CAVLI wireless

Cavli Hubble

The world's most comprehensive IoT connectivity management platform from Cavli Wireless

A good number of Machines/ Equipments/ Devices/ Appliances across Industries are getting Smart Connected or evolving into an IoT enablement product.


Smart Utility Meter


Smart Parking Meter


Smart EV Charging


Smart Building


Smart Homes


Smart Street Lights


Smart Roads


Smart Security


Smart Waste Management


Connected Vehicles


Smart Watch

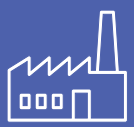

Smart Lock


Smart Door Knob


Fleet Management


Smart Agriculture


Connected Robotic Arms

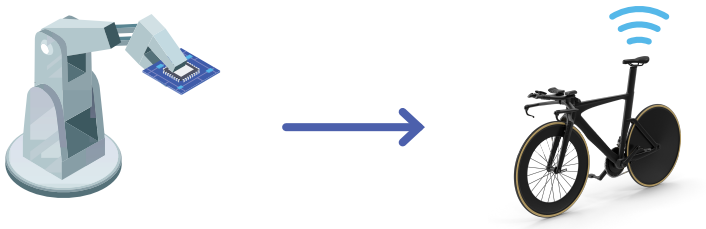

Smart Factory


Smart Warehousing

How is IoT or SMART - Connectivity enabled?

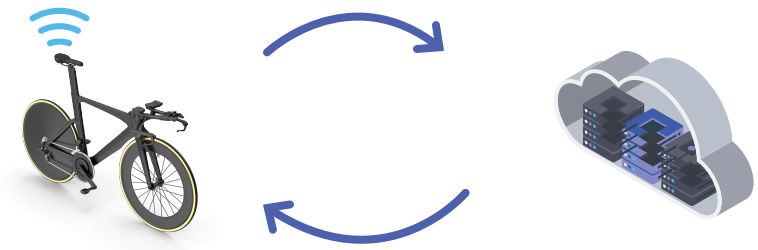
The world of Internet of Things, as omnipotent & ubiquitous as it sounds, is not an easy world to navigate. Yet if we were to explore how devices/machines/appliances/equipments are 'Smart-Connected' at an elemental level, this is how it happens.

STAGE 1



Product Design & Development -
Integration of IoT hardware to the device to enable connectivity at the edge

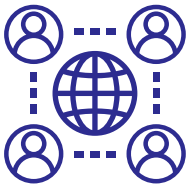
STAGE 2



Launch & Development -
Activation of internet access in the devices and device-to-cloud integration to scale the products

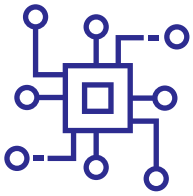
The ‘SMART-Connectivity’ enablement journey is not easy

There are multiple considerations when devicet makers embark on the journey to get their devices Smart Connected. Navigating through these decisions & choices are governed by the customer experience that the product maker needs to put in place to truly solve the problem at hand.



Network Access enablement

Deciding between eUICC versus UICC technology within embedded SIM frameworks & associated technology partner onboarding for the same.

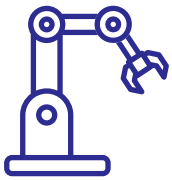


Connectivity hardware selection

Evaluating a range of embedded hardware based on network technology in consideration.

Application software/firmware

Deciding on what is the ideal way to load the application software - processor/controller selections.



Product level Integrations

Considerable product development & Iterative cycles to efficiently integrate network access technology, connectivity hardware & application management.

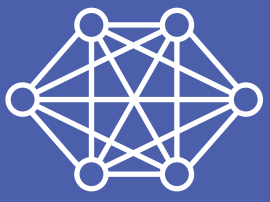
Data subscription management

Network data subscription management needs to be an integrated capability of the Device cloud.

Global & Regional Device certifications

Based on the region of deployment, use cases in consideration and criticality of the application, device makers need to figure out certifications.

Pitfalls of current IoT device & connectivity management systems



No provision for future network technology upgrade

Existing IoT connectivity management platform solutions do not have the capability to manage & control the network preference on the connectivity hardware. This means the device on ground may not be able to leverage a network upgrade to an LPWAN network even if the hardware supports the same.

Complexity of MNO Relations

IoT device makers who are starting off, find it difficult to negotiate and manage data plans directly with MNOs.

Device data management

IoT device makers are required to define their own data transfer protocols which needs to be separately integrated to the IoT connectivity infrastructure

Third Party Messaging Service

Connectivity modules which use MQTT service for data telemetry requires an MQTT broker to be run on a server side. This service is dependent on the customer to create or outsource.

Lack of Remote SIM Provisioning

Most of the existing options in connectivity hardware, support eSIM technology, but the onus is on the device maker to integrate & provision the eSIM. Device makers are yet to gain access to remote provisioning of eSIMs for network access which can greatly improve the customer experience for mobility projects.

What does it take to get the next billion devices Smart Connected?

What does it take to scale a global IoT solution?

How can IoT device makers launch & scale their solutions globally in under 3 months?

How can IoT product makers achieve quick Go-to-market scenario?

How can they remotely troubleshoot and manage their devices deployed across continents?

Introducing **Cavli Hubble**

The world's most seamless, secure, scalable & cost effective

IoT connectivity management platform solution

Cavli Hubble, Cavli's enterprise-ready IoT connectivity management cloud platform, lets your device get connected to the cloud to enable a wide range of applications across all major LPWAN & Broadband IoT network technologies like NB IoT, LTE-M, LTE -CAT 1, CAT 4 and legacy networks like 3G,2G

180+	27	18	160+
Countries	NB-IoT	LTE-M	lte 2G 3G

Number of Local networks

Key Features

Device Orchestration & Monitoring
Zero touch onboarding process that lets you provision & deploy devices remotely at scale

Firmware Over-the-air (Fota)
Secure onboarding, provisioning, over-the-air updates and life-cycle management with best-in-class security to mitigate device vulnerabilities.

IoT Billing
Create custom data plans and connect to over 180+ local IoT networks around the globe.

Messaging Service
The Hubble Messaging Service lets the IoT solution makers easily scale their MQTT based products with an "always-on" MQTT broker that establishes a seamless data pipe for application data transfer.

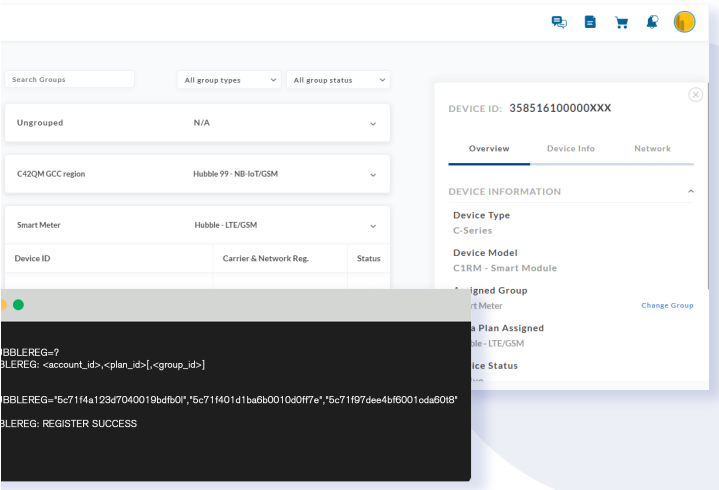
Security

GSMA SGP.02 version 3.2 SAS certified remote subscription management platform ensures secure onboarding, provisioning, and Over-The-Air updates.

Web Service Api

Leverage the power of Hubble on your application layer with full service API option

Cavli Hubble Key Highlights

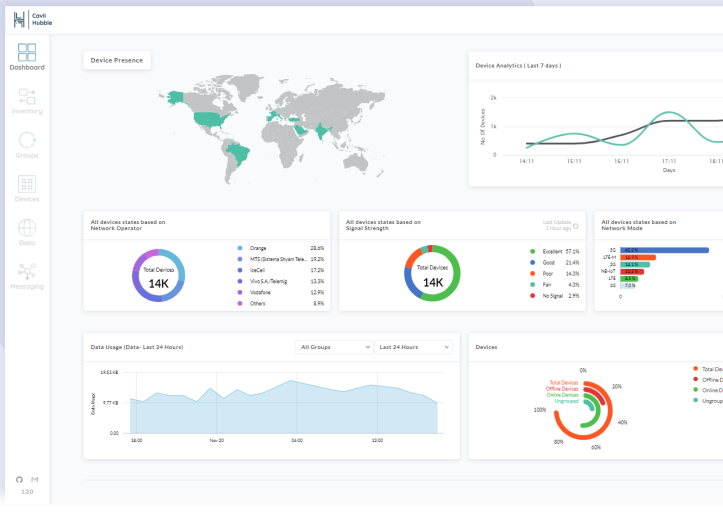


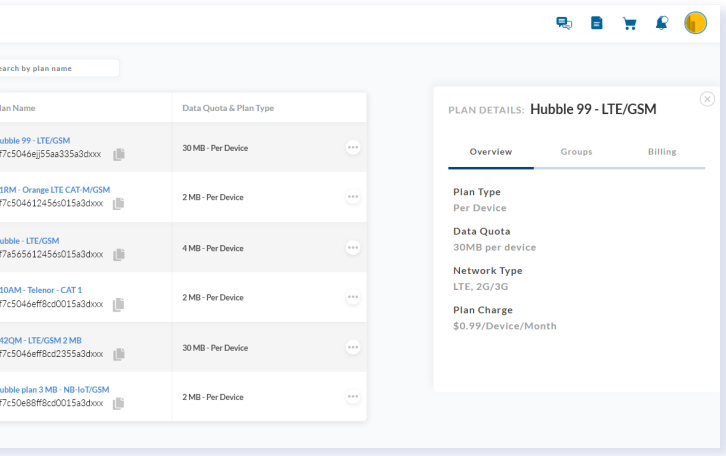
Zero touch device onboarding to Cavli Hubble:

With Cavli Hubble, IoT solution makers can now remotely provision devices on ground across the globe with minimal on field interventions.

Hubble Device Management:

Now manage over 40+ parameters of the deployed devices from network uptime, battery consumption, data usage, power profiles, signal strength and many more.



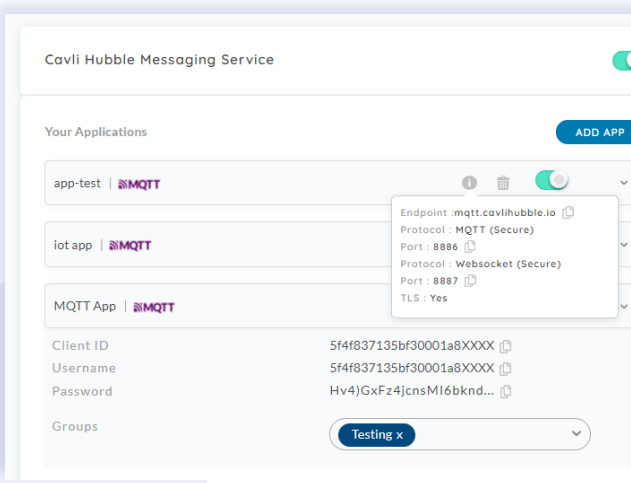


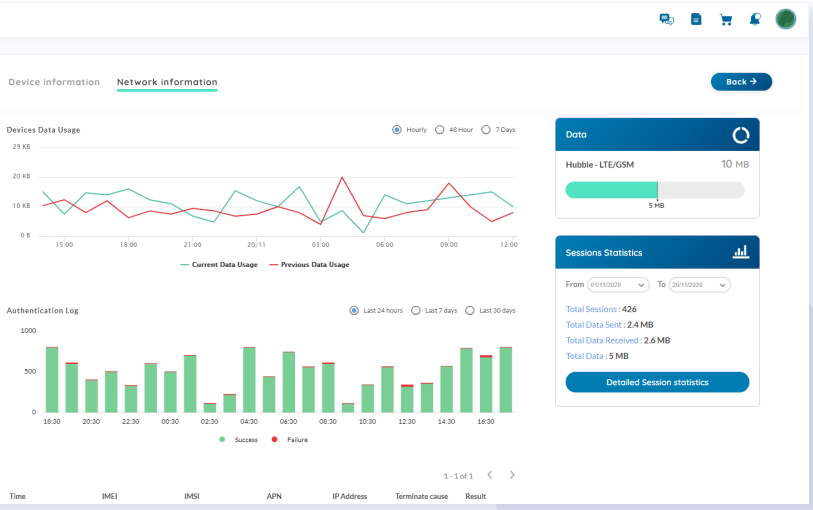
Hubble Subscription Management:

Now create, assign, and manage IoT data plans across operators & regions with subscription management feature on Cavli Hubble.

Hubble Messaging Service:

The Hubble Messaging Service lets the IoT solution makers easily scale their MQTT based products with an “always-on” MQTT broker that establishes a seamless data pipe for application data transfer.



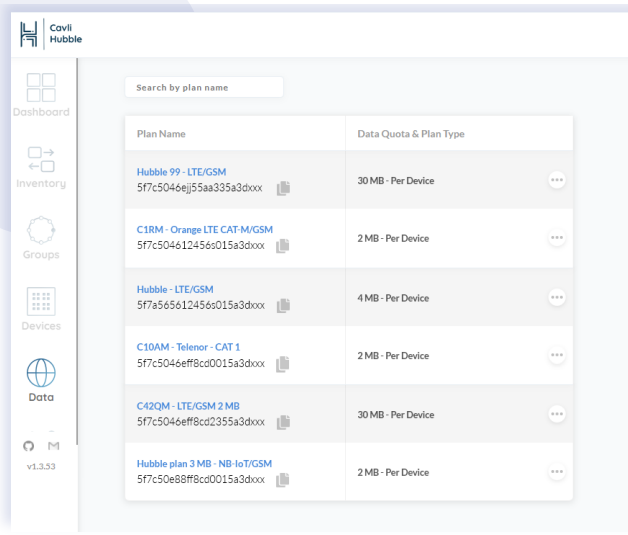


Hubble Network Management:

With Hubble Network Management, IoT solution makers have access to seamless & automated network configuration and device registration at scale for millions of smart devices.

Hubble Remote SIM Provisioning:

With the remote SIM provisioning capability, IoT solution makers can now remotely activate and manage the network access embedded into Cavli Smart Modules.



AT Command+:

As an extension to the device management capability, solution makers will soon get to use AT Commands over the air to activate/invoke specific responses from the Cavli smart modules.

And many more features...

Cavli Hubble Platform Demo: Onboarding Cavli IoT Modules in less than a minute

Cavli's Business Development Manager, Thomas Fesquet, talks about our value proposition, how to easily onboard and activate Cavli Modules in less than 1 minute and gives a brief introduction to Cavli Hubble.

What are the business benefits of Hubble?

Faster time to market

With Hubble, the entire network rollout process of configuration, provisioning and activation of eSIMs are automated. OEMs can scale any number of subscribers instantly without Telecom operator involvement.

Avoids delays in project roll-out

As there are no multiple contact points for sourcing and coordination of the connectivity implementation, there are no delays in project rollout.

Enhanced Security

No risk of tampering with the eSIM or non-payment of subscription by the user. Further all transmission of network and device telematics data to the Hubble cloud is secured.

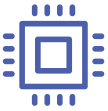
Revenue protection from defaulting users

Complete control of the subscriber as the admin can suspend, terminate or reactivate subscription.

What are the business benefits of Hubble?

Increased visibility & analytics

Better understanding of the subscriber's connectivity and usage pattern.



Predictable device behaviour

With Hubble, OEMs have complete control of the devices and all interfacing with the module can be done remotely via Hubble interface.

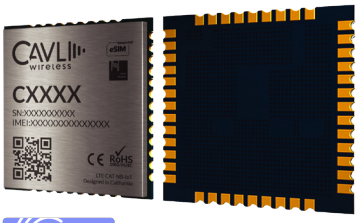
Open platform

Sophisticated services via API and Cloud connector for Hubble integration with IoT application platform. Message brokering service for collecting production data securely and delivering it to Application platform.

Cavli IoT Modules that work seamlessly with Cavli Hubble

Cavli's smart module portfolio consists 10+ modules across different network technologies and bands, already addressing over 40+ unique use cases around the world.

C-Series Smart Connectivity Modules



Cavli C Series

IoT connectivity modules:

- Low power consumption
- Small footprint
- Pre-loaded with global connectivity
- Hubble stack intelligence

P-Series Smart Compute Modules

Cavli P Series

P32 Compute Module Capabilities:

- Xtensa Dual-Core 32-bit LX6 Processor
- ESP32 MCU from Espressif
- Multiple IDE support
- Pre-loaded global connectivity with integrated eSIM
- High-gain on-board chip antenna

Impact across Business Operations for our customers

Business Development

"Seamless & scalable IoT connectivity management that can help us achieve faster GTM scenario in multiple geographies with local connectivity".

VP Global Sales,
Emerging Mobility product company

Product Development

"An IoT connectivity management solution that is easy to integrate to our product and provides supreme device management capabilities previously not available"

Sr. Hardware Engineer
Smart Utility meter manufacturer

Supply Chain Operations

"Hardware that comes pre-loaded with network access means, no hassle of SIM logistics and telecom operator relations which is not an easy world to navigate"

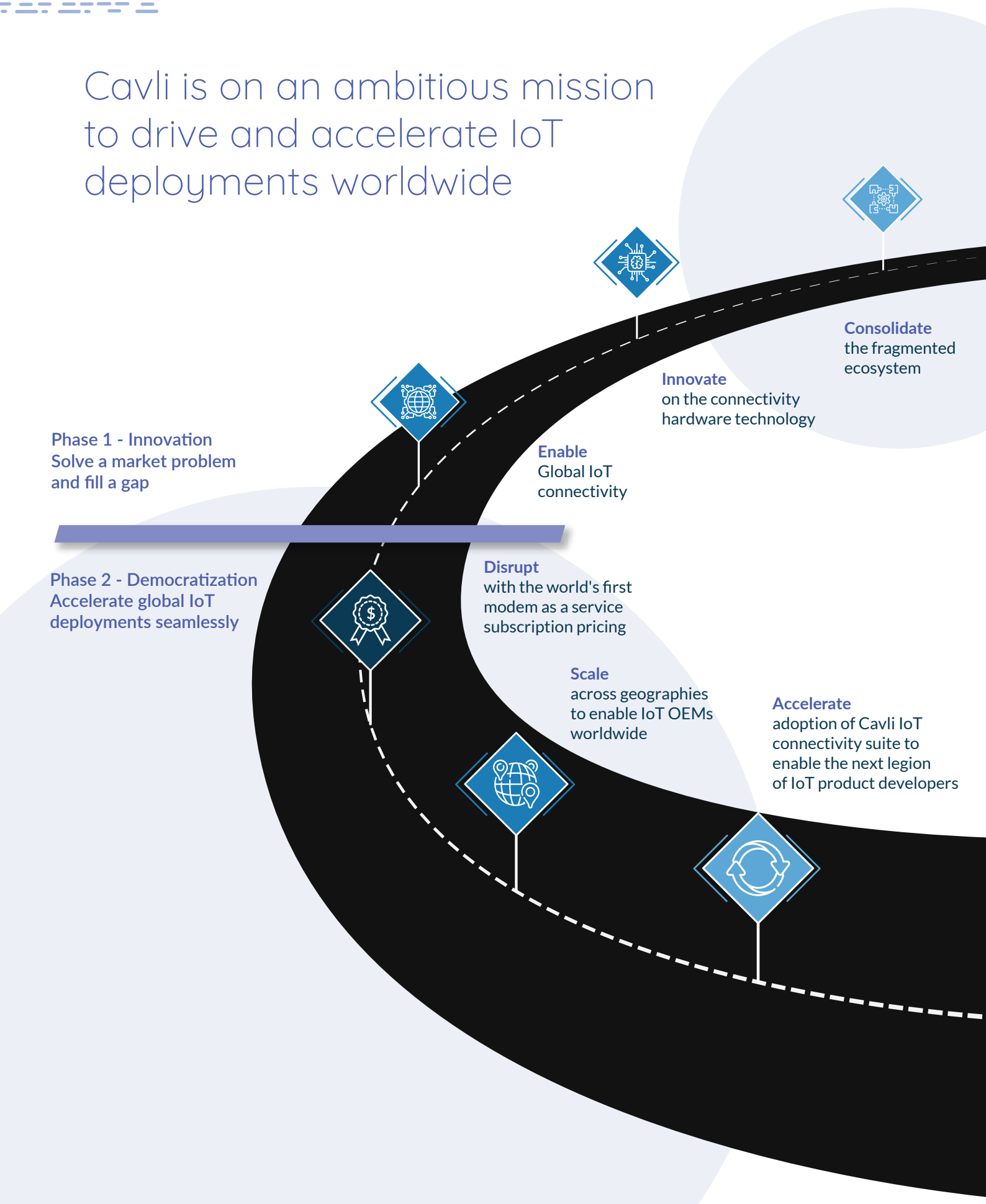
Sr. Associate, Procurement
Emerging Logistics IoT company

Customer -User experience

"With the API functionality, bringing critical connectivity management capabilities onto a single management framework has never been this easy. Our customers love our product experience even more now"

Product Manager,
Critical medicines transportation company

Cavli is on an ambitious mission to drive and accelerate IoT deployments worldwide



Cavli's disruptive plan to the IoT market - Hubble99

eSIM integrated
Cellular IoT modules

Network access and
IoT data connectivity

IoT connectivity and modem
management platform

Hubble 99 at **$0.99** per device/month
Billed annually

For more info on Hubble99, click to visit the Cavli Wireless official website.

INDUSTRY PREDICTED IoT HARDWARE PRICE TO DROP BELOW $5 BY 2020 AND CAVLI HAS MADE THAT HAPPEN.

with

Hubble 99

In 2016, Industry major Ericsson predicted a near future where the LPWAN module will be priced below $5 in the market. With Hubble99, Cavli has made that happen with the world's first modem as a Service subscription model. This is an industry first, making Hubble99 the unprecedented winner when it comes to the title of the smartest IoT hardware bundle package.

All Cavli smart modules offered as part of Hubble99, come with a lifetime warranty. A complete OPEX model of IoT connectivity enablement both at the hardware side and service end.

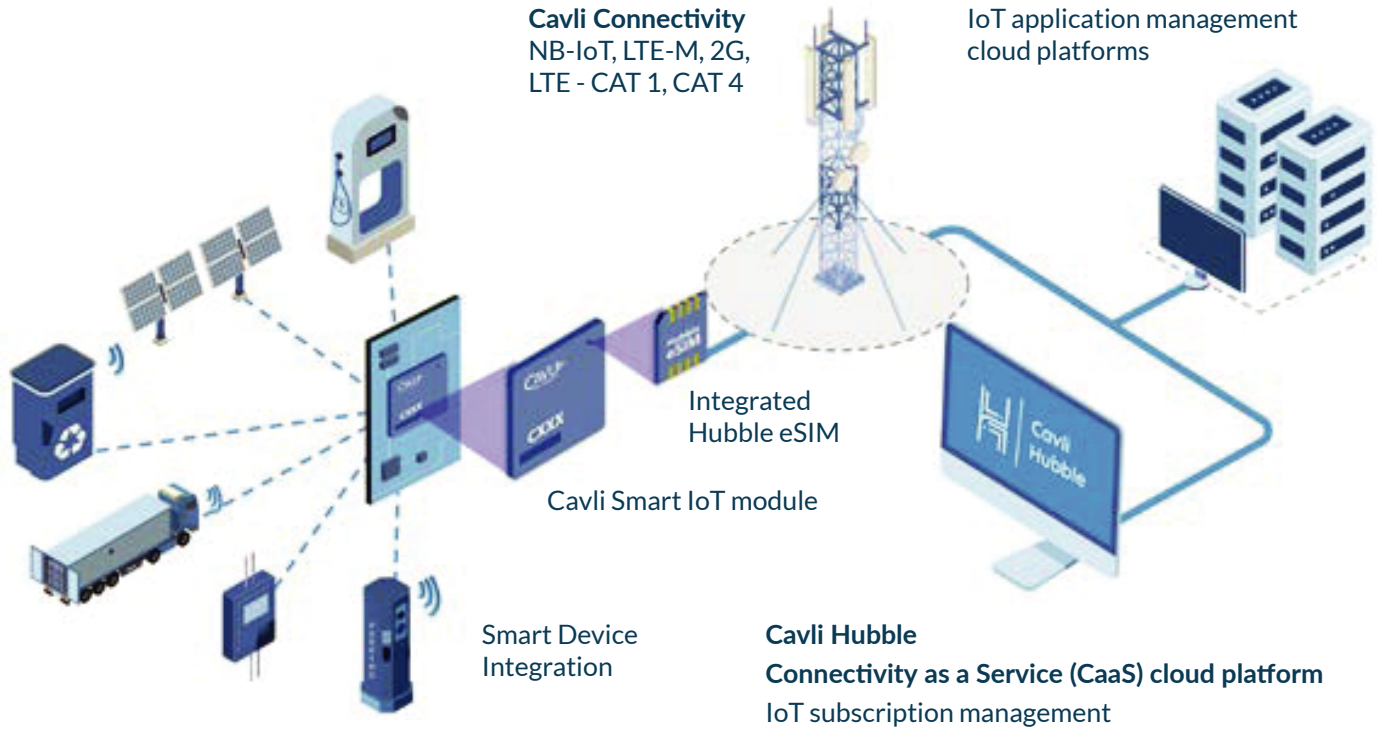
Choose your eSIM integrated Cavli IoT Modules

Engineer your IoT solution with Cavli Module

Integrate Cavli Hubble to Application Platform

Get Your IoT device Smart Connected

Powering Use cases across Industries



Cavli Hubble
Connectivity as a Service (CaaS) cloud platform
IoT subscription management
Modem & Module management
Hubble Messaging Service
Hubble Command Center

About Cavli

Cavli Wireless is a technology enabler company born out of the vision to make IoT simple, seamless, secure and scalable in the true sense .

We focus on Cellular IoT with our line of Smart Connectivity Solutions including Smart Modules, Network access, IoT data connectivity and the Connectivity management cloudplatform.

Cavli has agreements with operators to provide 2G/3G/LTE/ LPWA connectivity with coverage in 26 NB-IoT, 8 LTE-M and 160 LTE/3G/2G networks across the globe and counting.

2017
ESTABLISHED

Direct Telco Partnerships 7

LPWAN over 5G testing in progress

CaaS

One of the world's first truly enterprise ready Connectivity as a Service (CaaS) Solution for cellular IoT

10+
eSIM integrated smart IoT modules

100+
IoT OEM Customers around the globe

25+ Countries being served around the globe

Sales & Partnerships

Get in touch with us to get onboarded on the future of IoT connectivity

If you are an IoT product maker trying to put together the building blocks of IoT connectivity management, let us help you figure it out. Our team of solution experts can get you from product development to launch in under 3 months.

For direct sales enquires: sales@cavliwireless.com

For solution consulting: solutions@cavliwireless.com

CAVLI wireless

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