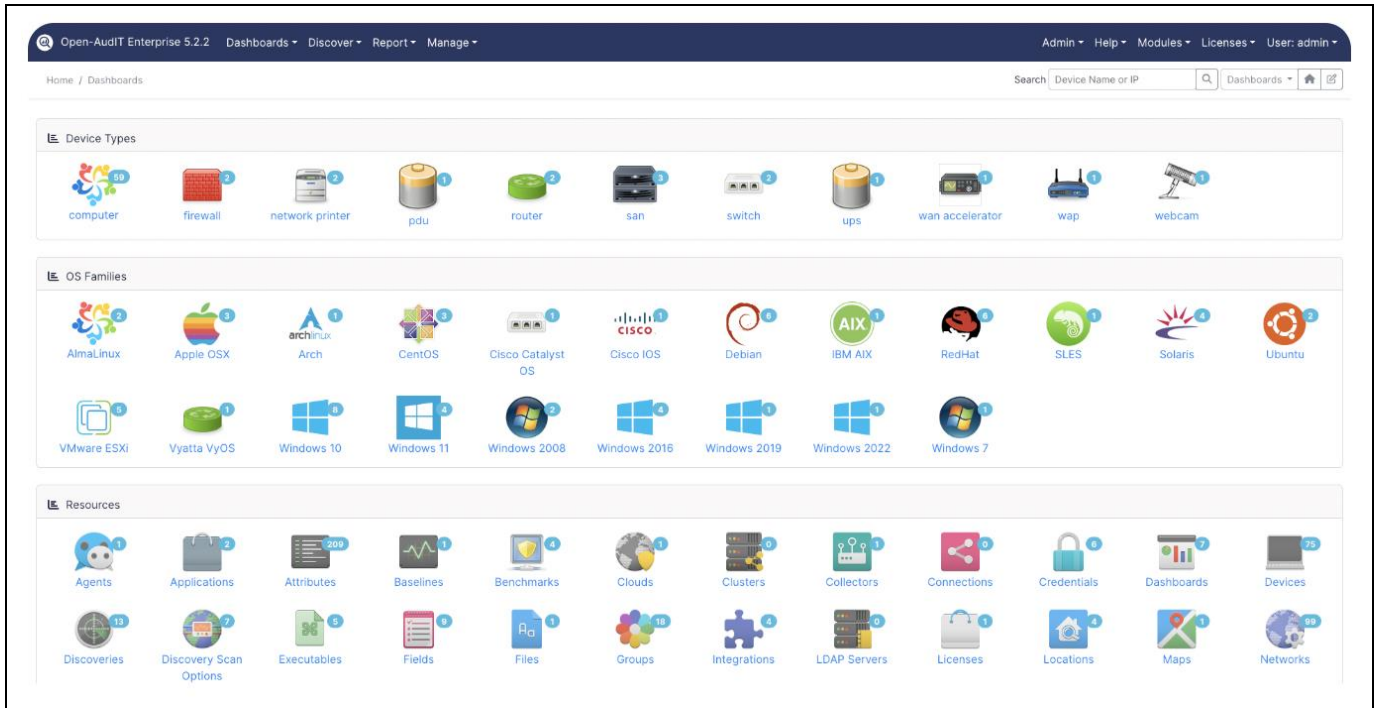
How does Open-Audit help customers? Open-Audit helps from both an operational and Cybersecurity perspective. A network cannot be secured if it is not known what devices are connected to it and how it is configured. Open-Audit enables clients to monitor that their networks comply with cybersecurity and operational standards. Customers can pinpoint changes in the environment, stay on top of licensing requirements, ensure technology is not vulnerable or end of life, and manage their IT assets.

Why would Open-Audit be chosen over competing software products? Because of certain features it has over competitors including its configuration management, simple interface (Figure 7), network mapper and the diverse range of equipment it can interact with, Open-Audit was last year declared the best agentless discovery tool in the world for IT asset management by pro-consumer website Comparitech. These features were crucial in being selected as the best platform².

² <https://australiancybersecuritymagazine.com.au/FirstWave-launches-major-open-audit-update/>



Figure 7: Open-Audit's interface



Source: Company



FirstWave Cloud's original product is CyberCision, a 'cybersecurity-as-a-service' platform.

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CyberCision for Cyber Security

FirstWave Cloud's original product, CyberCision, is a 'cybersecurity-as-a-service' orchestration and management platform. Since the acquisition of Opmantek and the need to target investment to the areas of greater opportunity, CyberCision has become a secondary focus, but remains an important revenue source for the company. The growing need for cybersecurity for enterprises of all sizes means that this product remains relevant for FirstWave. We see cybersecurity services today as roughly where internet services were in the late 1990s.

How CyberCision helps customers

CyberCision helps service providers sell, set up, and provide security services from one cybersecurity-as-a-service orchestration and management platform. It allows service providers to offer cyber security services at scale from the cloud with nothing to install on the customer premises which creates new opportunities to make money with lower costs. Its features include:

- Integrated security services orchestration and management from a single interface, simplifying the administration of security services
- The ability for service providers to build as-a-service packages, enabling them to streamline the delivery process
- Advanced email security, protecting against malware, ransomware, phishing and impersonation attacks
- Real-time threat intelligence with a combination of Cisco Talos Intelligence and Cisco Advanced Malware Protection; and
- A centralised view of security status across all users, accessible via both a unified web console, and mobile app, delivering continuous monitoring and control.

Unlike competing solutions in the market, CyberCision does not require its end users to own their own cybersecurity infrastructure and it is built for scale. It is therefore a very cost-efficient option. Moreover, it is designed specifically to enable telecommunications carriers and service providers as partners, offering an alternative to traditional data centre security with cloud-delivered services. It can virtualise, multi-tenant, integrate and support existing and new third-party vendors and security functions.



Telstra on-sells the services to its own customers (particularly in the enterprise and government sectors) providing them with features including email security and threat identification.

CyberCision and Telstra

CyberCision has had Telstra as a major reseller for many years, dating back to before its IPO. Telstra, as the service provider, on-sells the services to its own customers (particularly in the enterprise and government sectors) providing features including email security and threat identification.

FCT's contract with Telstra was most recently renewed in April 2024, to run to the end of July 2025. The contract upgrade included the latest version of CyberCision that extended its capabilities (including sovereign, standards-compliant cyber security for Australian government organisations) and expanded its marketability. The company estimates that the ARR (Annualised Recurring Revenue) is ~\$3m.

Investors had some concerns in June 2024 when FCT revealed that there were a number of strategic shifts within Telstra that would impact on revenue. In the context of a long-standing customer, any change doesn't sound like a good thing. The shift saw Telstra announce decommissioning of its GPA (GateWay Protection Advanced) firewall security offering due to its uneconomical infrastructure platform, and a recharge for hosting services. Whilst this will result in a loss of ~\$730k in Annualised Recurring Revenue (ARR) and ~\$440k in gross profit, GPA is a non-core business for FCT.

Customers affected by Telstra's decommissioning of the infrastructure platform will be moved on to FirstWave's Sydney (AWS) platform. This could result in either increased revenues for FCT, or an immaterial decrease in revenues. FCT has told investors it does not see this to be a threat to its business because the dollar amount was relatively low, and the company was now more diversified in terms of products and geographical revenues.

Also part of this strategic shift, Telstra commissioned FCT to build a sovereign ISM (Information Security Manual) compliant email platform for government as part of the Telstra contract. This platform is currently undergoing market testing prior to launch and ultimately could replace the current Telstra platform that hosts CyberCision. The ISM (Information Security Manual) standard is the Australian government security compliance standard, and Telstra and FirstWave are targeting ISM-compliant cybersecurity-as-a-service for Australian government users with the knowledge that this is the only multi-tenanted ISM compliant platform in Australia and represents a significant opportunity as government departments move to become compliant with this standard.



Gartner estimates that total spending on Network Management Services and cybersecurity to be well in excess of US\$100bn.

FirstWave's market opportunity is very substantial

FirstWave's software is addressing two major markets: Network Management and cybersecurity. In both instances, it is difficult to estimate the exact market size and many of the estimates out there are contentious. In both instances, we have chosen to use data from management consultancy outfit Gartner which estimates that total spending to be well in excess of US\$100bn.

FCT's Network Management Software could become very big in Latin America

FCT is hinting at a launch of a new cloud service for network management in Latin America which would provide significant new revenue streams for the company. Launching this service would mean that customers in Latin America would not need to install FirstWave's network management products on-premise, but rather take advantage of them through the cloud service and potentially purchase via their key partner Telmex.

Gartner estimated in 2023 that worldwide enterprise network connectivity services would exceed US\$260bn in 2023³. Although data for 2024 is not available, it is difficult to imagine it differing significantly in 12 months. The high amount of spending is due to increasing reliance on networks – especially due to IoT, cloud services and the expansion of data sources together with the convergence of security operations and IT operations.

Moreover, it is also because of the costs that network interruptions can have on enterprises of all industries and sizes. It was estimated by the Ponemon Institute in 2016 that the average cost of network downtime is US\$9,900 per minute⁴ - a figure that has almost certainly increased since then. As goes without saying, these figures vary dependant on company size and verticals, but even smaller businesses face a cost of \$137-\$427 a minute. Some of the highest risk businesses (including banking and finance, government and healthcare) face a cost of US\$90K per minute.

There is a particularly strong opportunity amongst regional telcos in the Americas.

There is a particularly strong opportunity amongst regional telcos in the Americas, particularly in Latin and Southern America. These telcos use a wide variety of technology – not just mainstream – and have transitioned much of their infrastructure into the cloud, and this is a place where FCT's network management systems excel.

There are 121m telco subscriptions in Mexico alone, and this is with 11% of the population lacking connectivity to the Internet⁵. Major telco and FCT customer Telmex is the dominate provider of telecommunications services in the country as part of the America Movil group.

FCT also has clients and a growing business with other parts of the America Movil Group, in particular with the Claro group of companies in Dominican Republic, Ecuador and Guatemala. As in Mexico, telcos that adopt FCT solutions have an opportunity to distinguish themselves from their peers from a customer service standpoint and to investors as well.

³ <https://futureiot.tech/it-budgets-hint-of-increased-spending-on-networking-services/>

⁴ <https://www.atlassian.com/incident-management/kpis/cost-of-downtime>

⁵ Center for Strategic and International Studies, <https://www.csis.org/analysis/mexicos-telecommunications-sector-competitiveness-amid-changing-economic-landscape>



Gartner estimates that cybersecurity spending will reach US\$183.9bn in 2024 and this figure will grow 15.1% in 2025 alone.

FCT believes the more immediate market opportunity is in its sales pipeline which it has estimated to be greater than its current ~A\$10m ARR.

The cybersecurity market has lots of growth left

Turning to CyberCision, there is a big market opportunity ahead for FCT in respect of this product too. There are several estimates for how big the cybersecurity market is, although Gartner estimates that cybersecurity spending will reach US\$183.9bn in 2024 and this figure will grow 15.1% in 2025 alone⁶. Nearly half of cybersecurity will be security software (US\$87.5bn in 2024 and \$100.7bn in 2025), although security services and network security will account for more than a fair share too. Spending on security services is forecast to be US\$74.5bn in 2024 and US\$86.1bn in 2025 (representing 15% growth) whilst spending on network security is forecast to be US\$21.9bn in 2024 and US\$24.8bn in 2025 (13% growth).

Network security spending is driven by increasing adoption of cloud-based security solutions, a rising need for data privacy and compliance (particularly in light of regulations such as the EU’s General Data Protection Regulation), and growing sophistication of cyber threats, including AI-driven attacks. Since the release of GenAI, attackers are employing tools along with large language models (LLMs) to carry out attacks. By 2027, 17% of all cyberattacks will involve AI. In this context, a platform like CyberCision that enables service providers to provide and manage security services through a cloud portal would be highly lucrative.

Obviously, no one expects FCT to take a significant share of either global market opportunity, overtaking the largest companies in the space. But even with a small market share, it still would be lucrative. FCT believes the more immediate market opportunity is in its sales pipeline which it has indicated is greater than its current ~A\$10m ARR.

FCT’s push towards profitability

The company anticipates cash-flow break even in FY25 and is on track to achieve that milestone, having recorded a cash-flow positive half in the first half of FY25. This is being achieved through optimised spending and through some increased customer adoption (Figure 8). FCT’s cash balance as at 31 December 2024 was \$1.68m, up \$1k from the FY25 opening position. Moreover, the past two quarters represent the first time the company has not used any cash.

Figure 8: FCT’s profit margins in Q1 and Q2 FY25

(A\$m)	Q1	Q2	Δ%
ARR	8.46	8.15	-4%
Revenue	2.25	2.27	1%
Gross Profit	1.99	1.85	-7%
Gross Profit Margin	88%	82%	-6ppt

Source: Company

As the revenues for the NMIS suite of products account for a larger and larger share of group revenue, the overall gross margins for the business will improve.

⁶ <https://www.gartner.com/en/newsroom/press-releases/2024-08-28-gartner-forecasts-global-information-security-spending-to-grow-15-percent-in-2025>



The company's long-term future: M&A or growing large?

Either scenario is plausible. Take for instance, IT observability and IT management software company Solarwinds which was founded in 1999. It is a US\$2bn+ company with over 300,000 customers and has built its capabilities up through M&A activity.

At the same time, there has been intense competition in the IT sector generally, as well as amidst cybersecurity and network management companies. IT players are engaging in frenetic M&A activity to stand out in a competitive market, from local players like the aforementioned Atturra and Cosol, to even giants like IBM. IBM spent US\$34bn to acquire open-source software provider Red Hat back in 2019, and there's little argument that it has paid off with IBM's market capitalisation having doubled since, and the world's oldest IT company finding modern relevance.

In March 2024, Cisco spent US\$28bn to acquire Splunk, a company with a technology platform that makes machine data accessible by identifying data patterns, providing metrics, diagnosing problems and providing intelligence for business operations. The price of this deal represented a 7x EV/Revenue multiple and staggering 104.6x P/E.

Deals for ASX-listed companies are more modest in comparison. One deal potentially relevant for FCT (at least in respect of CyberCision), was cybersecurity provider Tesseract which was acquired for A\$176m. This was 10-11x EV/EBITDA⁷. If we were to apply the same multiple to FCT in our DCF modelling for FY27, this would be \$71m, double FCT's current market capitalisation. We don't think it is beyond the realm of possibility that the company could sell off CyberCision, especially at such a premium price but moreover because the CyberCision business is more suited to a services company and such a sale would strengthen FCT's focus on the global opportunities presented by the network management software products. Another deal, also in 2023, was Atturra's acquisition of Managed Service and IT solutions provider Cirrus Networks, a deal completed for 11.1x EV/EBITDA, or \$58.6m⁸.

To give ASX investors (who may be less familiar with software metrics US investors or professional tech investors may use) an idea of an acquisition multiple, we have used the Tesseract deal to value FCT. Even if a deal was not primarily priced using an EV/EBITDA multiple, analysts and journalists would likely note such a multiple in any announcement of a deal. We would note that the value to any acquirer would not be restricted to money FCT makes from existing products, but from its entire customer base (both paid and unpaid) and the potential ability to sell them the acquirer's own technology products. A suitor may even value the business on the basis of its users with multiples using metrics such as Average Revenue Per User (ARPU) or Lines of Code (LOC) – which should be self-explanatory.

IT players are engaging in frenetic M&A activity to stand out in a competitive market, from local players like the aforementioned Atturra and Cosol, to even giants like IBM.

The value in FCT to an acquirer would not be restricted to the money it will or could be making from its products, but also from its user base.

⁷ Tesseract Scheme Booklet, p.174 or p.50 of Lonergan Edwards & Associates independent experts report

⁸ Cirrus Networks Scheme Booklet, p.11



FCT's Peers

FCT does not have directly comparable ASX-listed companies – that is to say open-source cloud infrastructure monitoring and cybersecurity solutions. There is no shortage of companies focused on cloud services generally, but to list them all it would be a report in and of itself. We have restricted our list to FCT's closest competitors that are providing eerily similar services to FCT.

- **Logic Monitor** develops and operates a SaaS-based performance monitoring system for IT infrastructure. Its namesake system empowers DevOps teams and web-commerce companies to monitor the availability and performance of their critical IT infrastructure; helps in-house IT teams and enterprise IT operations to simplify troubleshooting to optimize performance and end user experience; and monitors hybrid cloud, NOCs, and co-managed IT services for enterprise-level managed service providers. The company also provides cloud services monitoring and integrated solutions for device and application configuration management. LogicMonitor was founded in 2007 and is headquartered in Santa Barbara, California. It was most recently valued at US\$2.4bn as part of an \$800m fundraising in November 2024.
- **Science Logic** develops and offers a cloud-based hybrid information technology monitoring platform for service providers, enterprises, and government organizations. Its platform offers discovery, relationship mapping, monitoring, event management, runbook automation, dashboard analytics, asset management, and ticketing for various technologies. The company was founded in 2003 and is based in Reston, Virginia. It has not raised funding since its US\$105m Series E raising in early 2021, at which point it was valued at US\$525m according to DealRoom.
- **Red Hat** makes open-source solutions, including the Linux operating system and the Kubernetes open-source system. Red Hat would be the most well-known company on this list because it was bought by IBM for a whopping US\$34bn in 2019 and has been a subsidiary ever since. That deal has been described as 'the most significant acquisition IBM has ever done in terms of making it relevant and injecting some new life and different perspectives into the world's oldest IT company'⁹. Although its valuation has not been broken down ever since, it has been claimed that IBM in 2024 was 'nearly done getting back the \$34bn it spent'¹⁰.
- **MongoDB (NDQ:MDB)** is capitalised at nearly US\$18bn. The company provides MongoDB Atlas, a hosted multi-cloud database-as-a-service solution; MongoDB Enterprise Advanced, a commercial database server for enterprise customers to run in the cloud, on-premises, or in a hybrid environment; and Community Server, a free-to-download version of its database, which includes the functionality that developers need to get started with MongoDB. It offers professional services comprising consulting and training.
- **Solar Winds (NYSE:SWI)** is capitalised at US\$2.3bn. It provides a suite of network management software that offers real-time visibility into network utilisation and bandwidth, as well as the ability to detect, diagnose and resolve network problems.

⁹ <https://www.nextplatform.com/2024/10/24/ibms-red-hat-acquisition-will-pay-for-itself-by-early-next-year/>

¹⁰ Ibid



We value FCT at \$0.04 per share in our base case scenario and \$0.058 per share in our optimistic (or bull) case scenario, amounting to \$94.2m and \$137.8m respectively.

Valuation and catalysts

We value FCT at \$0.04 per share in our base case scenario and \$0.058 per share in our optimistic (or bull) case scenario using a blended DCF/M&A valuation, amounting to \$94.2m and \$137.8m respectively. This is assuming future shareholder dilution.

Specifically, we assume the company raises \$12m in the next 12 months and that this is completed at \$0.023 per share. But for this, our assumptions project the company to have a negative cash balance by the end of FY25. This is from a (\$6.7m) NPAT result and positive non-cash adjustments are not enough to bring the cash balance into positive territory in the same way that adjustments in FY23 and FY24 were.

But with this raising, the company has no further requirement to raise capital over the life of our model and its cash balance does not go backwards from that time onward. We have published the implied share prices to account for our anticipated scenario and an alternative scenario where the company does not need further capital raised. But even if we are correct, our project share prices (from our blended valuation) still amount to healthy premiums compared to the current share price and the market capitalisation an even higher premium, as we detail below.

The share prices under the current number of shares issue are \$0.055 per share in our base case and \$0.081 in our bull case.

Our M&A-based valuation

We have assumed the company is acquired in FY29 for 11x EV/EBITDA in line with the Tesserent acquisition in 2023. Our base case assumes \$9.4m EBITDA and our bull case assumes \$13.7m EBITDA for those years. These derive takeover values of \$103.1m in our base case and \$150.8m in our bull case (Figure 9 and Figure 10).

Figure 9: M&A calculation (pre-dilution)

Valuation (A\$m)	Base Case	Bull case
FCT's FY29 EBITDA	9,374.0	13,705.0
EV/EBITDA	11.0	11.0
Enterprise Value (A\$ m)	103.1	150.8
Net (debt) cash (FY25)	4.5	4.5
Equity value (A\$ m)	107.6	155.3
Shares outstanding (million)	1,713.5	1,713.5
Implied price (A\$ cents)	0.063	0.091
Current price (A\$ cents)	0.020	0.020
Upside (%)	215.0%	355.0%

Estimates: Pitt Street Research



Figure 10: M&A calculation (post-dilution)

Valuation (A\$m)	Base Case	Bull case
FCT's FY29 EBITDA	9,374.0	13,705.0
EV/EBITDA	11.0	11.0
Enterprise Value (A\$ m)	103.1	150.8
Net (debt) cash (FY25)	4.5	4.5
Equity value (A\$ m)	107.6	155.3
Shares outstanding (million)	2,360.0	2,360.0
Implied price (A\$ cents)	0.046	0.066
Current price (A\$ cents)	0.020	0.020
Upside (%)	130.0%	230.0%

Estimates: Pitt Street Research

Our DCF valuation is \$79.1m in our base case and \$117.8m in our bull case.

Our DCF valuation

Our DCF valuation is \$79.1m in our base case and \$117.8m in our bull case, which equate to \$0.046 per share and \$0.069 per share pre-dilution (Figure 11). When dilution is taken into account, these decrease to \$0.034 per share and \$0.050 per share even though the market capitalisations stay the same (Figure 12).

Our DCF assumptions are as follows:

- **Time frame.** We assume 10-years with terminal growth thereafter.
- **Revenue model.** In accordance with FCT's forecasts¹¹ we assume a 40% decline in revenue for FY25 for CyberCision due to the removal of the zero-margin recharge between Telstra and the company and the end of life of Telstra's GPA Firewall product. After this initial reduction, an organic growth rate of 5% was assumed over the next 4 years, with our own 4% forecast thereafter. In respect of Network Monitoring, we assume 8% growth in FY25, 25% in FY26, 50% in FY27 and FY28 with slowing growth over the remaining years, down to 6% over the last couple of years of the life of our model. FY24 was the first year in FCT's history that NMIS accounted for a higher revenue share than CyberCision. We expect the gap to grow in the years ahead. By the end of our model, we assume it is a 66-33 split between NMIS and CyberCision's share.
- **Operating costs.** We forecast 4% growth in cost of sales, operations, marketing and other corporate expenses. We assume 10% growth in product development costs over the first four years of our model, with 5% thereafter. The total investment in product on FCT's income statement comes to \$12.6m over the next 4 years and \$38.5m over the next 10 years. We have assumed further product investment in the cash flow statement, as an investment in intangibles, as a flat 4% of the opening book.
- **Tax rate.** Although we assume FCT does not have to pay tax for 3 years given operating losses, we assume a 25% corporate tax rate once it does pay tax (from FY28). This is in line with Australia's rate for companies with a revenue under A\$50m. With a pre-tax profit of \$32.8m by the end of the life of our bull case model, the company does not exceed the \$50m threshold companies must cross to pay the higher 30% rate.

¹¹ P.46 of FCT's 2024 annual report.



FirstWave Cloud Technology

- **Discount rate.** We arrive at a WACC of 13.1%, reflecting a 14.5% cost of equity, a 9% cost of debt and a 95%-5% proportion of equity and debt respectively. Our cost of debt is acquired from a 12% pre-tax cost of debt, 9% post the 25% tax rate. Our cost of equity is derived from a 1.5x beta, a 4% risk-free rate of return and a 7% equity premium.
- **Terminal value.** We assume a 2% growth rate.

We have also constructed a bull case in which we assume faster revenue growth for both CyberCision and NMIS – peaking at 20% and 60% respectively within the next 4 years before moderating to the same pace as our base case

Figure 11: DCF calculation (pre-dilution)

Valuation (A\$m)	Base Case	Bull case
Present Value of FCF	24.5	40.6
Present Value of Terminal Value	50.1	72.7
Enterprise Value (A\$ m)	74.6	113.3
Net (debt) cash (FY25)	4.5	4.5
Equity value (A\$ m)	79.1	117.8
Shares outstanding (million)	1,713.5	1,713.5
Implied price (A\$ cents)	0.046	0.069
Current price (A\$ cents)	0.020	0.020
Upside (%)	130.0%	245.0%

Estimates: Pitt Street Research

Figure 12: DCF calculation (post-dilution)

Valuation (A\$m)	Base Case	Bull case
Present Value of FCF	24.5	40.6
Present Value of Terminal Value	50.1	72.7
Enterprise Value (A\$ m)	74.6	113.3
Net (debt) cash (FY25)	4.5	4.5
Equity value (A\$ m)	79.1	117.8
Shares outstanding (million)	2,360.0	2,360.0
Implied price (A\$ cents)	0.034	0.050
Current price (A\$ cents)	0.020	0.020
Upside (%)	70.0%	150.0%

Estimates: Pitt Street Research



FirstWave Cloud Technology

Our blended valuation: A\$0.04 to A\$0.058 per share

Figure 13 and Figure 14 show our final blended valuation. Summarising these valuations, we believe FCT should be valued at A\$0.04 per fully diluted share in our base case and A\$0.058 per fully diluted share in our bull case.

Figure 13: Our blended valuation of FCT (pre-dilution)

BASE CASE			
Methodology	Weights (%)	Market Cap (A\$m)	Share price (A\$ cents)
DCF	50.0%	79,647.1	0.047
Takeover	50.0%	107,628.6	0.063
Composite Value (A\$)		93,637.9	0.055
Adjusted Current Value (A\$)		37,571.5	0.022
Upside/ Downside (%)		149.2%	149.2%

BULL CASE			
Methodology	Weights (%)	Market Cap (A\$m)	Share price (A\$)
DCF	50.0%	118,603.6	0.069
Takeover	50.0%	155,277.6	0.091
Composite Value (A\$ cents)		136,940.6	0.080
Adjusted Current Price (A\$ cents)		37,571.5	0.022
Upside/ Downside (%)		264.5%	264.5%

Source: Company

Figure 14: Our blended valuation of FCT (post-dilution)

BASE CASE			
Methodology	Weights (%)	Market Cap (A\$m)	Share price (A\$ cents)
DCF	50.0%	79,647.1	0.034
Takeover	50.0%	107,628.6	0.046
Composite Value (A\$ cents)		93,637.9	0.040
Adjusted Current Price (A\$ cents)		37,571.5	0.022
Upside/ Downside (%)		149.2%	80.4%

BULL CASE			
Methodology	Weights (%)	Market Cap (A\$m)	Share price (A\$ cents)
DCF	50.0%	118,603.6	0.050
Takeover	50.0%	155,277.6	0.066
Composite Value (A\$ cents)		136,940.6	0.058
Adjusted Current Price (A\$ cents)		37,571.5	0.022
Upside/ Downside (%)		264.5%	163.8%

Source: Company



FirstWave Cloud Technology

We foresee the stock being re-rated to our valuation range driven by the following factors:

- Commercial adoptions of NMIS by large direct customers and MSPs globally,
- Growth within the current NMIS customer base, particularly as the Telmex relationship deepens,
- Continued exploration and expansion of the conversion of the free user base to commercial clients,
- Growth in CyberCision,
- FCT reaching ‘cash flow’ breakeven or close (which is expected in FY25),
- Delivering its (conservative) promise of 20% revenue growth in FY25¹².

Risks

We see the following key risks to our investment thesis:

- **Technology and competitive risk:** FCT operates in a competitive market where innovation is constantly happening. There is the risk that FCT may not be able to keep up with the competition.
- **Macroeconomic risks:** A prolonged downturn in the economies of FCT’s customers may affect their demand for FCT’s services.
- **Funding risk.** There is the risk that the company may need future funding and it may not be able to raise the funds on favourable terms, if at all; and this would be dilutive to shareholders.
- **Cybersecurity risk.** There is a risk that FCT’s systems or its products could be subject to a cybersecurity attack. Even though companies like FCT are expected to have strong systems and to be continually strengthening them, so are cybercriminals constantly upping the ante.
- **Key personnel risk:** There is the risk the company may lose key personnel and be unable to replace them and/or their contribution to the business. This is particularly critical considering that FCT operates in such a highly competitive market for skilled staff and expertise.

¹² ASX announcement 11 June 2024



Glossary

Annualised Recurring Revenue (ARR) – The value of the recurring revenue or a business' term subscriptions, normalised for a single calendar year.

Cloud – A distributed collection of servers that host software and infrastructure, and it is accessed over the Internet

Cyberattacks – Attempts by hackers to damage or destroy a computers' network.

Cybersecurity – the state of being protected against the criminal or unauthorized use of electronic data, or the measures taken to achieve this.

Data patterns – A sequence of data points that show a shape or structure that can be easily recognised.

General Data Protection Regulation (GDPR) – Laws in the EU that establish a set of rules for processing the personal data of a company's digital users/customers.

Global Industry Classification Standard (GICs) – An industry analysis framework that helps investors understand the key business activities for companies around the world

Gross margin – The difference between revenue and cost of goods sold, divided by revenue.

IoT (Internet of Things) – The interconnection via the internet of computing devices embedded in everyday objects, enabling them to send and receive data.

ISM (Information Security Manual) – The Australian government security compliance standard,

IT (Information Technology) – The use of technological systems to store, retrieve and send information.

Managed service provider (MSP) – an outsourced third-party company that takes on the ongoing, day-to-day responsibilities, monitoring, and maintenance of a range of tasks and functions for another company – their customer

Network discovery - a process of finding devices that also allows systems and nodes to connect and communicate on the same network

Network Management - the process of administering, managing, and operating a data network, using a network management system

Oligopoly – A state of limited competition, in which a market is shared by a small number of producers or sellers.

Open source – In general terms, this refers to something people can modify and share because its design is publicly accessible. In the context of software, it is code that is publicly accessible so anyone can see, modify, and distribute the code as they see fit.

SaaS – a method of software delivery and licensing in which software is accessed online via a subscription, rather than bought and installed on individual computers



FCT's leadership

The company's current board and leadership composition is as follows (Figure 15):

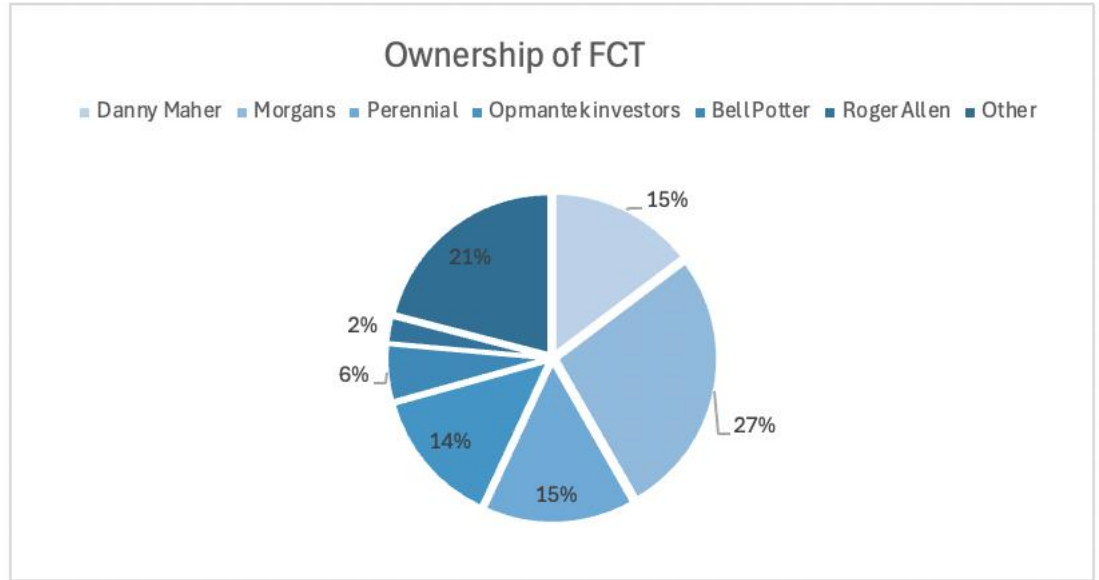
Figure 15: FCT leadership composition

Board of Directors	
Name and Designation	Profile
Danny Maher CEO and Managing Director	Mr Maher has 30 years experience in the IT industry in a career spanning USA, Asia, UK and Australia. He joined FCT when Opmantek was acquired in 2022, having founded and been at Opmantek for 11 years prior. Mr Maher, ING Bank and Allen & Buckeridge venture partners were the 100% owners of NetStar, which was acquired by Logicalis in 2010. At NetStar Mr. Maher built the Network Management business, founding it (together with previous Opmantek CTO Keith Sinclair) in Sydney, Australia and growing it to service clients in 42 countries. He was named Australian CEO of the year in 2015 ahead of Alan Joyce (Qantas) and David Thodey (Telstra).
John Grant Non-Executive Chairman	Mr Grant has an extensive career spanning technology, engineering and construction and sports administration. He has held leadership positions including CEO of ASX listed technology company, Data#3 Limited, and inaugural Chair of the Australian Rugby League Commission. He is currently Chair and a Non-Executive Director of UniQuest Pty Ltd and Chair of Entacon Group's Advisory Board. He has also chaired or been a member of various industry and government advisory groups and industry associations.
Daniel Friel Non-Executive Director	Mr Friel, with over 25 years in the financial sector, founded Bank of America's Strategic Alliances and Investments group to identify and adopt innovative technologies. As President of Banc of America Technology Investments and Ecommerce Holdings, he oversaw investments in over 40 tech companies, including notable exits like Signio (acquired by VeriSign), Shopping.com (now owned by eBay), and Archipelago (merged with NYSE). Previously, he was SVP and Director of Financial and Economic Analysis at Bank of America and taught economics at North Carolina State University. Mr Friel has also advised several technology firms, including DxEcosystems, 6fusion, and Virtual StrongBox.
Iain Bartram CFO & Company Secretary	Mr Bartram has extensive experience as a strategic CFO with multi-site and international high-growth technology businesses. He has significant experience in financial management, governance, and operations, particularly in listed technology companies. Before joining the company, he served as the CFO at another ASX listed company (Vinyl Group, then known as Jaxsta), contributing to its strategic direction and business growth. Since joining FCT in 2020, his key achievement is overseeing the acquisition of Opmantek, including delivering the synergies and cost savings.

Source: Company



Appendix I – Capital Structure



Source: Company



Appendix II – Analysts’ Qualifications

Nick Sundich is an equities research analyst at Pitt Street Research.

- Nick obtained a Bachelor of Commerce/Bachelor of Arts from the University of Sydney in 2018. He has also completed the CFA Investment Foundations program.
- He joined Pitt Street Research in January 2022. Previously he worked for over three years as a financial journalist at Stockhead.
- While at university, he worked for a handful of corporate advisory firms.

Marc Kennis has been an equities analyst since 1996.

- Marc obtained an MSc in Economics from Tilburg University, Netherlands, in 1996 and a postgraduate degree in investment analysis in 2001.
- Since 1996, he has worked for various brokers and banks in the Netherlands, including ING and Rabobank, where his focus has been on the technology sector, including the semiconductor sector.
- After moving to Sydney in 2014, he worked for several Sydney-based brokers before setting up TMT Analytics Pty Ltd, an issuer-sponsored equity research firm.
- In July 2016, with Stuart Roberts, Marc co-founded Pitt Street Research Pty Ltd, which provides issuer-sponsored research on ASX-listed companies across the entire market, including technology companies.

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