LOCTIO

Democratizing precise location capabilities for IoT devices

Christos Makiyama

Loctio, Director Business Development

5th EU-Japan GNSS Roundtable 2021

November 26, 2021

Company Confidential, For authorized use only, Copyright 2021 Loctio P.C., All rights reserved

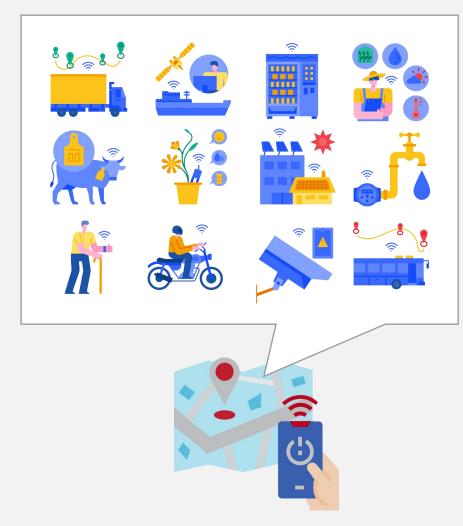
Who we are

- Founded in June 2019
- Loctio is developing a novel location system architecture and software technology for low-power IoT device positioning.
- Headquartered in Athens, Greece R&D in Athens & Patras, Greece and Barcelona, Spain. Business development in Yokohama, Japan.
- Founding Team is a blend of strong industry and academia track record





The need: Enabling IoT device positioning



- IoT is moving from hype to reality and there are not doubts that billions of connected devices will change industries and influence our lives
- Smart logistics, asset management, smart-cities, Agri-tech, smart manufacturing, Mobility as a Service are only few of the applications that drive IoT market growth
- IoT devices need to operate 24X7 reliably, securely and with a prolonged battery lifetime, in some cases expected to operate for 5-10 years
- Precise location capabilities for IoT devices is key for enabling, managing and operating such applications and services.

Company Confidential, For authorized use only, Copyright 2021 Loctio P.C., All rights reserved



What is the problem with GNSS?

GNSS



1. IoT device battery drains fast

- Shorter operational period
- Use cases limitations (i.e., Fewer position acquisition requests)

2. Trade-off positioning accuracy

- Augmentation services are not always an option
- GNSS chips are not all equal (Supported constellations, accuracy, robustness, price etc.)

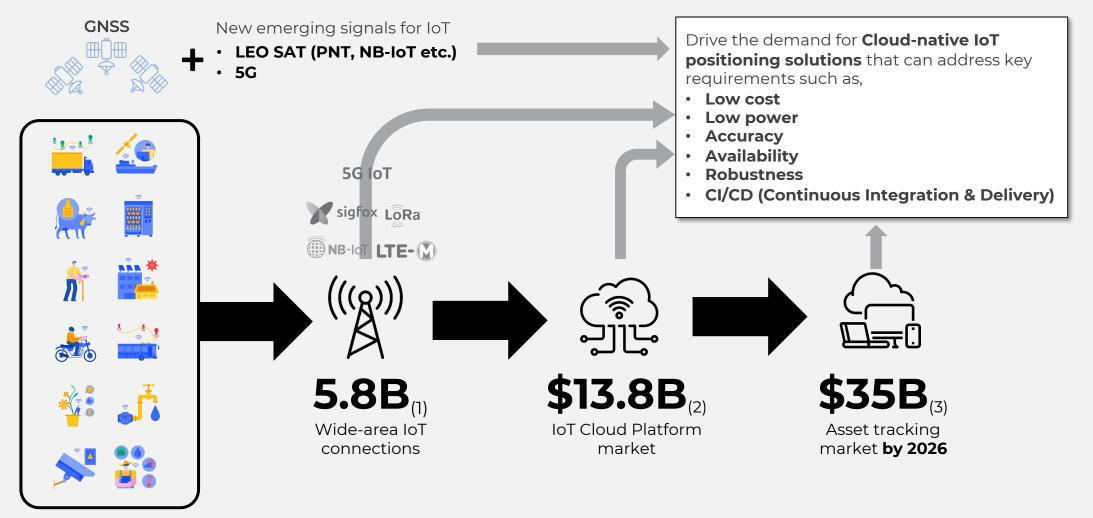
3. IoT device provisioning is expensive More frequent battery replacements or recharges

- GNSS chips and software are highly complex and
- optimized for specific use cases and applications

GNSS receiver chip



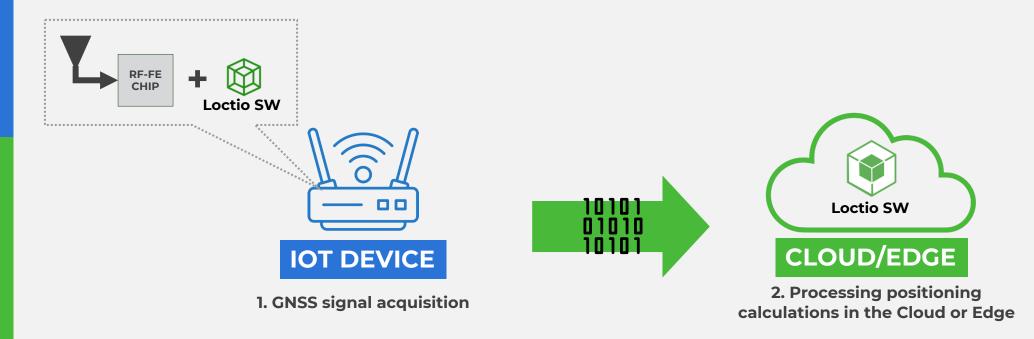
Cloud-native positioning for IoT





Solution: Cancri

Loctio's Cancri is a cloud-based technology that offloads the GNSS signal processing from the IoT device hardware to the Cloud or Edge.





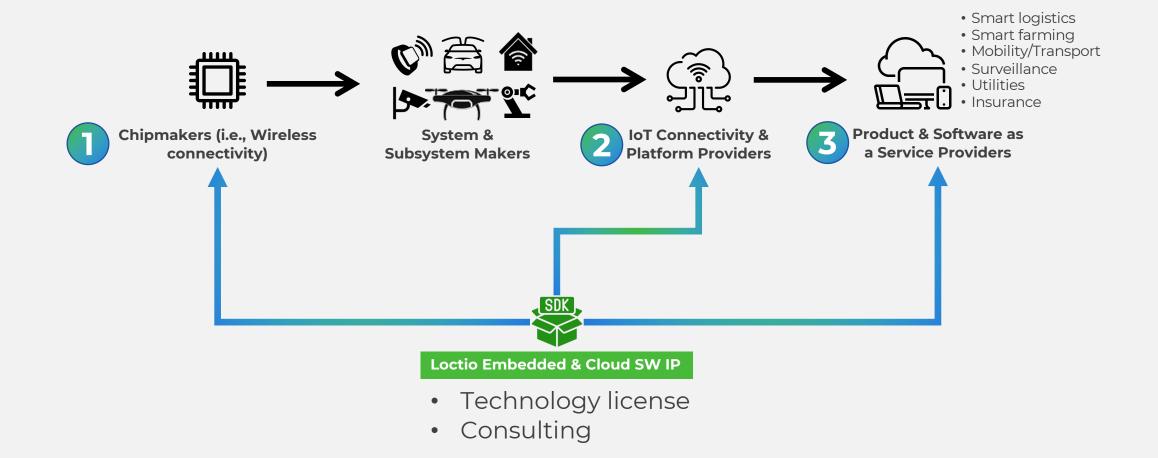
Cancri's benefits

The benefits of running the computationally intensive GNSS signal processing on the Cloud or Edge are:

- Achieve high savings on power consumption and cost of the IoT device.
- Enhance IoT device's positioning accuracy, applications versatility (i.e., outdoor and indoor positioning), and security by fusing and processing LEO and 5G PNT signals.
- Dramatically reduce the CAPEX and OPEX of IoT service by higher automation of operational tasks and lower cost hardware components. Easy to enhance IoT device position-related performance and capabilities by only Cloud or Edge software updates.



Revenue model





Status

- Cancri beta version release in 2022 Q1
- Partnerships with a:
 - Global NB-IoT chip maker
 - LEO SAT player
- We are seeking to partner with Japanese companies interested in developing solutions or services for IoT applications and utilizing GNSS or other emerging positioning technologies (LEO PNT, 5G) based on an innovative and highly scalable architecture.
- The partnership can be,
- a) licensing Loctio's technology
- b) offering our solution as a SaaS, or
- c) joint product/service development

LOCTIO Contact Details

Christos Makiyama, Director business development Christos.makiyama@loctio.com

Or follow us at: https://www.linkedin.com/company/loctio

Company Confidential, For authorized use only, Copyright 2021 Loctio P.C., All rights reserved

