

SHAREHOLDER UPDATE

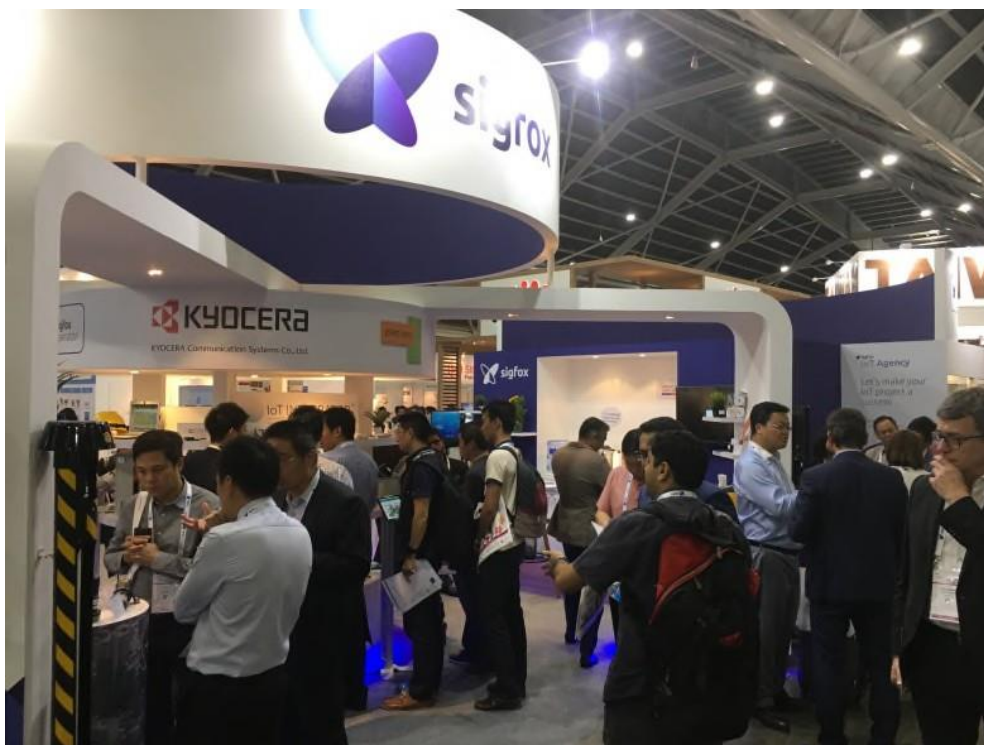
MARCH / APRIL 2018

KEY HIGHLIGHTS

- Opportunities in Asia
- Shipment monitoring presents CCP with a huge addressable market
- Blockchain to strengthen food safety

CEO ADDRESS

The Asia-Pacific region is a powerhouse for Internet of Things (IoT) adoption. It is estimated that the region will have 8.6 billion connected devices by 2020. Analysts are predicting staggering growth, with 75% of businesses expected to have some form of IoT use by 2019. CCP was invited to participate in IoT Asia 2018 (held in March) on the Sigfox stand - joining our Sigfox network partners Thinxtra and Unabiz. The Singapore-based event attracted around 6,000 people from 50 countries.



CCP attracted significant interest and we now have potential relationships with Sigfox operators in Taiwan, Hong Kong and Malaysia; and many new leads to follow up on.

Following IoT Asia 2018, I visited the US. I'm delighted to advise that we now have a presence on the West Coast. CCP Network North America has appointed a full-time Vice President Business Development who will focus on California and Las Vegas. We are also progressing a joint venture with a firm in Las Vegas. Their product extends perishable food shelf life; and CCP neatly complements their offering. Both companies are very excited about the potential combination. I can advise CCP has signed a Memorandum of Understanding to advance business planning, and we anticipate making a further announcement in April/May 2018. On the back of progressing this joint venture relationship, we have received orders for CCP installations at two US prisons via the Federal Department of Justice.

CCP has been invited to present at Dicker Data IoT community events to be held in Sydney, Brisbane and Melbourne (17-19 April 2018). These events will enable Dicker Data resellers to access IoT resources and information and present an excellent opportunity for CCP to meet with resellers and demonstrate our value proposition and compelling IoT solution for the food industry.

We are back in Singapore from 24-27 April 2018 to exhibit at the Food & Hotel Asia Expo (FHA 2018). Unabiz - our Sigfox partner in the region - has invited CCP to join its stand at Asia's most comprehensive international food and hospitality trade event. We understand that there will be 119,500 sqm of exhibition area supporting 4,000 international exhibitors from over 70 countries, with an expected audience of 78,000 attendees from over 100 countries.

Finally, I'm delighted to advise that we have selected a professional marketing company to undertake the Chief Marketing Officer (CMO) role. Our new CMO has an impressive pedigree, with links to global IT brands. In recent weeks, we have reviewed past marketing activities and we're establishing a new direction. As we move forward, our CMO's insight into partnering initiatives, content curation and creation, and powerful lead generation tactics will build brand awareness and better position our solution in the market. Shareholders can expect to see a new website strategy emerge mid-year, which will re-position the way CCP is presented online.



Michael White
Executive Director & CEO
CCP Technologies Limited

Did You Know...

According to the Cold Hard Facts 2 report, **there are more than 1 million refrigerators in the Australian food cold chain.**

[Source: Brodribb, P & Mccann, M. (2013) Cold hard facts 2: a study of the refrigeration and air conditioning industry in Australia. Canberra: Australian Government.]

BUSINESS UPDATE

Shipment monitoring to present CCP with a huge addressable market

The food industry encompasses several primary market sectors - each comprising numerous market segments. The combination of these defines the food supply chain.

Since temperature is the most critical environmental parameter affecting the perishable food supply chain, it is commonly referred to as the "cold chain". All cold chain stakeholders have a requirement for temperature monitoring to comply with food safety legislation and regulations. Being a low-cost, adaptable and reliable product, the CCP solution puts us in a strong position to service client demands across diverse market segments.

We have been focusing on applying our CCP solution to in-situ environments; for example, temperature monitoring fridges, freezers and cool rooms in food service and food retail environments. However, shipment monitoring is also part of our innovation pathway and another step forward in our business development. CCP is on the verge of releasing its shipment smart tag. While the in-situ monitoring market segment is estimated to be 2.8 million monitoring points (MPs) in Australia and the US, the shipment monitoring segment is estimated to be 450 million MPs in the same territory.

When it comes to shipment monitoring, the market is currently dominated by passive data loggers. Data loggers are typically connected to a PC to download temperature data at the end of the journey; however, these do not provide a real-time preventative management tool. The CCP shipment monitoring solution is a novel multi-path connectivity approach. By providing easy access to data at any point along the supply chain, our approach is designed to enable customers to prevent failures before they occur.

When perishable products are shipped, temperature control is critical. If a temperature breach occurs at any point along the supply chain, product quality can be irreparably impacted. Shipments valued in the millions can be lost or delayed as breaches are investigated, which results in supply interruptions, negative customer impact and risk to product safety. Our wireless shipment monitoring solution presents an opportunity to feed critical control point data into a Blockchain.

In our Half Yearly Report (to 31 December 2017), we advised shareholders that we are poised to commence shipment monitoring trials. Following discussions with several stakeholders, including Microsoft, CCP has submitted a proposal to a major supermarket chain in Australia. We will update shareholders as this initiative develops and agreements are reached.

Blockchain to strengthen food safety

Paper-based systems are cumbersome. If a serious foodborne illness occurs, through-chain traceability is slowed by a paper trail. Meanwhile, other consumers are put at risk.

Sadly, Australia has just experienced another foodborne illness crisis, with six people dead from eating contaminated rockmelon. According to media reports, the first cases of listeriosis were identified in January 2018, and the grower was identified in February 2018. When it comes to tracing contaminated food, the days, weeks and months count.

There's a great example of how the latest advances in technology can strengthen food safety attributed to Walmart's Vice President of Food Safety: "I brought a package of sliced mangoes into my staff meeting. I put it on the desk, and I said to my team, the traceback study starts right now." He waited seven days for his team to track mangoes to the farm. By using Blockchain, Walmart has reduced that timeline to 2.2 seconds. By using technology, tracing contaminated product to its source quickly will help curb the spread of foodborne illnesses and potentially prevent deaths.

Blockchain is a distributed ledger technology that allows all members of a supply chain to record transactions in a decentralised data log maintained on a network of computers, rather than a physical ledger or a single database. Transactions must be approved through consensus, and everything is secured through cryptography. A transaction is immutable once added to the blockchain, which prevents participants from manipulating or altering the records.

Globally, food companies are looking to use Blockchain to improve their ability to through-chain monitor the temperature conditions of perishable foods to ensure quality control and extend shelf life. By participating in the CCP Blockchain, our customers will be able to enter into smart contracts which are supported by business rules for product monitoring, breach alerts, product acceptance and product payment. Our new shipment smart tag complements our Blockchain initiative.

Paper-based systems are prone to error. Handwriting is often illegible and critical information in forms can be missing. Online systems prevent critical information from being missed and use workflow rules to escalate action if forms are not completed on time. We are strengthening our Blockchain capabilities to drive related initiatives and respond to new opportunities.



Our product management team comprises 45 staff, including experienced Blockchain developers. Given there is a global shortage of Blockchain developers, we are in a very fortunate position. Our team has a real depth of experience and skills, and we are leveraging existing relationships and partners with organisations like Microsoft to expand our Blockchain activities. We are quickly forging new relationships that we believe may lead to further growth in this part of our business.

Opportunities in Asia

According to the World Economic Forum, the Southeast Asia region will rank as the 5th largest economy in the world by 2020. Agriculture and food accounts for up to 48% of the gross domestic product in the individual states of the Association of Southeast Asian Nations (ASEAN). Rapid population growth and urbanisation is fuelling significant growth in the food industry across Asia. To springboard into Southeast Asia, CCP now has a presence in Singapore via its partnership with UnaBiz.

- **Singapore** is a highly attractive market for CCP. The food industry is vibrant and growing, with Singaporeans spending around US\$ 5 billion annually eating out. By CCP's estimates, there are over 7,000 food service outlets and 3,000 convenience stores in the territory. The National Environment Agency (NEA) regulates the food retail industry in Singapore to ensure that food sold at retail outlets is prepared hygienically and is safe for consumption. Regulations include requirements for proper storage of food in refrigerators, including temperature control.

As mentioned earlier, following IoT Asia 2018 (held in Singapore), we now have opportunities to investigate Taiwan, Hong Kong and Malaysia.

- **Taiwan** has one of the highest per capita rates of expenditure on food in Northeast Asia which supports more than 120,000 restaurants. Inhabitants have relatively high disposable incomes and a strong preference for convenient, healthy, quality and premium food and beverage products. Food trends include demands by time-constrained consumers for quick fresh-cooked meal solutions via convenience stores. Major food safety issues in Taiwan have resulted in the government strengthening food safety laws. Regulations now reference hazard analysis and critical control point monitoring requirements.
- **Hong Kong** is one of the world's leading gourmet dining centres. There are around 14,000 restaurants and other food service businesses. As an import-dependent market, cold chain distribution channels are generally efficient and dependable to support its 7.5 million population. The Centre for Food Safety is responsible for implementing strict food safety legislation.
- **Malaysia** continues to attract leading multinational food retailers in its expansion drive. Supermarkets increasingly import food and beverage products directly, and consumers are becoming more health conscious. In 2015, Malaysia had over 160,000 food services businesses with a projected 5% annual growth. According to the International Trade Administration, the country has a high potential for cold chain sector growth. Malaysia's quality of transport infrastructure is ranked 10th out of 140 countries in the World Economic Forum Global Competitiveness Index.

Perishable foods (i.e. fresh foods, such as fruits, vegetables, meat, seafood, poultry and dairy) require an uninterrupted cold chain. By controlling parameters of temperature, humidity and atmospheric conditions, service providers in the cold chain can sustain food safety and extend product shelf life. However, historically, cold chain infrastructure in Asia has presented challenges for food importers, exporters and in-country distributors. In recent years, the growing demand for high quality fresh food in Asia has driven increasing cold chain investment. With the right partnering strategies, there are now significant opportunities for CCP in Asia.

CUSTOMER PROFILES

Australian Customer Profiles

Capital Brewing Co



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Craft beer is a vibrant \$500 million sector. Competition is fierce and each brewer is aiming to create a signature flavour. Who would've thought temperature is such a critical control point when it comes to flavour. Find out how CCP is helping Capital Brewing Co.

Meals on Wheels Queanbeyan



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Meals on Wheels provide meal services and support to vulnerable members of their local community. We're delighted to see another Meals on Wheels join the CCP Network.

Mingara Recreation Club



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Mingara Recreation Club offers some of the best dining experiences in the NSW Central Coast region. With food safety as a top priority, it's no surprise the club has recently installed CCP to support its hospitality business.

North American Customer Profiles

CCP secures Mendakota's 19th hole



[Read More](#)

National surveys in the US continue to show that club dining operations represent the most popular amenity offered by clubs. No surprise that Mendakota Country Club has installed CCP to strengthen food safety.