



**Breakaway
Research**

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Company Information

ASX Code	CIO
Share Price (21 Feb 2017)	A\$0.026
Ord Shares	484m
Escrowed Shares	305m
Performance Shares	150m
Market Cap diluted (excl. performance)	A\$20.5m
Cash	A\$2.0m
Total Debt	NIL
Enterprise Value	A\$18.0m

Directors & Management

Chairman	Jason Ferris
Managing Director & CEO	Yakov Temov
Non-Executive Director	Eric De Mori
Non-Executive Director	Blaise Thomas
Company Secretary	Nicki Farley

Substantial Shareholders

Cocoon Capital Investments Limited	15.8%
White Light Communications Ltd	5.8%
Y. Temov	5.8%

Source: ConnectedIO

Company Details

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Registered Address	Level 24, 44 St Georges Terrace Perth, WA, 6000
Phone	+61 (0)8 6211 5099
Email	info@connectedio.com

1 Year Price Chart*

(*Company listed 14th March 2016)



Source: Iress

ConnectedIO (CIO)

Delivering SIM card connectivity to devices & hardware

*Recommendation: Speculative **BUY***

Tech Company – Silicon Valley M2M Solutions Provider

Key Points

- *ConnectedIO (CIO) is focused on the development of hardware, software and cloud-based M2M services that connect machines and devices to the internet.*
- *Formal certification by AT&T, Verizon, T-mobile, Vodafone and Telefonica to distribute CIO's products and services through their existing customer networks.*
- *Current sales pipeline of \$6m AUD.*
- *Existing sales contracts with: Coca-Cola, The American Red-Cross and other US Enterprise-level customers.*
- *CIO have in-field trials with over 100 customers including 17 different drone manufacturers and a number of billion dollar US-based Enterprises.*

Introduction to IoT & M2M

The IoT (Internet of Things) concept involves connecting machines and devices with internet connectivity to be able collect and transmit machine or environmental data – and which creates enormous opportunities for businesses. The internet is now not just a network of computers but a network on inter-connected 'things'.

Gaining real-time feedback of an asset can help business efficiency in terms of:

- Feedback on an asset's performance statistics can allow for operational optimisation.
- Real-time feedback on stock and consumable levels.
- Reduction in physical call-outs as asset faults can be remotely diagnosed.
- Ability to communicate with assets and force software and firmware updates.

Connecting a machine or asset in a Business-to-Business context with internet connectivity is broadly defined as an M2M (machine to machine) application within the IoT segment.

The pool of connected IoT devices is predicted, by Consultants McKinsey & Co., to more than double from 12 billion in 2016 to 30 billion devices by 2020 with most growth a result of new machine connections. These commercial applications will include factories and industrial equipment including robots, healthcare devices, agricultural and mining machines and construction applications. McKinsey, in their analysis of the sector concluded, "Our central finding is that the hype may actually understate the full potential of the IoT".



Company Overview

Founded in Silicon Valley in 2013

ConnectedIO manufacture small routers and modems that become physically attached to machines and equipment. The devices allow for the transmission of machine data back to a central operator via a cellular (sim-card) connection

ConnectedIO was founded in Silicon Valley in 2013 following a contract to supply a specially designed modem for Coca-Cola's remotely located vending machines. Today, ConnectedIO supply their products to the Drone, Energy Management, Surveillance, Oil & Gas, Robotics, Digital Signage and Industrial Machinery markets. ConnectedIO listed on the ASX in March 2016.

Cellular is the Future of IoT Connectivity

Transmission of machine data over cellular network considered most stable, secure and easily scalable option

In the past, equipment users and manufacturers have relied on the collection and retention of data through non-real-time methods such as the use of flash memory sticks. High value assets were often connected via expensive physical hard-wired connections. More recently, devices could transmit live-data over wireless networks but would need to be within proximity of a network and therefore not suitable for mobile or remotely located devices. Wireless networks are considered a less ideal method for providing connectivity as they are more unstable and less secure than an equivalent cellular solution.

The latest evolution of machine connectivity and data access, and the one considered likely to be the most pervasive, is the transmission of machine data over a cellular network. Cellular networks are considered the most stable, most secure and most easily scalable option for machine data transmission. Perhaps most importantly, cellular connections unlock the ability for M2M to function on mobile or remotely located devices.

CIO is a Foot in the Door for Cellular Carriers

M2M for cellular carriers means billions of potential new connections creating a shift in focus

Cellular carriers, faced with huge competition and minimal growth in a saturated mobile market were early to recognise the huge potential of M2M. M2M for cellular carriers means billions of new potential connections and has resulted in a fundamental shift in focus by carriers from the consumer segment to M2M.

Cellular carriers, not traditionally hardware and software suppliers, are eager to establish relationships with partners, like CIO, which represent new sim-card activations and more network traffic with newly connected billions of devices and web of machines.

Formal Certification by Verizon, AT&T and Vodafone

CIO's suite of products are currently being used by major US cellular carriers.

The largest US cellular carrier, Verizon initially contracted CIO to design and build one of CIO's early cellular modems, LT1001 in 2013. This device became the starting point for CIO's foray into the M2M hardware market. In April 2016, CIO had signed a collaboration agreement with Verizon giving access to its sales force and enterprise sales network.

CIO's suite of products are certified and approved for use by Verizon's customers, CIO is further advantaged against its competitors by accreditation as an official member of Verizon's 'VPP' supplier program.

In May 2016, CIO signed an agreement with Vodafone for the purpose of collaborating and jointly marketing CIO's products to Vodafone's global enterprise customers in the M2M segment.

CIO announced formal certification and collaboration with AT&T and T-Mobile in August, 2016. AT&T and T-Mobile are regarded as the leading carrier for enterprises in the US, contrast to Verizon who are predominantly consumer focused. AT&T represent over 75%



The validation of CIO's technology by the largest global cellular carriers is testament to the viability of the company and its products.

of M2M 'physical' data lines in the US and service almost of all the Fortune 1,000 group of companies. The conversion of these physical data lines to cellular connections represents the biggest opportunity for CIO in the enterprise space. The formal certification and close collaboration with AT&T's IoT division now gives CIO access to AT&T's extensive network of resellers and their entire enterprise customer base.

Current Sales Contracts

A cyber-security company integrator for remote Point-of-Sales (POS) machines signed a purchase agreement in January 2017 for \$1.7m of product in 2017. \$550,000 has been delivered to date and orders are expected to be recurring. This order was received through Verizon's sales network.

Economiser Pro – An energy management technology provider signed a product order of \$300,000 in October 2016 with expectations of future orders in 2017. This order was received through Verizon's sales network.

Levelops Energy – An oilfield technology services company placed an order for \$250,000 of product in November 2016. Orders are expected to be reoccurring. This order was received through Verizon's sales network.

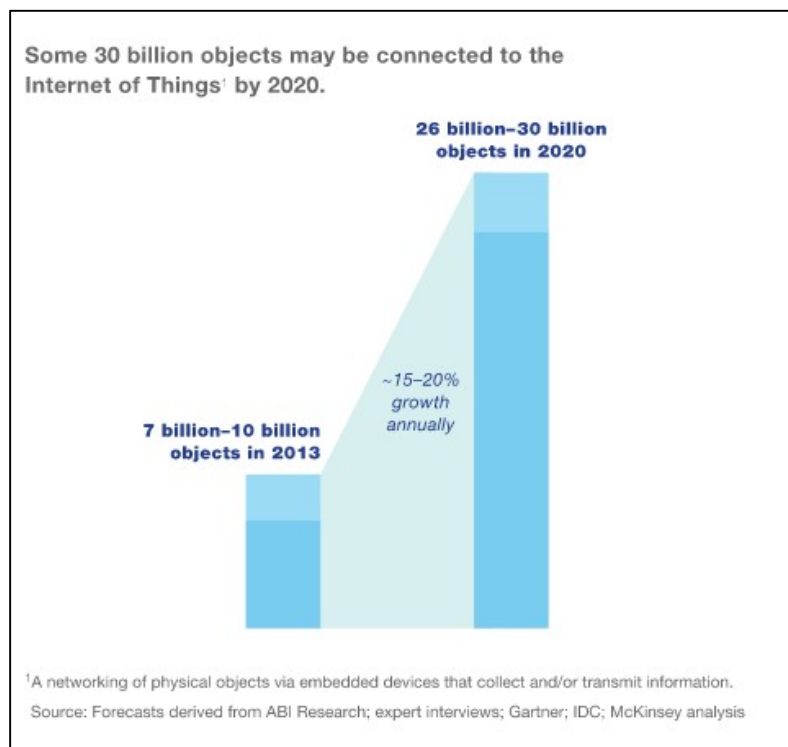
First Mover in a Growing Internet Revolution

The M2M segment, is a sector in its infancy. Organisations are only just beginning to understand and adapt to the capabilities of this new-found connectedness. Many large Enterprises are in the process of redesigning their organizational strategies to take advantage of the benefits of real-time feedback from their machinery and devices.

Device manufacturers and systems integrators – CIO's main customer base - are working collaboratively with Enterprises and Small-Medium businesses to design solutions that can deliver tangible benefit for operations.

Expectations of Device Growth in the Sector

Some 30 billion objects are expected to be connected to the IoT by 2020, compared to 10 billion in 2013.



Source: <http://www.mckinsey.com/industries/high-tech/our-insights/the-internet-of-things-sizing-up-the-opportunity>



CIO is considered a centre of knowledge in the M2M IoT space.

Typical Sales Cycle – CIO has a Headstart

Having developed M2M products as early as 2013 for Verizon, CIO is an early mover and considered a centre of knowledge in the space. Through CIO's in depth understanding of potential applications for the technology, the company can offer bespoke solutions to customers who may only just be beginning to understand and embrace the capabilities of M2M.

Typically, a new customer would buy a handful of devices to trial in their own in-house simulated environment before placing a bulk order.

CIO, being an early mover, has its products being trialled with hundreds of customers in a wide variety of vertical applications who are beginning to embrace the capabilities of M2M connectivity. Given the infancy of the sector, this process will remain ongoing but has already begun to translate into bulk orders.

Sales Channel Horizontal

CIO is deliberately sales channel agnostic, instead partnering with equipment manufacturers, systems integrators and hardware resellers across all potential sales channels. This horizontal approach means CIO always sits in the middle of any installation between a systems integrator and a manufacturer or end user and can be flexible in operating across all industries.

Once a systems integrator has tested and demonstrated a solution for an application, CIO is then able to benefit from recurring installations with competitor manufacturers through the same systems integrator.

This sales methodology was proven with a cyber-security systems integrator for remotely located point-of-sales systems. A scaled demonstration took place in 2016 followed by an order of \$1.6m worth of product in January 2017.

The Horizontal sales approach will offer multiple revenue stream capabilities

Product Released for Complete Global Coverage

To date, the bulk of CIO's sales were attributed to its early generation Verizon modem. Early in 2017, CIO released 2 new modems and 2 new routers giving customers almost ubiquitous cellular coverage across the globe and a solution for a variety of requirements.

Multiple Revenue Streams

Hardware

CIO will capture initial hardware revenue at approximately 40% Gross Profit. These margins are above the industry standard for hardware sales and still keep CIO's products at the bottom end of a cost comparison with its competitors.

Cloud Management Revenue

Cloud management revenue, typically charged per device, is generally recurring for the life of the installation.

Data Reselling

Each newly connected device will require a monthly cellular data subscription. Verizon and Vodafone are keen for CIO to resell cellular subscriptions on its behalf from which CIO would receive ongoing revenue. CIO estimates it can re-sell data to new customers in 30% of transactions.



ConnectedIO Product Suite

Cellular Modem – eg CIO Machine-Connect LTM1000, LTM1002

Typical Cost: \$180-\$250 USD

A cellular modem allows for basic cellular (internet) connectivity. That is, delivering internet and roaming capabilities to a device for total uptime connectivity. A CIO cellular modem offers reliable 4G connectivity with the added benefit of automatic fall back to 3G and 2G, and are often used as a failover device when a machine loses primary internet connectivity.

Allows for basic cellular (internet) connectivity



EM1000T – Cellular Modem

Source: CIO

Cellular Router – eg CIO Emu Router ER1000T

Typical Cost: \$350 USD

CIO's cellular router allows for not only cellular connectivity through its onboard modem but also provides complete access and management capabilities to the network traffic sensor data of a single device or a group of devices in series. A cellular router alone will allow a machine operator to get real-time feedback of a machine's performance through its array of sensors. This data can then be relayed in real-time to stakeholders through CIO's cloud monitoring platform.

The Cellular Router is the anticipated most important product for CIO

The cellular router is anticipated to be the most important product for CIO.



ER1000T – Cellular Router

Source: CIO



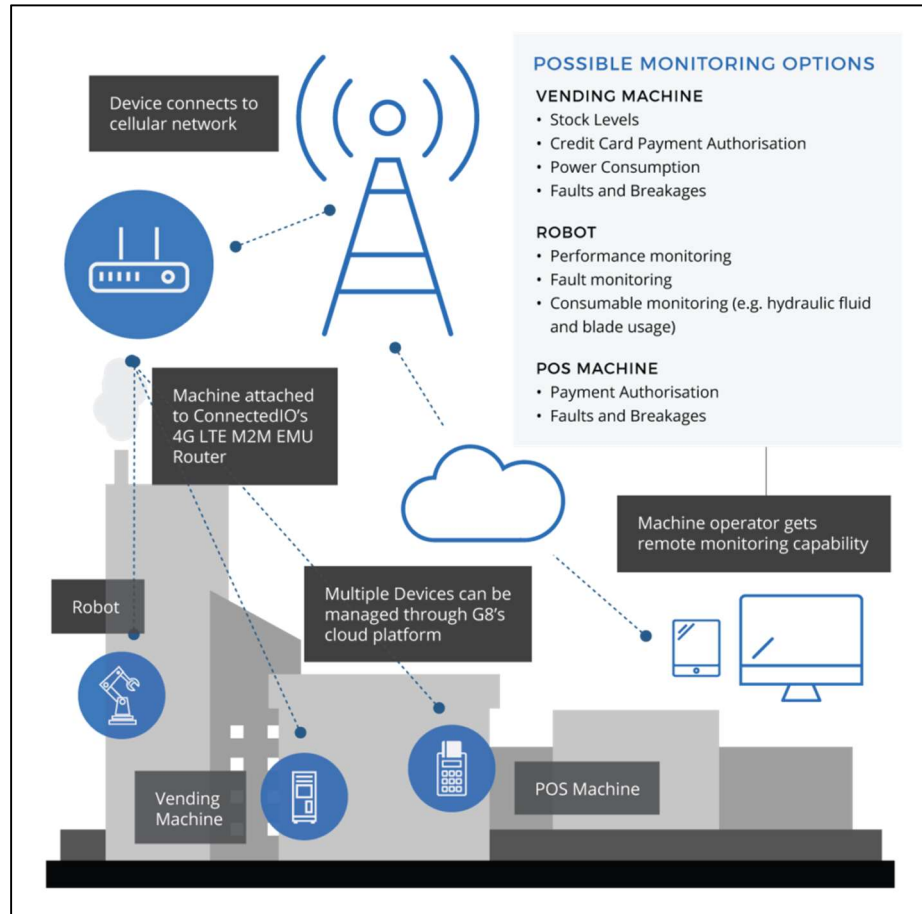
Cloud Management Platform

Typical Access cost: \$10 USD per device per month

CIO's cloud management platform allows machine operators to get remote access real time sensory data from an array of machines or devices.

CIO's cloud management platform allows machine operators to get remote access real-time sensory data from an array of machines or devices. Access to such a platform is a critical tool to data gathering and M2M network monitoring.

M2M Ecosystem Example – Utilising CIO EMU Router



Source: CIO



Analyst Verification

I, Stephen Bartrop of Breakaway Research Pty Ltd, as the Research Analysts, hereby certify that the views expressed in this research accurately reflect our personal views about the subject securities or issuers and no part of analyst compensation is directly or indirectly related to the inclusion of specific recommendations or views in this research.

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