

Panel Discussion II : Co-Creating with Advantech to Accelerate Domain Focus IoT Deployment

Moderator:

Tony An, Advantech Sales Director

Panelists:

Michael Huang, Advantech Project Associate Manager Park Sam, Yujin Robot President & CTO Ravi N. Amble, SUQUINO President & CEO Ming Yeh Hsieh, HwaCom Systems Vice President







Identify Pain Points of solution with Experts and Partners



Speaker Introduction



Park Sam

President & CTO



Ravi N. Amble

President & CEO



Ming Yeh Hsieh

Vice President



Michael Huang

Project Associate Manager





Autonomous navigation solution & Fleet management system on WISE-PaaS

Park Sam Yujin Robot AUDITICE Industry A.O WISE-PaaS WISE-PaA

Global Trend in appliance and machinery industry

Appliance to robot /automatic appliance



Future of devices with wheels in the factory, hospital and market







Autonomous Navigation Solution to enable manual devices to be robotic device





Autonomous Navigation Solution







Demo – Mobile Cart, proof of concept







ANS component – 3D LiDAR





- 3D environment monitoring
- 3D map building Autonomous navigation
- Safety human & object detection
- AI object recognition





3D LiDAR for AI – Object/location recognition on Odroid w/o additional GPU or CPU



3D LiDAR for 3D Map building









ANS component – Various robots run with the same navigation SW



ANS component - FMS (Fleet management system)



Use case: Assign job, control and monitor multi ANS vehicle







Use case: Control traffic, elevator and automatic door















DFSI- Smart City

Mingyeh Hsieh Vice President 2019-12-13

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Intelligent Environmental Management Services



IoT Data & Image Collection

Integrate external data (such as: Central Weather Bureau Open Data Platform...), real time data (such as: pH, EC, SS...) and video streaming as a data repository.

External Platform



Real Time Data







Data

Analysis & Action

Build data correlation analysis, AI deep learning, intelligent detection & warning and other functional modules to provide a complete intelligent environmental monitoring platform.

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Data Correlation

Analysis

July No See Orth

Platform

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Al Deep Learning

\$11.25

Application Services Integration

Provide intelligent environmental monitoring services such as water quality monitoring and air pollution monitoring, and extend other value-added applination services through open API interface.

Service

Air Pollution

Monitoring

Water Quality Monitoring





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Water Quality Monitoring Service Scenario





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Water Quality Monitoring Service Architecture

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Water Quality Monitoring Service Dashboard





- **pH** : Display real-time pH value, when the value exceeds the threshold represents abnormality occurs.
- **Temperature** : Display real-time temperature, when the value exceeds the threshold represents abnormality occurs.
- EC : Display real-time EC value, when the value exceeds the threshold represents abnormality occurs.

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Air Pollution Monitoring Service Scenario

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Air Pollution Monitoring Service Architecture

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Air Pollution Monitoring Service Dashboard

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- PM2.5 : Display real-time PM 2.5 value, when the value exceeds the threshold represents abnormality occurs.
- Humidity : Display real-time humidity value, when the value exceeds the threshold represents abnormality occurs.
- **Temperature** : Display real-time temperature, when the value exceeds the threshold represents abnormality occurs.



Co-Creating The Future of The IoT World "Co-Creation Program"

Michael Huang, ACI, Advantech

AUDICATION CO-Creation MUSE-PaaS Alliance Lot SRP 2.0 Service IoT City OF Embedded IoV Cloud-Io MUSE-STREY 4.0 MUSE-STREY 4.0 ALI Platform NeviceOn ALI Platform DeviceOn ALI Platform DeviceOn ALI Platform Design-in Services Read Read

Advantech Co-Creation Program for Ecosystem of Industrial IoT



Objective Establish strategic partnership and co-create scalable IoT solutions with co-creation partners through Advantech WISE- PaaS and HW Products





SRP Co-Creation Case

Co-Creation Process

RTLS SRP Service Developer

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Nurse Station Pod 3



Area





Office 2

RTLS Case Sharing

> All deployed clients are highly satisfied with the Co-Creation RTLS



Regional Strategic Partnership For Phase II Business Development

Objective Establish strategic partnership with regional DFSI partners to jointly promote and implement WISE-PaaS & SRP within the region



DFSI Co-Creation Case *SW & System Integration for Enterprise & B2B Sectors*



Partner: Nippon RADEstablished: June, 1971Listed in: Tokyo Stock Exchange(JASDAQ)Employees: 300 (250+ Engineers)Location: Tokyo HQ, Osaka, Nagoya, FukuokaType: DFSI Co-CreationDomain: SW & System Integration for Enterprise & B2BSectorsCo-Creation Year: 2018

Strategic Investment

• 10M USD Equity Investment for 19% Share

Core Team Establishment

- NRAD doubled its IoT team from 20 to 40 employees
- WISE-PaaS Certification
 Program

Co-Marketing

- 2 Local Demo Room Setup
- Japanese IoT News Distribution
- Joint Solution Day

Joint Business Development

- Joint Customer Visit
- Over 90 Project Leads
- Over 30 on-going projects

Co-Creation Process



Co-Creating the Future of the IoT





AD\ANTECH

Co-Creating the Future of the IoT World



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