



Wireless AI accelerometer AC-COMM

April. 2018

Yoshimasa Suzuki

CEO

CACH Inc.

G-JAP Economic Forum HM 2019

Our Vision

We CAn CHange the World by the Power of IoT



Common IoT stories and our solution

Objectives of IoT

Detection

Productivity

Optimization

Autonomous

Challenges facing

Power

How to install on
existing products

Network

Running cost

Our solution

Cell batteries

Add-on device

LPWA

(Low Power Wide
Area Network)

Edge-computing

AI

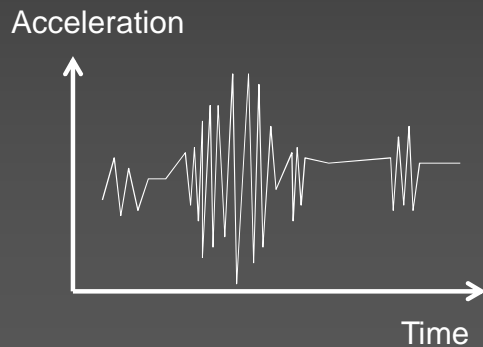
Our solution Wireless AI accelerometer : AC-COMM



- Acceleration and Gyro sensor
- Temperature sensor
- Wireless communication module
- Powered by Cell Batteries

STEP1

Vibration monitoring



STEP2

Analysed by AI
(Edge computing)

Action A	1
Action B	3
Action C	5
Action D	2
.....	

STEP3

Data transmission
(Sigfox)



Cutting Edge approach
Acceleration × AI × Edge Computing

AC-COMM is custom based platform

Platform

AC-COMM



Industry

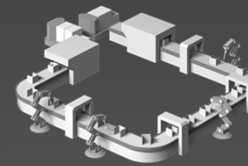
Automobile



Facility



Smart factory



Infrastructure



Application

- Safe driving diagnosis
- Driving history
- Security monitoring

- Factory machineries malfunction forecast
- Abnormal inclination detection

- Operation monitoring and optimization
- Preventive maintenance
- Knowledge management

- Structural health monitoring
- Abnormal vibration detection

Competitive advantage 1.
High recognition rate of users' behavior



500 of right and left turns
+
AI

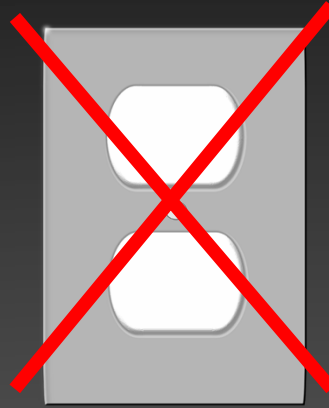
Accuracy
of turns in
unknown data

90%+

Competitive advantage 2. High Versatility



Gateway
not needed



AC power source
not needed



Wiring
not needed

Can be integrated into a new product and as an add on
device for an existing product

Other Competitive Advantages

Technology

Power saving PCB and Firmware
(Cell batteries)

AI Edge computing

Low running cost by utilizing latest
wireless technology

Patent pending

Launched another IoT product
(Wireless infrastructure
monitoring system)

Team

- Mechanical engineer
- PCB engineer
- Web application engineer

AI professional partner

One- stop IoT & AI solution

- Data collection
- Trained model build
- Field test
- Mass production
- Web application

Achievements at the moment

1 Grant

was given by

Tokyo Metropolitan
Small and Medium
Enterprise Support
Center



2 Projects

are on going with

Home maintenance
company and
Construction
Company

5+ Projects

are under
feasibility study

with
Machine company
Railway company
Construction company
etc.



We CAn CHange the World by the Power of IoT

<https://www.cach-inc.com>

info@cach-inc.com

Thank you!

Visit us at Hall013, stand D18/1