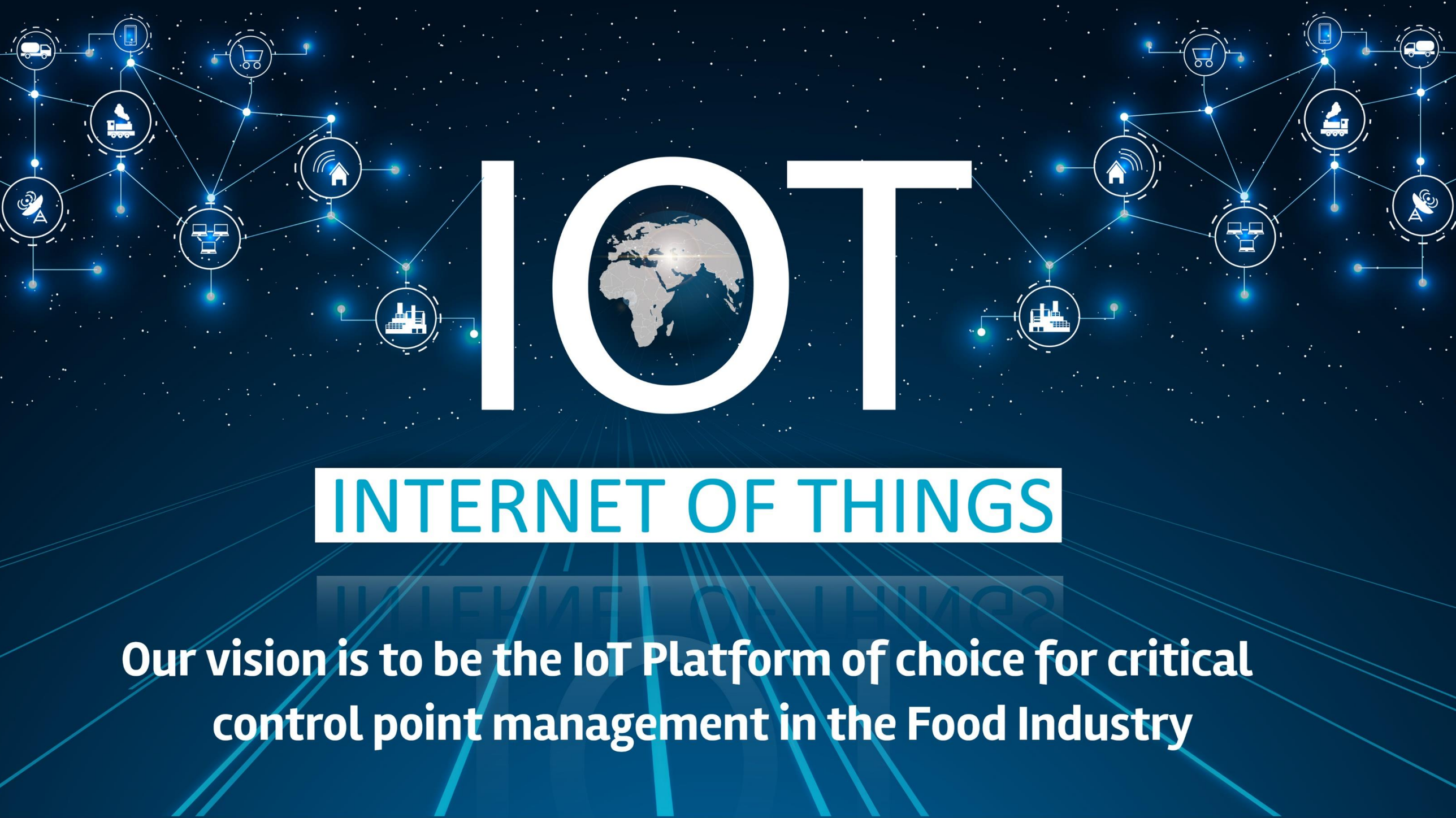
# CCP Technologies Limited (ASX:CT1)

# AGM Presentation 2018

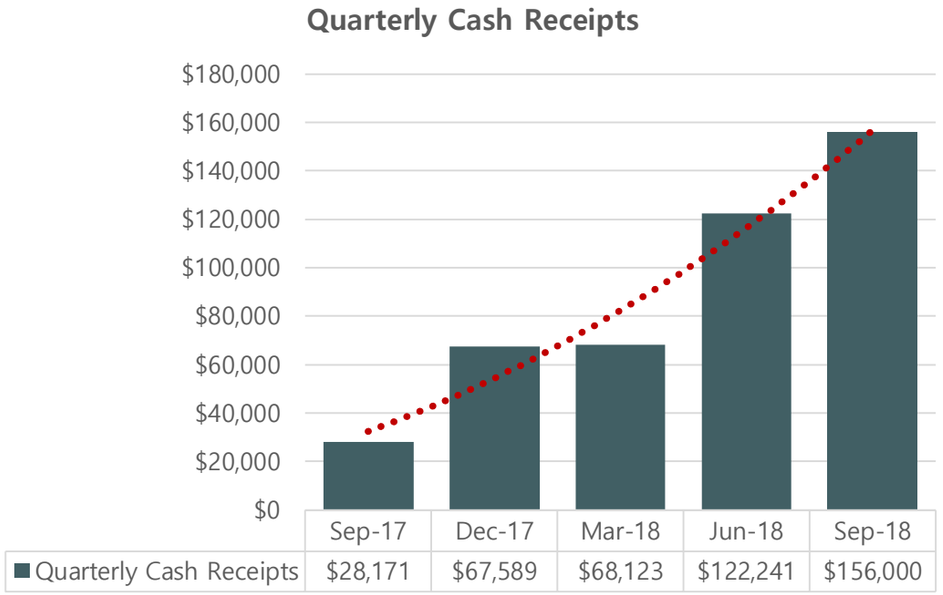



**Our vision is to be the IoT Platform of choice for critical control point management in the Food Industry**

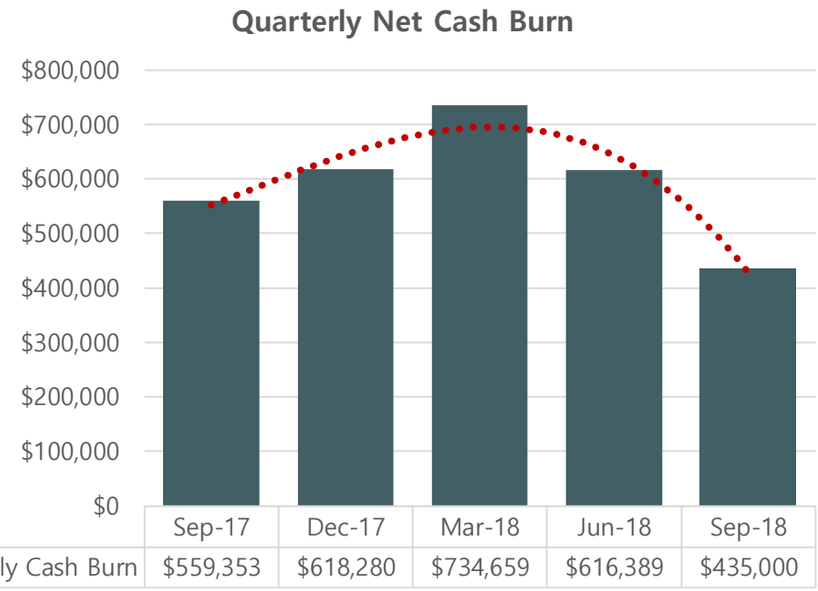
# Quarterly Results

**Quarterly Receipts** are steadily rising as we secure more subscription and development contracts.

**Quarterly Cash Burn** reached a peak in the Mar-18 QTR and has declined steadily with the increase in customer receipts. Whilst labour costs will rise, we anticipate the monthly cash burn will continue to decline as larger contracts are secured.




| | Sep-17 | Dec-17 | Mar-18 | Jun-18 | Sep-18 |
|---|---|---|---|---|---|
| Quarterly Cash Receipts | $28,171 | $67,589 | $68,123 | $122,241 | $156,000 |




| | Sep-17 | Dec-17 | Mar-18 | Jun-18 | Sep-18 |
|---|---|---|---|---|---|
| Quarterly Cash Burn | $559,353 | $618,280 | $734,659 | $616,389 | $435,000 |






























AGM Presentation 26-Nov-18

# Key Food Industry Facts for Australia

**$20B**
Cost of food waste

**60%**
Food waste occurs through the food supply chain

**40%**
Food waste occurs at the retail and consumer end

**5.4M**
People suffer food poisoning

**2.1M**
Days of lost work due to food poisoning

**$1.25B**
Annual cost to the economy

**1.6M**
Refrigerated assets

**23GWhr**
Electricity used for food refrigeration

**$8B**
Cost of Electricity to maintain cold chain

# Customer Pain-Points

**Perishable foods must be maintained at correct temperatures to remain safe to consume.  Failure often leads to wastage.**

**For most perishable foods, remaining shelf-life is a function of temperature over time.  Once lost, shelf-life cannot be recovered.**

**Food Safety Regulations stipulate safe temperature thresholds for food and there is a legal obligation to comply.**

**Food supply chains are complex and they suffer from a lack of information flow.**

**Cold Chain management decisions are typically reactive.**

# Addressing the Pain Points

**CCP aims to address the needs of the food industry by providing the critical information required to effectively manage food throughout the cold chain.**


**We are helping our customers to manage their food supply chain proactively rather than reactively.**

# CCP's IoT Hardware Evolution

**Button activation, BLE and RF communications**

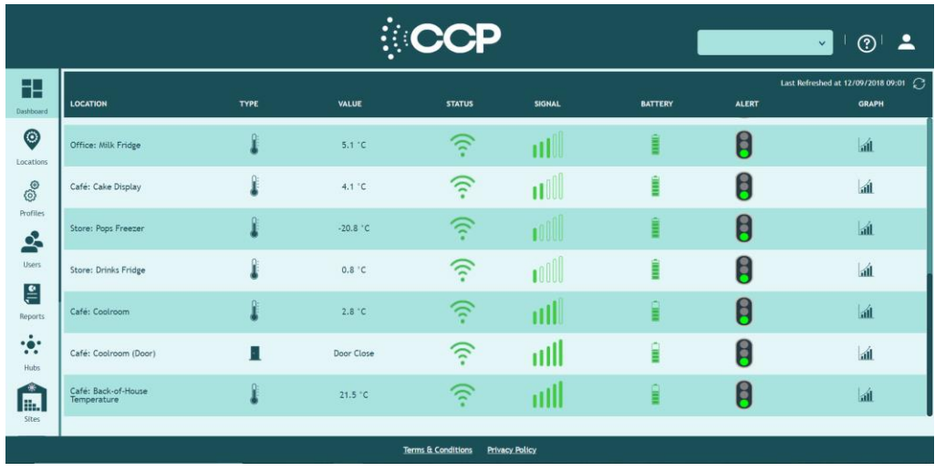

## Generation 1 Smart Tags

**NFC activation, induction charging, BLE, RF and Direct LPWAN communications**


## Generation 2 Smart Tags

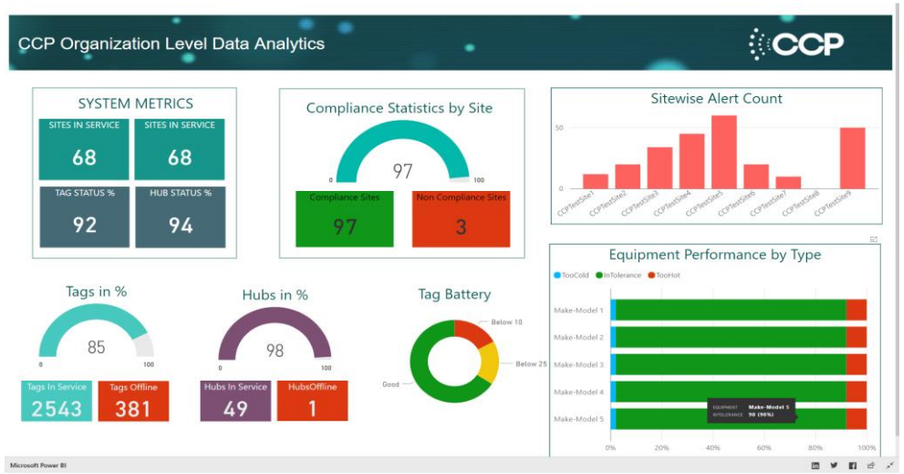
# CCP's Big Data Analytics Evolution

## Status Dashboard displaying current data

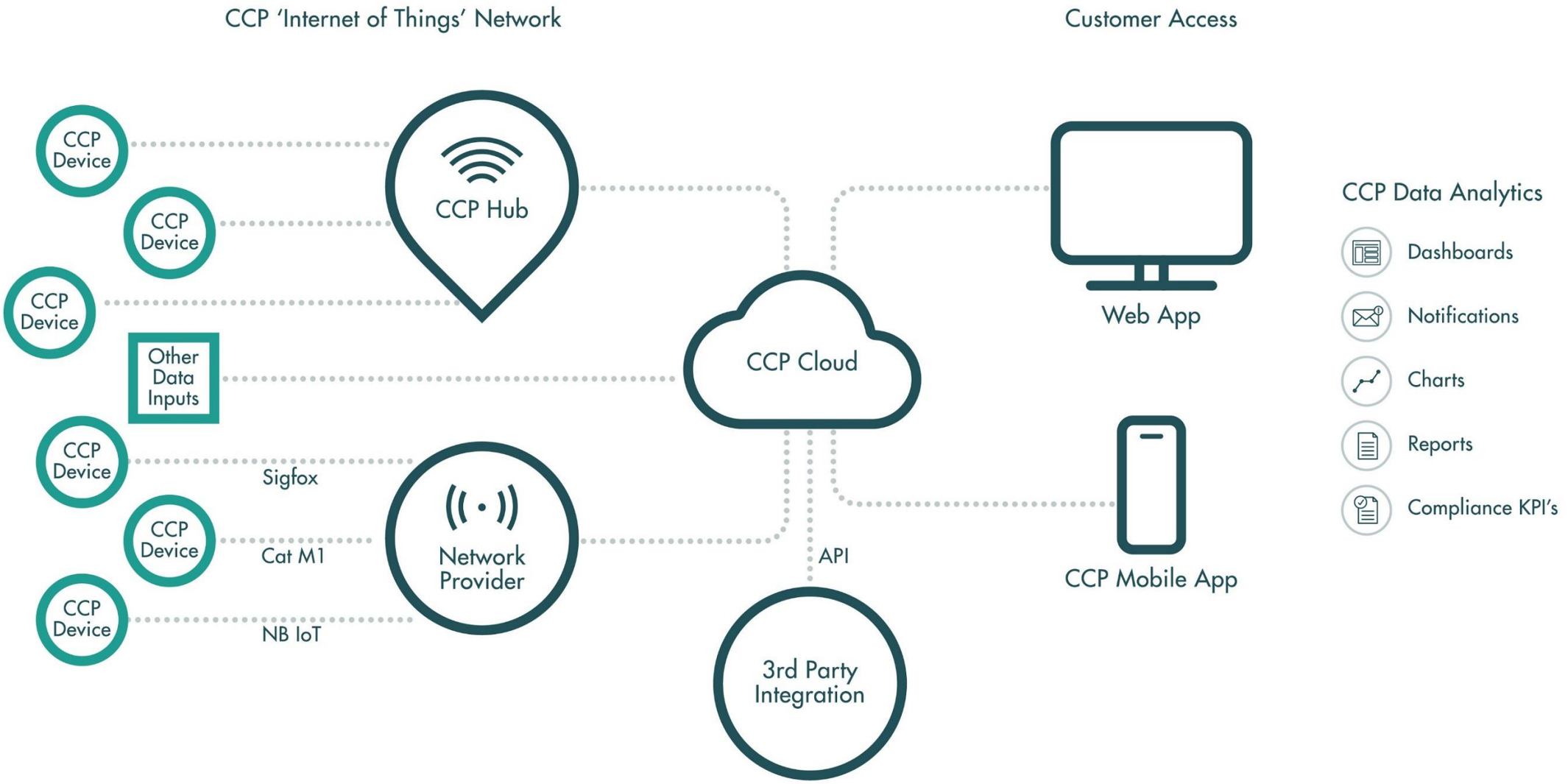



## Generation 1 Platform

## Data Analytics Dashboard displaying advanced business intelligence




## Generation 2 Platform

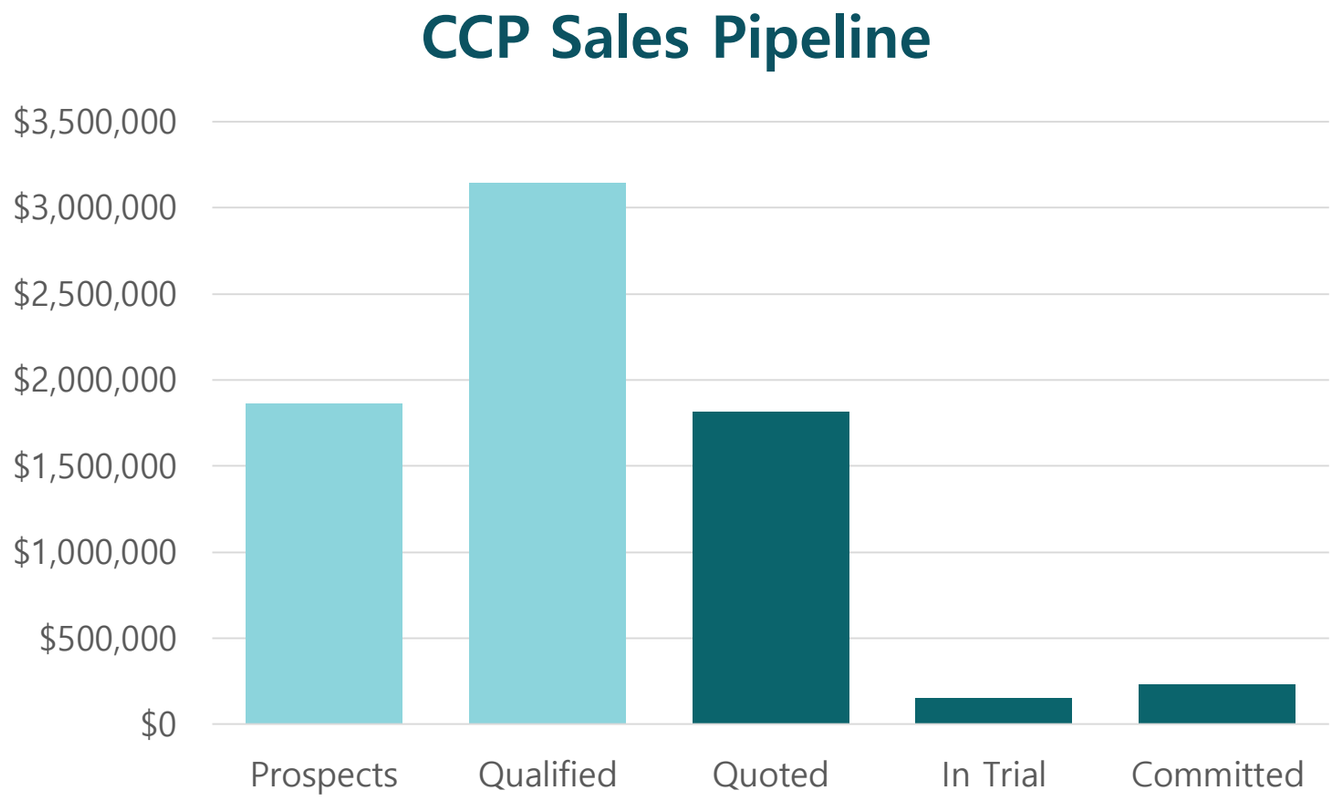

CCP 'Internet of Things' Network
Customer Access
CCP Device
CCP Device
CCP Device
Other Data Inputs
CCP Device
CCP Device
CCP Device
CCP Hub
Sigfox
Cat M1
NB IoT
Network Provider
CCP Cloud
API
3rd Party Integration
Web App
CCP Mobile App
CCP Data Analytics
Dashboards
Notifications
Charts
Reports
Compliance KPI's

# Set for Growth

## CCP in focused on four areas for future revenue growth.

- **Expanding Existing Sources of Revenue**
  - Fixed Location & Cold Chain Monitoring
  - Contract Development
- **Introducing New Sources of Revenue**
  - Blockchain Services
  - Fully Managed Services

# Pipeline of Opportunities




**Customer Contract Value current as at 20 Nov 2018**

**Pipeline includes 92 potential opportunities with a total contract value of $7.2 million**

**Pipeline includes 66 advanced opportunities with a total contract value of $2.2 million**

**67% of deals in the pipeline (by value) involve large enterprise opportunities (>$250k contract value)**

Business Model Validated

Sustainable Competitive Advantage

**MASSIVE MARKET OPPORTUNITY**

**Global Reach**

**Strengthening Regulatory Environment**

**EXPERIENCED & PROVEN MANAGEMENT TEAM**

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All amounts are in Australian dollars unless otherwise stated.

# CCP Technologies (ASX:CT1) AGM Presentation

**Transcript of Speech delivered by the CEO on 26 November 2018**

The 2018 AGM Presentation slides should be viewed in conjunction with this speech, noting the Disclaimer (Slide 14) contained in the AGM Presentation applies to the slide content and this speech.

**SLIDE 1**

I would like to welcome you all here today and thank you for your participation.

**SLIDE 2**

Since our last AGM 12 months ago, we have substantially advanced our vision to become a leading provider of IoT services in Australia.

We have extended our reach to over 100 customers and we are now monitoring more than 210 sites in Australia, the US and Singapore. Over the past 30 days our platform received and managed almost 9 million data points.

Our Australian patent was granted in July, and in August, CCP won the Australian Food & Beverage Industry's - Food Safety Equipment & Materials Award.

We have completed our major hardware and software development program which has delivered one of the most advanced IoT Big Data Analytics Platforms available today.

**SLIDE 3**

Our revenue has grown by more than five and a half times over the 12-month period to September 2018 – to reach $156,000 for the last quarter. Our customer contract value – which is the total value of all contracts we have secured - now exceeds $1.1 million. This has increased by an average of 20% per quarter over the same period. And with this increase in revenue, we have seen a reduction in our cash burn.

We anticipate revenues and customer contract value to rise substantially over the next six months as trials with a number of large national and global companies are successfully concluded.

CCP is now well positioned to realize its potential. We have completed our major development works and we have a substantial pipeline of opportunities before us.

**SLIDE 4**

This handful of logos represents a small sample of CCP customers. It shows how our customer base has grown to include a diverse range of businesses including:

- Food producers and manufacturers
- Retail and wholesale food distributors
- Grocery stores
- Restaurants and casinos
- Aged care centers and hospitals
- Laboratories and bio-medical facilities
- and more recently, Data Centres.

**SLIDE 5**

I would like to spend a few minutes describing why the food industry is now primed for an advanced IoT solution like CCP.

As these facts show, the food industry faces a number of key challenges:

- In the order of one third of all food produced and supplied to the market is wasted – we discard $20 billion worth of food every year in Australia
- Roughly one in five people suffers a case of food poisoning each year – and this costs our economy over a billion dollars
- The food industry is reliant on refrigeration – and consequently it is a major consumer of electricity and other sources of energy.

Against this backdrop of costs, inefficiencies and supply chain failures, lies the potential for massive savings to be gained across all parts of the food supply chain.

CCP's core tenet is that timely access to reliable and accurate information regarding critical control point performance is the key which unlocks these savings.

**SLIDE 6**

Businesses dealing in perishable foods are constantly seeking to improve business efficiency, protect the reputation of their brand, and to survive tight margins.

Our customers have many common pain points. For example:

- Refrigeration accounts for up to 70% of the electricity consumed in an average grocery store or supermarket. The challenge for the food service and food retail sectors is to reduce power consumption whilst ensuring that food is held in these assets at optimal temperatures.
- Refrigeration failure typically leads to food being discarded because operators don't know how long the food has been exposed to elevated temperatures. The risk is that the food has become unsafe to consume or its quality has been compromised.
- All food businesses must comply with food safety regulations. This means they must record temperature readings for each refrigerated asset twice per day and manage

these log sheets as part of their food safety program. For more than 90% of food businesses this is done manually. We know this process does not ensure that food is kept safe.

Our goal is to address these and other pain points by arming our customers with the insights they need to make informed decisions which are proactive rather than reactive.

**SLIDE 7**

The way we do this is through the deployment of low-cost IoT Smart Tags - which continuously sample critical control points like temperature and humidity.

The data is collected and then assembled into encrypted data packets which are transmitted across a third-party network to CCP's Big Data Analytics Platform on the Cloud.

Our Cloud Platform incorporates advanced tools including Predictive Analytics and Artificial Intelligence to interpret the data and transform it into valuable business intelligence. Our customers are notified of out of tolerance events and likely failures, and can view the analytics through dashboards and reports.

**SLIDE 8**

Over the past year, close engagement with our customers has clarified their key cold chain process and application requirements. This knowledge, in combination with the latest IoT technologies, has enabled the development of our second generation Smart Tags.

These tags can be activated by the touch of a phone (using NFC) and configured using Bluetooth and our mobile app. The tags transmit data across a variety of Low Power Wide Area Networks like NB IoT, Cat M1 and Sigfox from virtually anywhere in the world.

They can be deployed to capture and manage almost any type of data, whether it be pH, temperature, GPS location, shock or humidity. By knowing the temperature and location of a product, for example, as it passes through the supply chain enables operators to gain substantial efficiencies.

CCP Smart Tags are truly plug & play and they can be installed in minutes.

**SLIDE 9**

The transition from reactive to proactive decision-making is achieved through advanced data analytics.

CCP's Big Data Platform continuously analyses data received from each Smart Tag to establish data patterns or trends. When any new data is found to deviate from the established trend, the system creates a notification. CCP's support staff determine the cause of the trend deviation and then update the system. This underpins a process of machine learning, whereby the system itself becomes increasingly adept at predicting changes in the performance of monitored equipment.

When Smart Tags have been deployed for more than six months or so, the CCP Platform can accurately predict if a freezer or cooler is running inefficiently or is likely to fail. Armed with this information, it is possible to undertake proactive maintenance to improve operating efficiencies or avert failures. This is something that can only be achieved through Big Data Analytics.

I would like to take this opportunity to acknowledge the achievements of our CTO – Kartheek and his team. They have done an exceptional job in delivering our advanced IoT hardware product suite whilst concurrently undertaking a number of contract development projects which have helped to finance these activities.

**SLIDE 10**

This diagram shows how the main components of the CCP Platform work.

We have developed a scalable platform which supports the capture of data from CCP Smart Tags and almost any other data source. We can now deploy our tags for a range of applications including:

- Fixed Location Monitoring – where the temperature, humidity and power use of coolers and freezers is monitored in grocery stores, commercial kitchens, distribution centers and the like
- Cold Chain Monitoring which enables the temperature and location of shipments of goods to be continuously monitored as they pass along the cold chain. Our tags can also be fixed in refrigerated vehicles.

Monitoring data can be transmitted by the tags across a variety of different networks to the CCP Cloud where it is aggregated and analysed. The resultant information is presented in the form of dashboards, reports, graphs and notifications, and is easily accessible to our customers via a secure login through both web and mobile applications.

**SLIDE 11**

Having commercially proved our technology, we now have a number of revenue pathways. We are set for growth.

We have a suite of applications to address the needs of customers across all parts of the supply chain. Fixed Location and Cold Chain Monitoring can be sold under the current SaaS recurring revenue model.

We are now integrating our technology with other services to open up new market opportunities.

The strategic investment of Penta Global in CCP has led to the integration of our IoT Smart Tags and Services into the Penta and IBM-Hyperledger Blockchains, and we have created a working ‘farm to fork’ demonstration for the perishable food supply chain. CCP and Penta have also partnered with the University of Melbourne to incorporate biometrics and gas chromatography with machine learning of to ‘close the loop’ in the food chain from producer to end consumer. Our unique partnership will add quantitative shelf-life predictability as well as customer desirability ratings to the scope of CCP’s product offerings. Both Penta and CCP are

now collaborating to extend opportunities into both the US and Chinese food supply chain markets.

There is no doubt that Blockchain will play an increasingly important role in the food industry as large food companies seek to improve supply chain visibility, integrity and efficiency. In September of this year, Walmart announced that all suppliers of leafy vegetables must be on the Blockchain within the next 12 months if they intend to continue their supply contracts. No doubt this requirement will extend to other product lines and will become a requirement of other large food organisations.

We have also been investigating the opportunity to establish a fully managed service to the cold chain industry in Australia. With the support of partners that currently provide refrigeration maintenance and other field services, we can deploy our Platform to provide the predictive data and information required to manage a new proactive services model. This will involve an operations center to manage the field service response to performance issues identified by the CCP Analytics Platform. We intend to pursue a similar approach adopted by Rolls Royce where they now rely on IoT data and Predictive Analytics to manage aircraft engine maintenance. This has led to massive efficiencies and savings for the industry and has improved aircraft engine reliability.

The currently fragmented cold chain industry is ready for a new proactive approach to refrigeration system management.

Finally, we believe the experience and expertise of our development team in India can be further leveraged to undertake more contract development projects in the IoT and Cloud Platform space.

**SLIDE 12**

Currently, our sales pipeline includes 92 sales opportunities with a combined value of $7.2 million. 31% of these opportunities (by value) have advanced through the pipeline to the point of being quoted, being under trial or committed to purchase.

Many of these deals represent large enterprise opportunities with potential contract values of more than $250,000. Examples of these opportunities which are currently in proof of concept or under trial include:

- Providing temperature monitoring to a multi-national smart cities IT company for re-sale to their food service customers.
- Providing temperature, humidity and power monitoring to a global engineering firm that designs, builds and manages Data Centres. By deploying our solution – which operates independently of their network - they can offer full redundancy for failure notifications to their clients.
- A deal involving a multi-national IT services firm presenting a fully-integrated IoT solution (which includes CCP) to a national food industry business with several hundred sites.
- In partnership with a global telecommunications company, CCP is preparing to undertake a paid proof of concept trial for a global food company with over 2 million refrigeration assets. The trial involves monitoring the location and temperature of 200 assets.

- We are also partnering with a multi-national professional services firm to supply refrigeration diagnostics to a global beverage firm seeking to remotely monitor more than 50,000 commercial fridges in Australia.
- Through our partner Eposode Data Solutions, we have quoted our solution to monitor freezers and chillers for a large food service chain across more than 230 sites nation-wide.
- Also through Eposode, we are progressing discussions with a major Australian retailer to develop and deliver an innovative IoT asset locating solution and a mobile consumer experience application.
- We have commenced a paid trial to monitor transport vehicles for a National food distribution business. This will involve monitoring the location and temperature of their third-party transport vehicles and providing access to current status dashboards, maps as well as tabular and graphical reports.
- CCP's smart tags have recently been deployed to feed data into a blockchain to underpin smart contracts associated with air shipments of beef to SE Asia. This trial is expected to lead to commercial deployment of the Blockchain.
- Our partnership with Koolmax and our White Tiger JV in the US is supporting the implementation of CCP services across new casino sites and creating opportunities for new monitoring services.

In combination with the expanded market opportunity created by our Managed Services and Blockchain initiatives, successful outcomes from these projects provide an exciting pathway for CCP's future growth.

**SLIDE 13**

Over the past 18 months we have validated our business model and we have built a sustainable competitive advantage.

The food industry is the world's largest industry and it presents a massive market opportunity to CCP. We know in Australia alone there are several million refrigerated assets integral to the food supply chain, and a very small proportion of these assets are being effectively managed.

The regulatory and commercial environments are driving the adoption of new technologies to better manage the handling and storage of food and other perishable products.

CCP understands the issues and we know how to address them.

Most importantly, we now have a clear pathway for future growth and profitability.

**SLIDE 14**

On behalf of the Board and Staff of CCP I would like to thank you sincerely for your support and attendance today.