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CONSUMPTION INFORMATION REAL TIME



**FRIDGELOC[®]
CONNECTED COOLER
SUMMARY**

JUNE 2020

Market Challenges

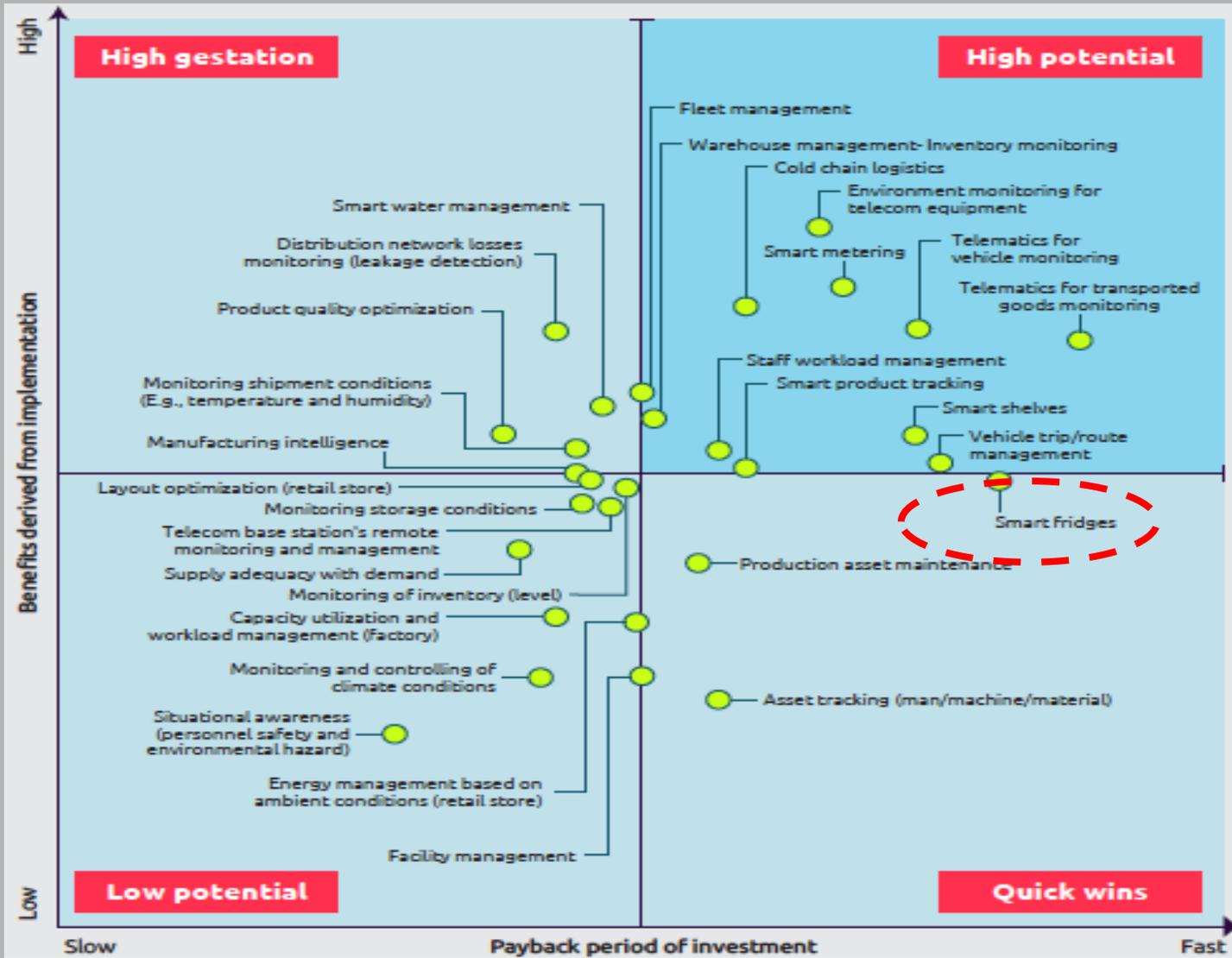
- 2%-12% of coolers “grow feet” annually
- Global cooler fleet estimated to reach **\$64bn by 2024** at a CAGR of 6.4% from 2019 to 2024* according to independent research
- Annual fleet **breakdowns** between 7-11% pa affecting sales of beverages



Fridgeloc[®] Connected Cooler Our Solution

- We can **locate coolers anywhere in the world** using U-Blox sim cards
- We can prevent losses resulting in **cost savings of millions p.a.**
- Monitoring compressor temperatures allows for **preventative & predicative maintenance** saving millions p.a. & increasing sales

SO WHY EXPLORE CONNECTED COOLER IOT?



According to Capgemini Connected Coolers provide beverage companies with a fast payback period

BEVERAGE CPGS REPLACE 7% OF THEIR COOLER FLEET ANNUALLY DUE TO THEFT. CAGR OF 6.4% IN A \$64BN COOLER MARKET THAT REQUIRES 10% REPAIRS ANNUALLY.



Challenges

Cooler fleets experience significant theft annually and are not optimized. They also experience significant in-field failures resulting in lost revenue.

Ideal Solution

Our Fridgeloc Connected Cooler monitors the location of your cooler fleet as well as the temperature on the inside of the cooler and on the motor to provide unique insights into its operation.

Desired Outcomes

Cost saving on cooler fleet replacement and proactive response to cooler repairs improves sales and profitability.

ABInBev, the world's largest brewer, has rolled out the solution in South Africa.

ABInBev South Africa have a 100% Return on Investment on Connected Coolers



CONNECTED COOLER CONCEPT

Using data to solve real problems for clients in a value adding way



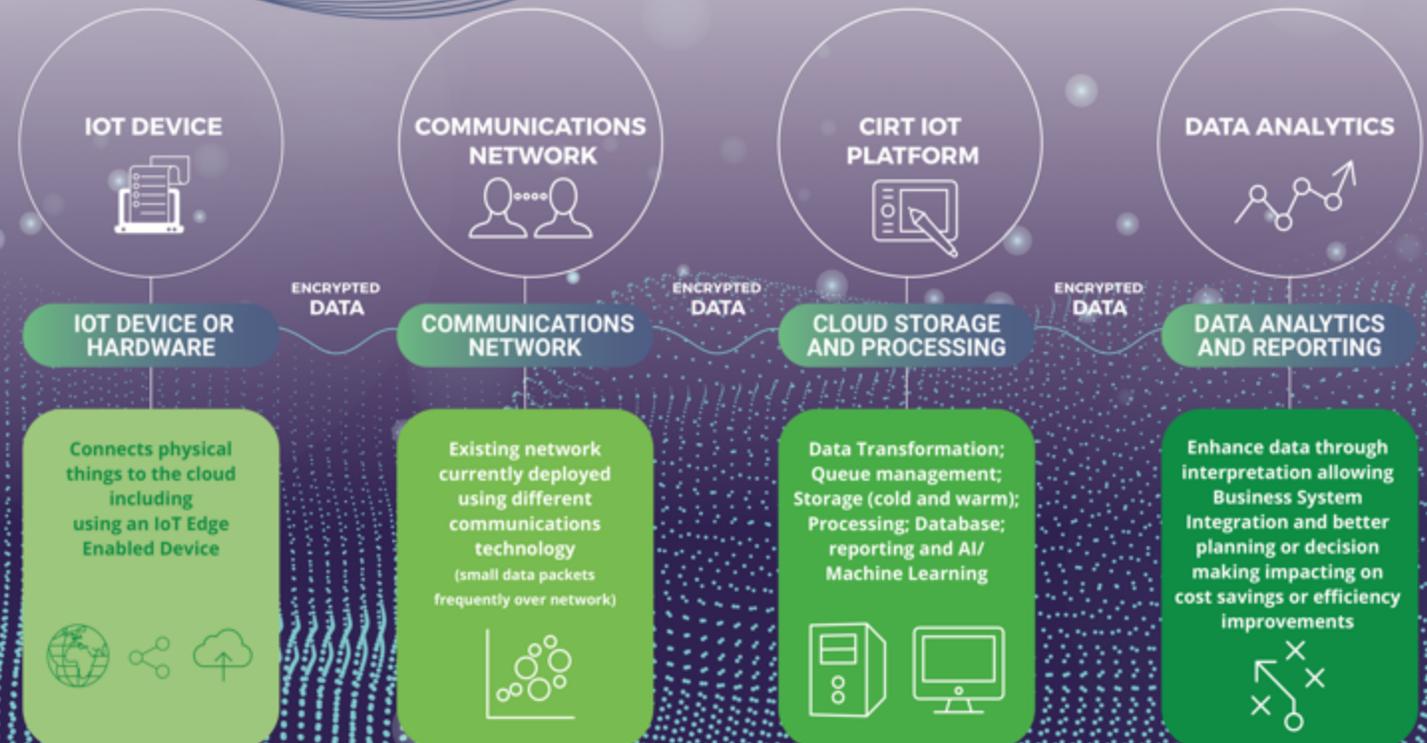
OUR SERVICES

IoT ENABLEMENT

DATA ANALYSIS

DIGITAL TRANSFORMATION

DIGITAL CONSULTING



BENEFITS OF CIRT IOT DEVICE

- Bi-directional communication
- Edge enabled
- Abnormal situation management
- Internal and external temperature sensors
- Immediate notification on temperature outside range
- Periodic data updates to track assets in transit
- Battery powered IoT asset tracker
- Connects to cooler power supply
- *Ublox* approved and enabled
- IP61 compliant design

TECHNICAL SPECIFICATIONS

Power Supply	Universal Mains (110-230 VAC)
Optional Battery	Sized to requirement. Up to 5000 mAh LiPo
Runtime Minimum	Dependant on Battery size 1 to 15 days.
Location Method	GSM Triangulation
Location Accuracy	Up to 50m
Communications	Quad-Band GSM (2G) 850/900/1800/1900 MHz MQTT-SN via Ublox
Environment	IP61 Compliant between -20°C - 60°C

OUR IOT DEVICE



CONDITIONS MONITORED

- On/off status
- Battery Level
- Internal Temperature
- Evaporator Temperature
- Location – GSM only

COMMUNICATION NETWORK

U-BLOX USE CASE FOR IOT

- Ubiquitous **global wireless** connectivity
- Small sensor payloads
- **Doesn't use cellular data**
- Low battery power
- **Security**
- At a low total cost of ownership

BENEFITS OF USING U-BLOX

- Seamless global MQTT-SN connectivity leveraging **600+ cellular networks** across **190+ countries**
- High security (No IP)
- By finding the strongest network signal it continuously optimises power consumption

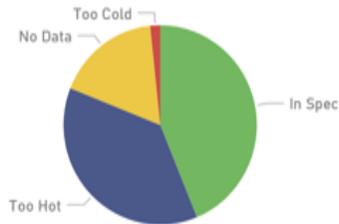


OUR DASHBOARD

121

#Devices

Count by Temperature Range

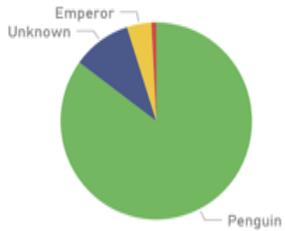


Count by Temperature Range



Temperature	In Spec	No Data	Too Cold	Too Hot	Total
		16			16
GAUTENG	14	2	1	15	32
KWAZULU-NATAL	15	2	1	7	25
LIMPOPO	14			9	23
WESTERN CAPE	10	1		14	25
Total	53	21	2	45	121

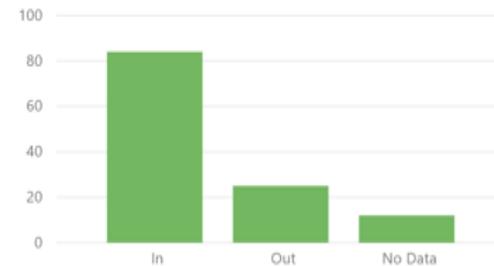
Count by Type



Count by geoFence



Count by geoFence



geoFence	In	No Data	Out	Total
		3	13	16
GAUTENG	24	3	5	32
KWAZULU-NATAL	17	5	3	25
LIMPOPO	20	3		23
WESTERN CAPE	23	1	1	25
Total	84	12	25	121

Count by 24h+ Offline



Count by 24h+ Offline



24h+ Offline	Off	On	Total
	14	2	16
GAUTENG	13	19	32
KWAZULU-NATAL	8	17	25
LIMPOPO	2	21	23
WESTERN CAPE	7	18	25
Total	44	77	121

01



121 Coolers monitored

02



8.5 Million messages

03

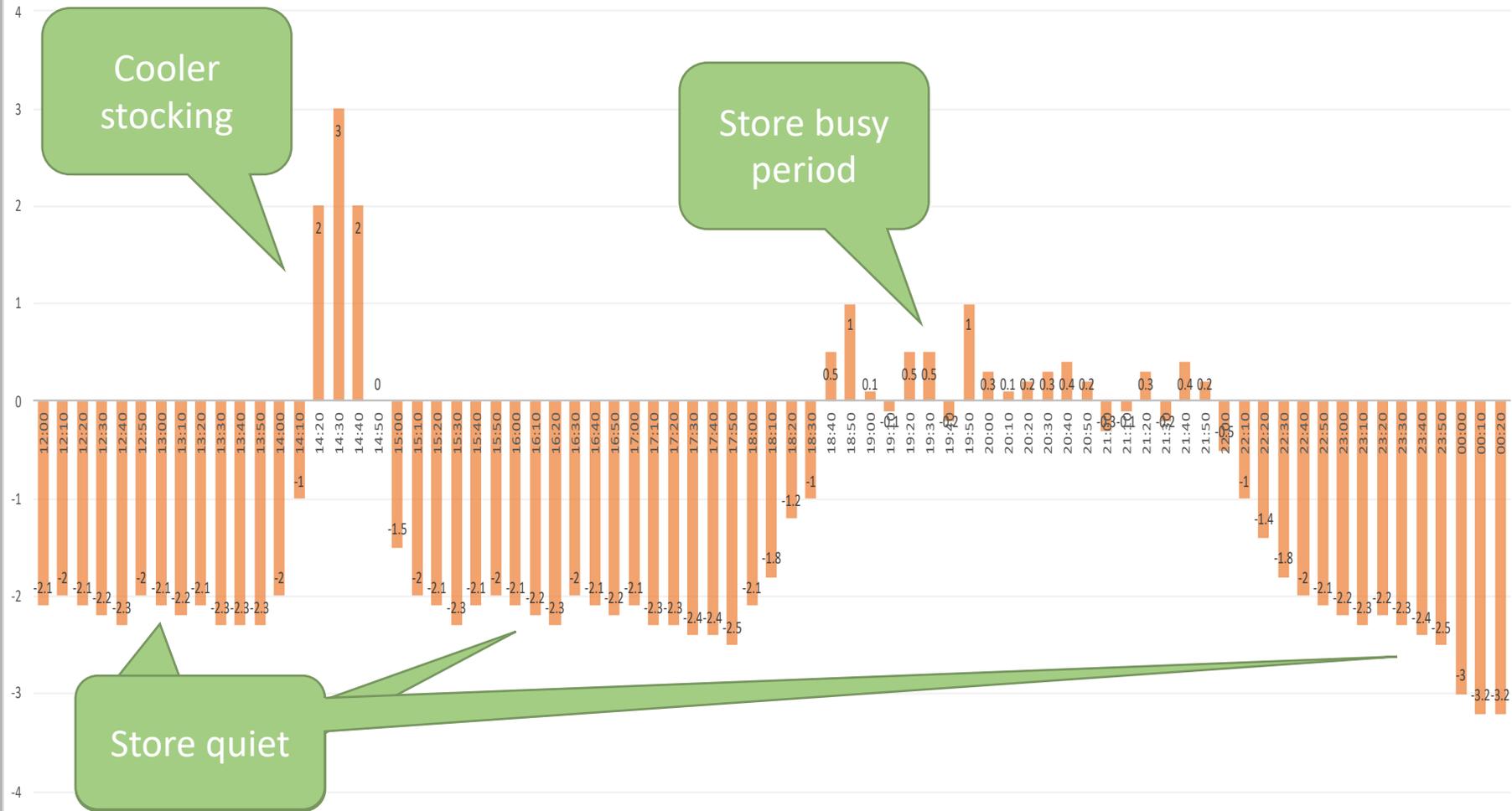


18 GB of data produced



DATA INSIGHTS TEMPERATURE ONLY

Fridgeloc Connected Cooler Temperature



The data insights that we can change how beverage companies engage with their market and when and how they distribute and market their products

OUR TECHNOLOGY IS BEING GLOBALLY SHOWCASED AND RECOGNISED

CONNECTED COOLER CASE STUDY

MANUFACTURING

CONNECTED TRANSPORT

HEALTHCARE

ENERGY AND UTILITIES

BUILDINGS & INFRASTRUCTURE

OPEN INDUSTRY

ENABLING IoT



Location Intelligence with Azure Maps

Talk to us at:

NRF 2020
VISION

RETAIL'S BIG SHOW

JAN 12-14 | JAVITS CENTER | NYC

- We presented a case study at IoT Solutions World Congress (the worlds largest IoT Conference) in October 2019
- Microsoft showcased our solution at NRF, North Americas largest retail industry show, in New York
- Our solution has been included in a global case study by Microsoft*
- ITWeb included several articles on our solution**
- CNBC Africa did an interview showcasing our solution***

* <https://customers.microsoft.com/en-us/story/776768-sab-ab-inbev-consumer-goods-azure?lrs=1ee77169-7fed-4f4b-bd2c-b9585f554f58>

**<https://www.itweb.co.za/content/dgp45vaG8jyMX9I8>

***<https://www.linkedin.com/feed/update/urn:li:activity:6590225755106533376/>

THANK YOU



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