



AIS Business

Your Trusted Smart Digital Partner

การเชื่อมโยงข้อมูล

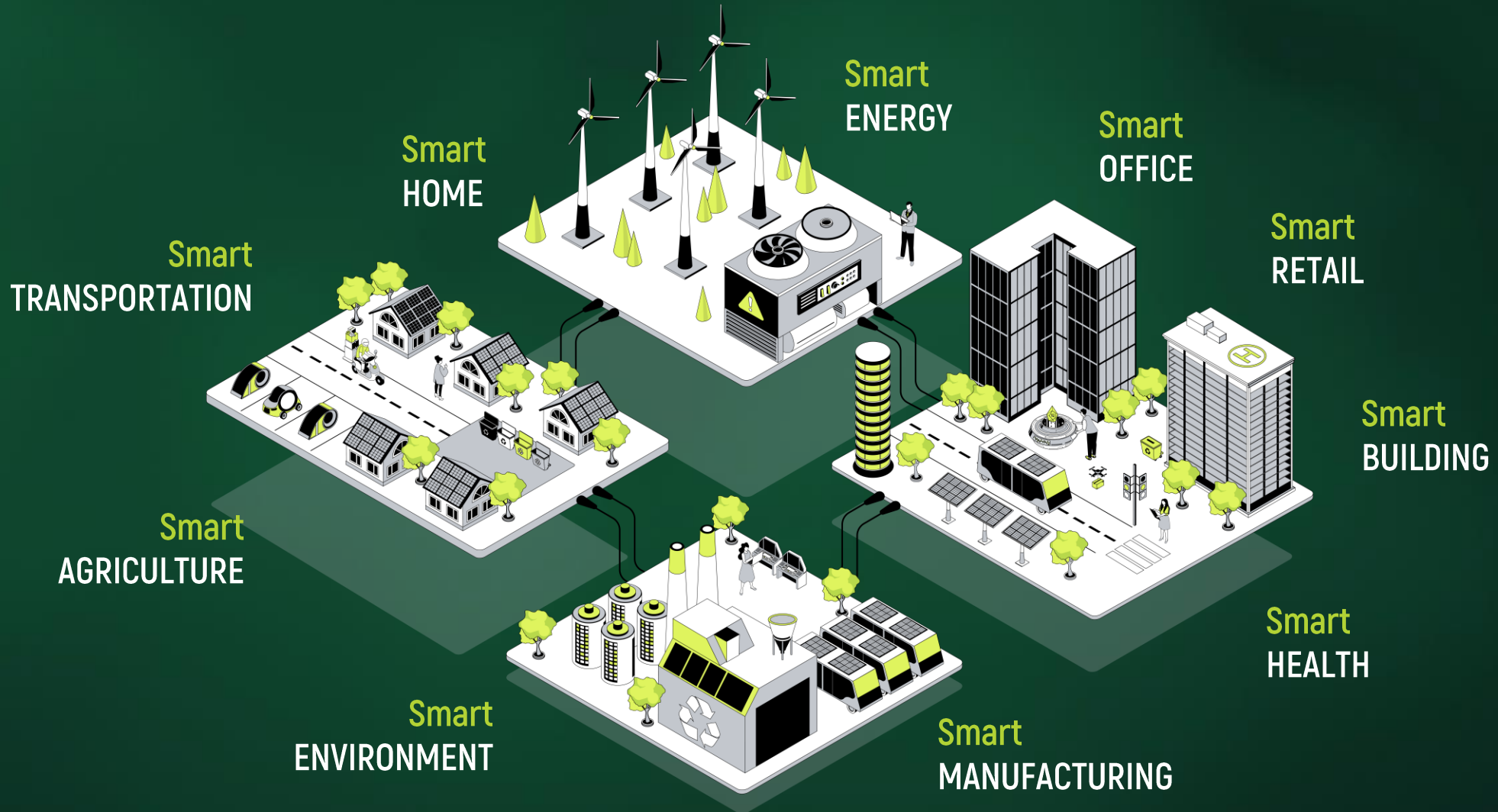
หัวใจสำคัญในการผลักดันนวัตกรรม IoT

และการเปลี่ยนผ่านสู่อุปกรณ์อิเล็กทรอนิกส์อัจฉริยะ

Phuchong Charoensuk

Enterprise Product Marketing Manager, AIS

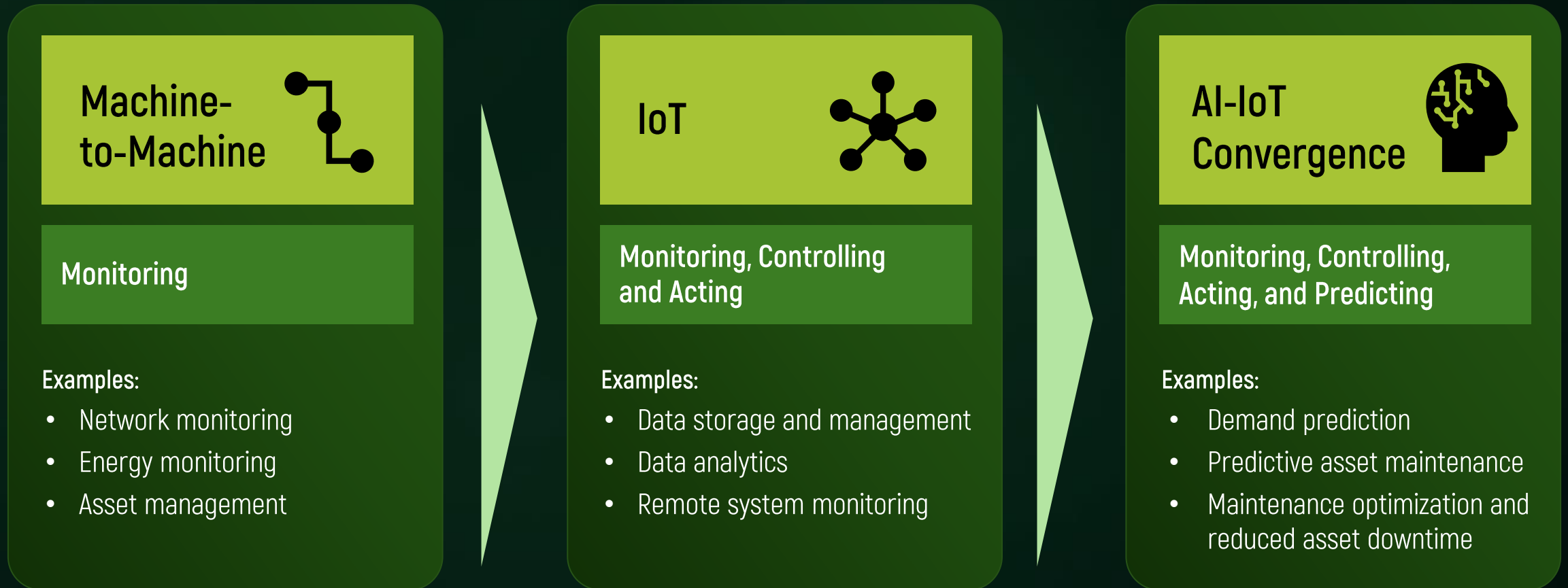
Smart Industry APPLICATIONS



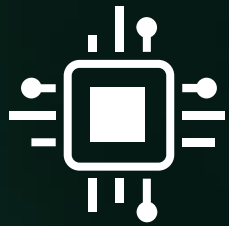
Smart Industry APPLICATIONS

EVOLUTION

The Evolution of Convergence between GenAI and IoT for Smart Industry Applications



The Foundation of **Internet of Things**



Sensors &
Thing Devices



Connectivity



Computing &
Platform

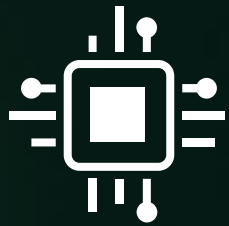


AI & Data
Analytics



Application &
Virtualization

The Foundation of **Internet of Things**



Sensors &
Thing Devices



Connectivity



Computing &
Platform



AI & Data
Analytics



Application &
Virtualization

DATA

SMART SENSORS MARKET OPPORTUNITY in Asia-Pacific

Asia-Pacific was the
Largest Regional Market Globally

38%

of global value in 2023

with Strong Growth

19%

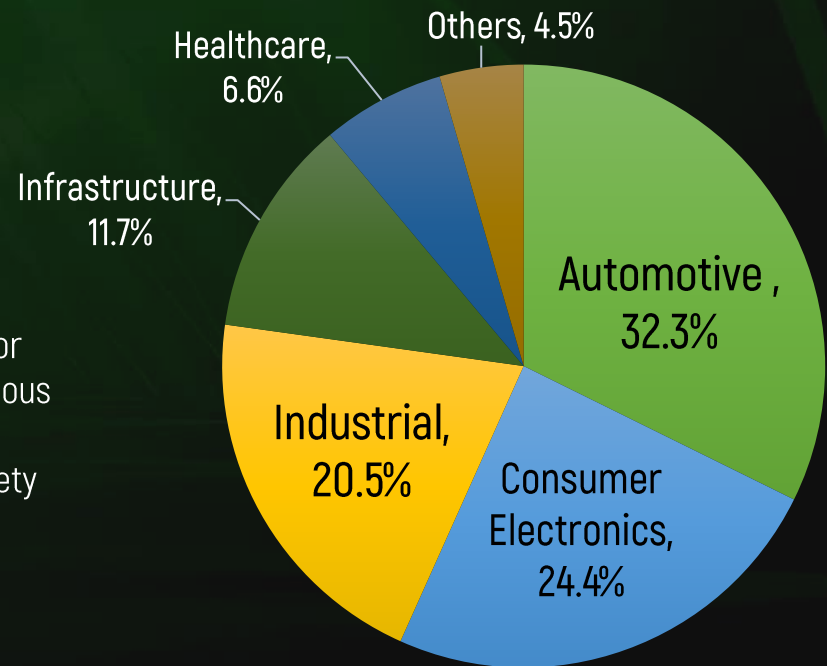
CAGR from 2023 - 2028

GLOBAL SMART SENSORS

MARKET CATEGORY SEGMENTATION
(2018 - 2023)

**32.3 %
AUTOMOTIVE**

Smart sensors market for connected and autonomous vehicles and a greater emphasis on vehicle safety requirements.



"QUALITY"

Data is the New Oil

High Data Quality drive
actionable insights and
efficient IoT-enabled system

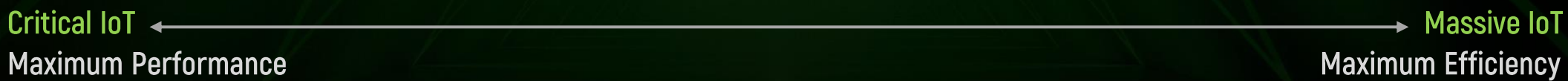
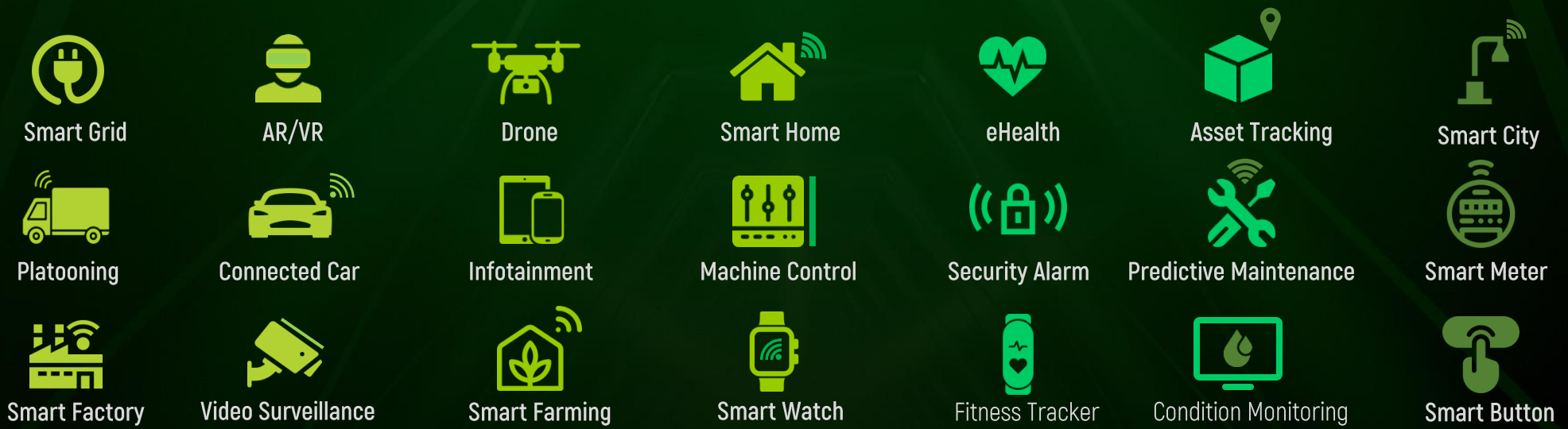
- Data Accuracy and Consistency
- Data Precision and Integrity
- Data Completeness
- Timeliness (Real-time Data)



“CONNECT” and **“COMPUTE”**

Connecting Data to Build an Application

How to Select the Right Connectivity Technology



	5G	4G	3G	NB-IoT
--	----	----	----	--------

Low Latency	●●●●●	●●●●○	●●○○○	●○○○○
Indoor Coverage	●○○○○	●●○○○	●●●○○	●●●●●
Data Rate	●●●●●	●●●●○	●●○○○	●○○○○
Battery Life	●○○○○	●○○○○	●●●●○	●●●●●

Hardware and Platform for Connecting Data from Smart Sensor

```
...mirror_ob
...mirror_object = mirror_ob

operation == "MIRROR_Y":
    mirror_mod.use_x = True
    mirror_mod.use_y = False
    mirror_mod.use_z = False
operation == "MIRROR_X":
    mirror_mod.use_x = False
    mirror_mod.use_y = True
    mirror_mod.use_z = False
operation == "MIRROR_Z":
    mirror_mod.use_x = False
    mirror_mod.use_y = False
    mirror_mod.use_z = True

#selection at the end add back the deselected
mirror_ob.select
modifier_ob.select
bpy.context.scene.objects.active = modifier_ob
print("Selected" + str(modifier_ob.name))
#mirror_ob.select = True
one = bpy.context.selected_objects[0]
bpy.data.objects[one.name].select = True
print("please select exactly two objects")

----- OPERATOR CLASSES -----
class MirrorX(bpy.types.Operator):
    """This adds an X mirror to the selected object"""
    bl_idname = "object.mirror_mirror_x"
    bl_label = "Mirror X"

    @classmethod
    def poll(cls, context):
        return context.active_object is not None

    def execute(self, context):
        mirror_mod = modifier_ob.modifiers[0]

# set mirror object to mirror_ob
mirror_mod.mirror_object = mirror_ob
```

NODE 05

NODE 05

NODE 03

NODE 02

NODE 04

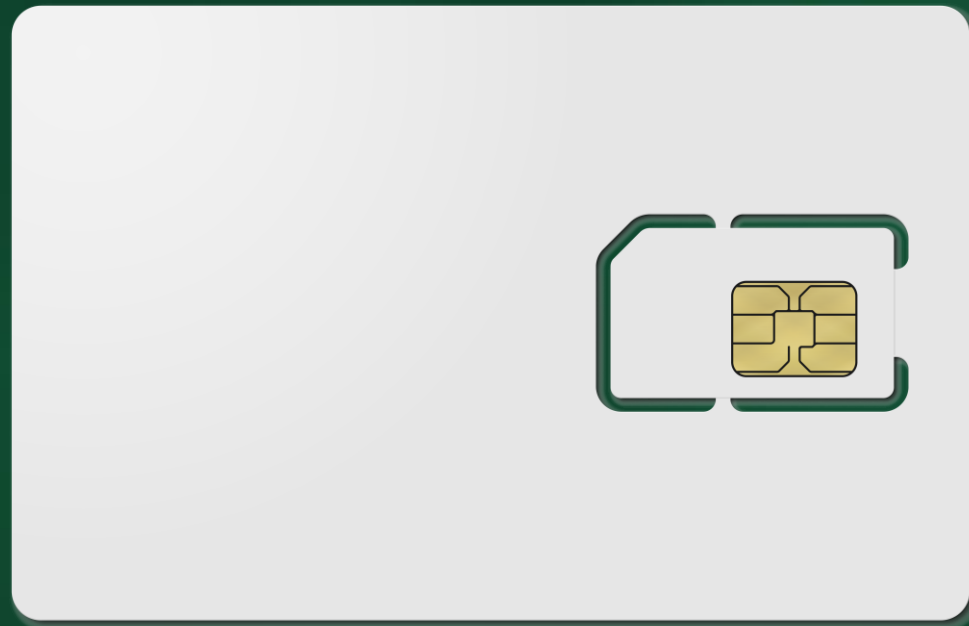
BLOCK 01

BLOCK 01

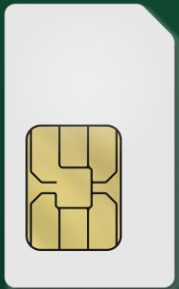
NODE 01

NODE 01

SIM Form Factor



SIM



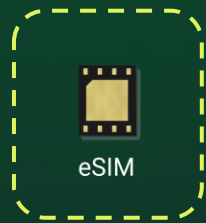
Mini SIM



Micro SIM

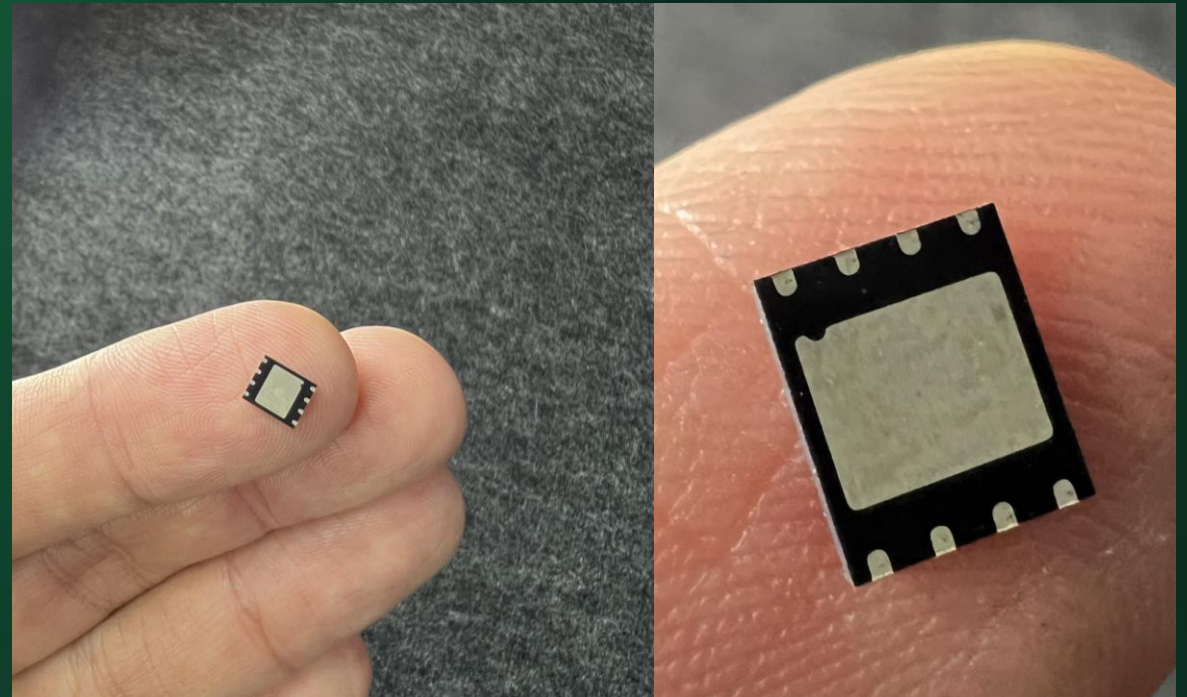


Nano SIM

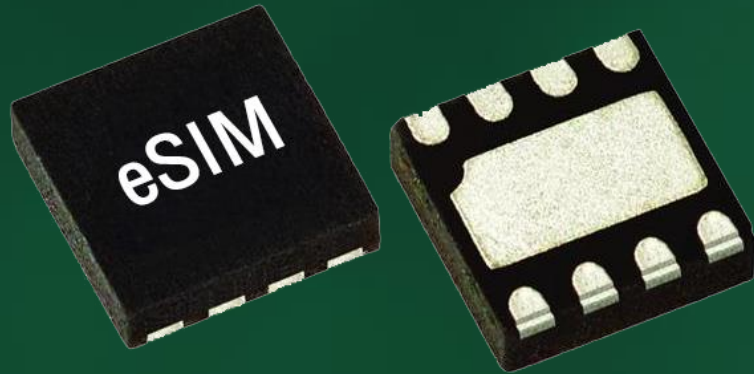


eSIM

eSIM – Embedded SIM

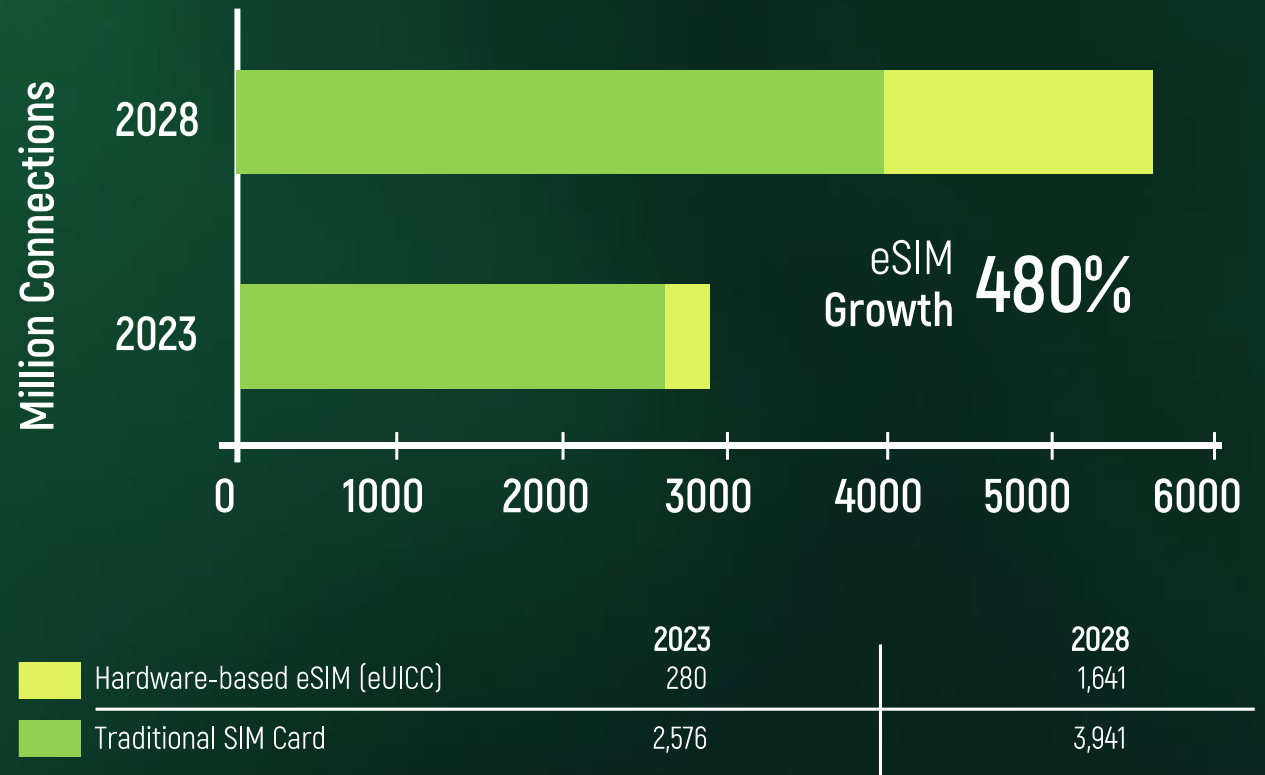


eSIM (embedded SIM)



1. Reduced Physical Space:
2. Increased Design Flexibility
3. Increased Durability and Harsh Environment Resistance
4. Simplified Manufacturing
5. Easier Global Deployment

Cumulative IoT Connections by eSIM and Others, Global, 2023 & 2028



Source: AIS, Frost & Sullivan

Connectivity Lifecycle Management

for Consumer IoT



Managing IoT Device Lifecycle with IoT Connectivity Management Platform



Factory

Distribution

Device Purchase

Device into Operation

4 5

1



SIM Ordering
Device Assembly
SIM Deployment

2

SIM Provisioned
Factory Testing



3

Device Ready
Price Plan Activated
Billing Starts



6

Device Bill



Example Business Life Cycle

Connected Vehicle

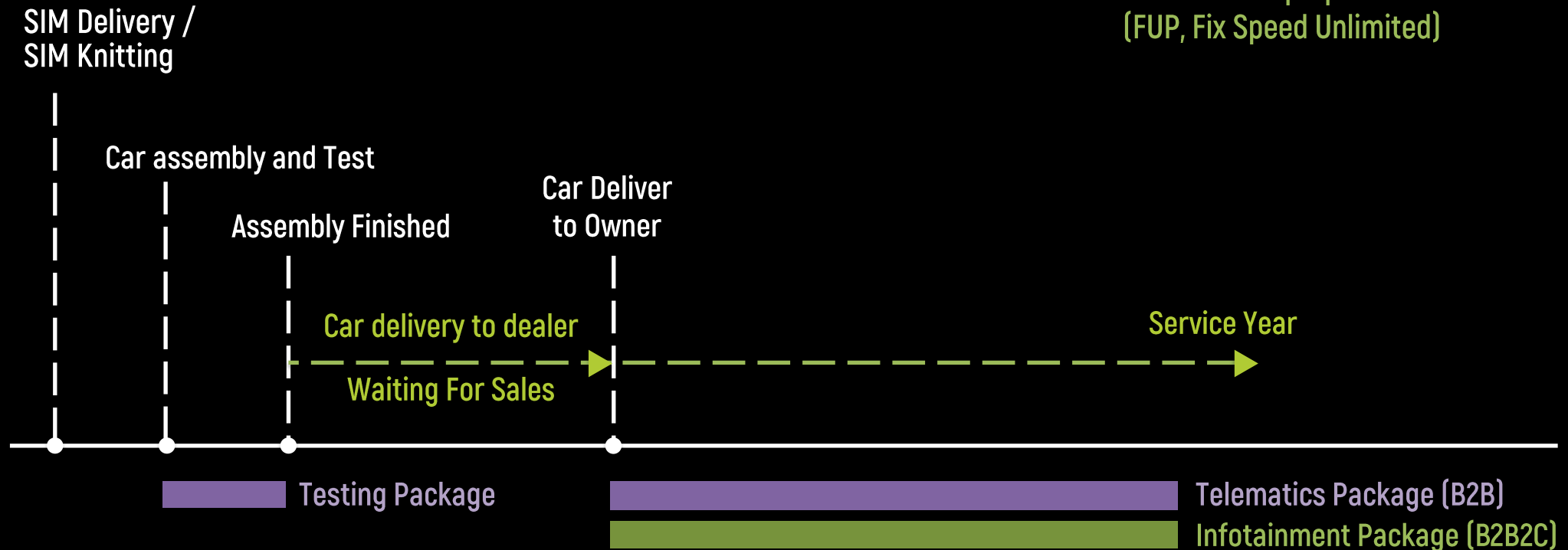


Telematics Package (B2B)

- Long Term Plan
- Pay-per-Use

Infotainment Package (B2B2C)

- Consumer Top-up Plan (FUP, Fix Speed Unlimited)



AIS IoT Connectivity Platform : Automated business process for both operator and enterprise

แดชบอร์ด

+ เพิ่มวิดเจ็ต

สถานะซิม

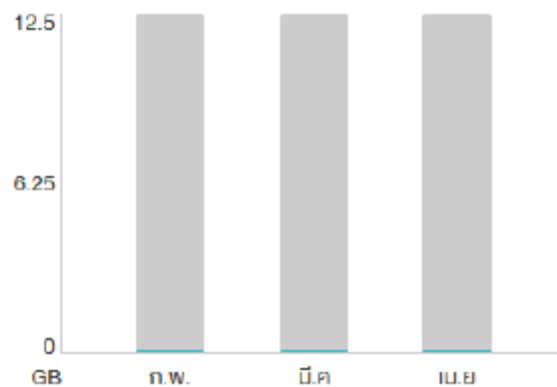


- 13 SIM Ready
- 5 Test
- 1 Commercial
- 3 Suspend
- 33 Terminate

ลงทะเบียนซิมการ์ดที่นี่

ลงทะเบียนซิม

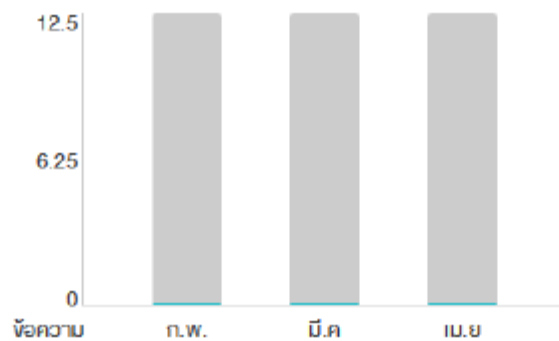
สถิติการใช้งานข้อมูล



สถิติการใช้งานเสียง



สถิติการใช้งานข้อความ



13

ซิมพร้อมใช้

ต้องการซิมการ์ดเพิ่มหรือไม่?

สั่งซื้อเลย!

Project_MilkyWay_New_Ins...

4 SIM Ready

5 Test

1 Commercial

3 Suspend

29 Terminate

ดูรายละเอียด

Project

Project_MilkyWay_New_Instance... Search

FILTER SORT CUSTOM VIEW ACTION

Filter by All Statuses All Main Packages All Services

BA LIST

Automatic SIM selection (Click to choose SIM list file

Change Main Package

On/Off Services

Suspend SIM

6 SIM displayed 1 selected

Select All List Grid 20 Per Page

	NUMBER	SIM ID	STATUS	
<input checked="" type="checkbox"/>	9991061419	2120024100192	Test	VIEW
<input type="checkbox"/>	9991061432	2130044100767	Test	VIEW
<input type="checkbox"/>	9991061581	2130044100718	Test	VIEW
<input type="checkbox"/>	9991991615	2120024100150	Test	VIEW

เปิด/ปิด การให้บริการ

การให้บริการ

กรุณาตรวจสอบรายละเอียดก่อนเปลี่ยนข้อมูลบริการ

Data ON OFF

Voice In ON OFF

Voice Out ON OFF

SMS In ON OFF

SMS Out ON OFF

IDD ON OFF

IR ON OFF

Network Diagnostic - 0610265567

Last 24 Hours ▼ Last Updated: 20/03/2023 19:59:49

ON

Open sessions

0%

Session setup success rate

100%

Location update success rate

Data

2.90GB

SMS MO

0

(Messages)

- All
- Data
- SMS
- Location Update
- Session Setup
- Error

Data

TYPE	USAGE	LAST ACTIVITY	LAST TIME
Data uploaded	350.25MB	-	20/03/2023 19:59:49
Data downloaded	2.56GB	-	20/03/2023 19:59:49

SMS

TYPE	MESSAGE	LAST ACTIVITY	LAST TIME
SMS MO	0	-	-



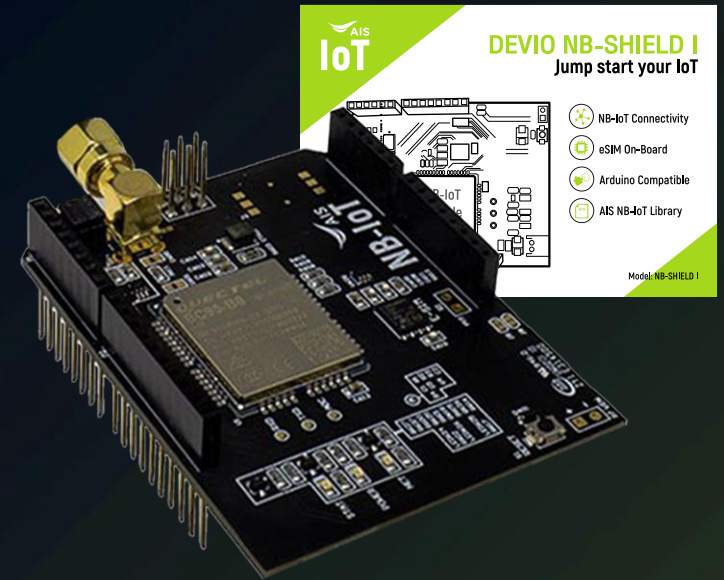
Connectivity Board

Suitable for ALL

- R&D in Large Enterprise
- IoT System Integrator
- Education/Starter Developer



AIS 4G BOARD



DEVIO NB-SHIELD I



- Plug & Play
- Device Management
- Data Visualization
- Open Platform
- Team Collaboration

NT_Demo02

Soil Temp, Soil EC, Soil humid, SHT temp

Switch1, Switch2, Switch3, Switch4, status switch1, status switch2, status switch3, status switch4, SW_TEST01, SW_03, ButtonDump, Switch5

Dashboard AFarm

Stable Wifi North, Dim Light, Humidity 3000 watts, Brightness, Error -52, Good Morning

แผนที่ กรุงเทพมหานคร

37 °C Solid Temperature

milking the cow, chicken room

Chicken room

เป็นการเลี้ยงในโรงเรือนปิด เน้นความปลอดภัยทางชีวภาพ (Bio-Security) สำหรับแม่พันธุ์ ไก่ไข่เป็นหัวใจสำคัญ โดยเลี้ยงไก่ให้อยู่ในรูปแบบ....

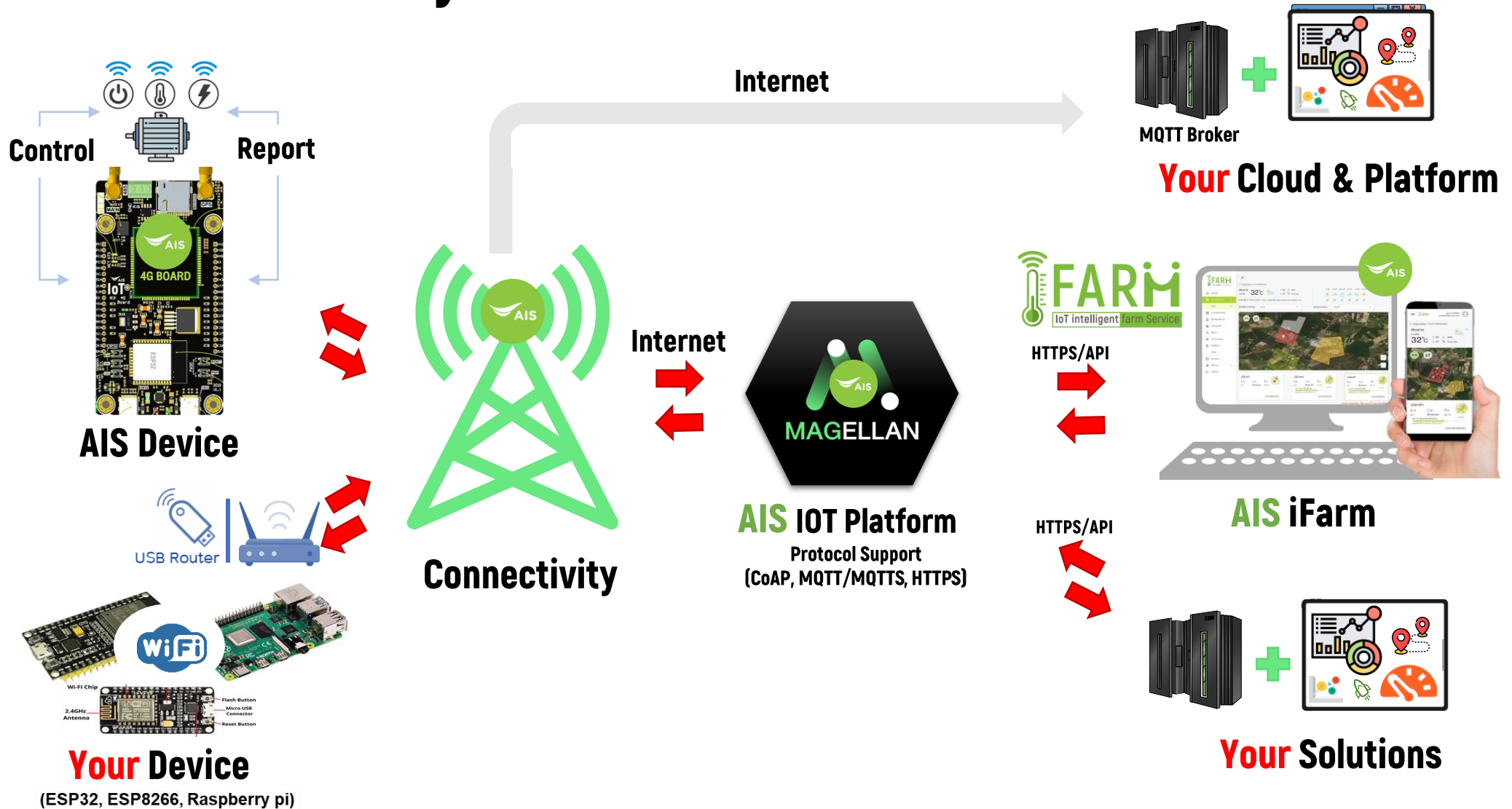
Graph Name Last update: 22/06/64 12:33:45 u.

Temperature Rate

10.4 kv Heater

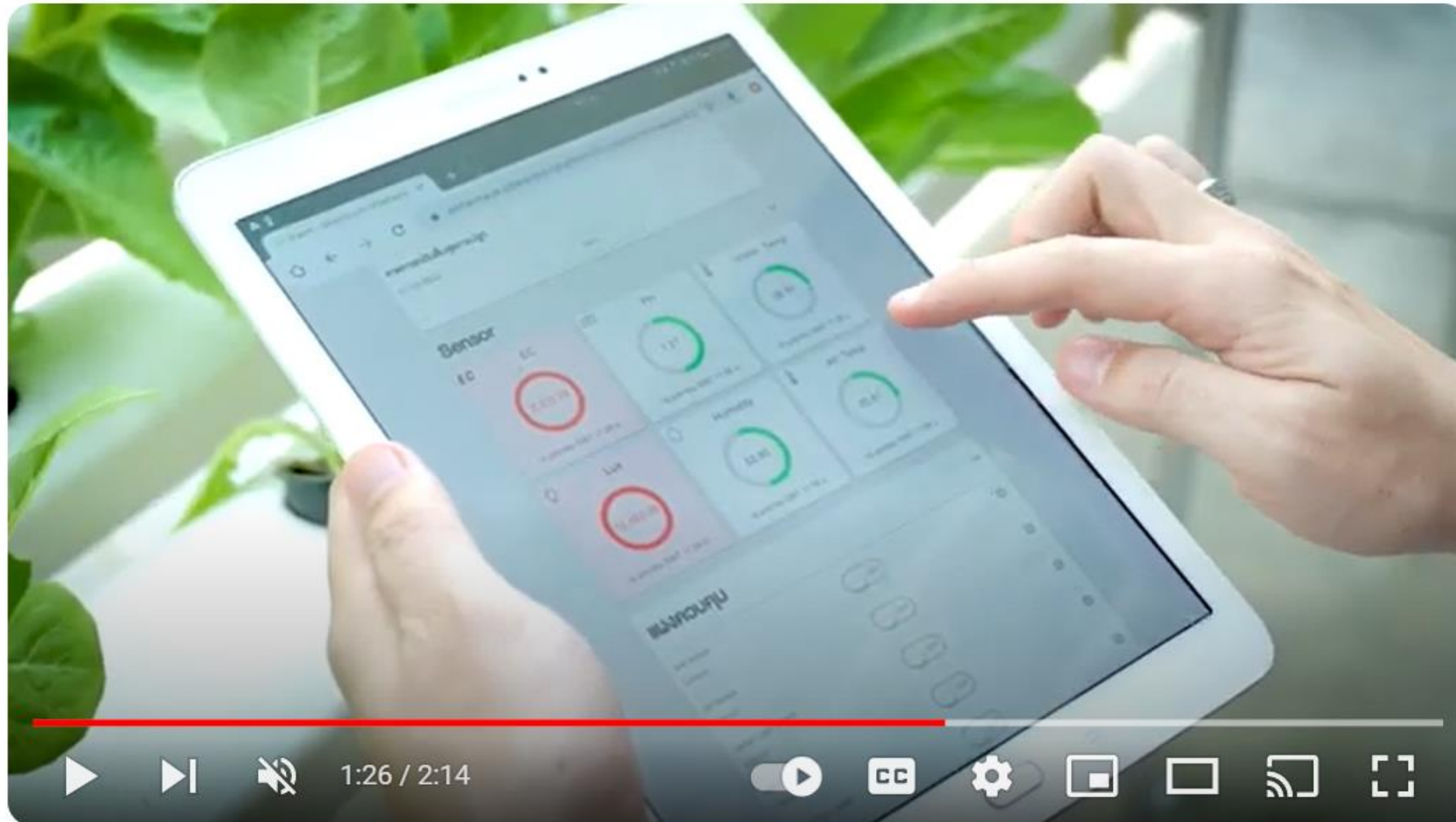
Soil Moisture, Charge Battery

AIS IoT and Ecosystem

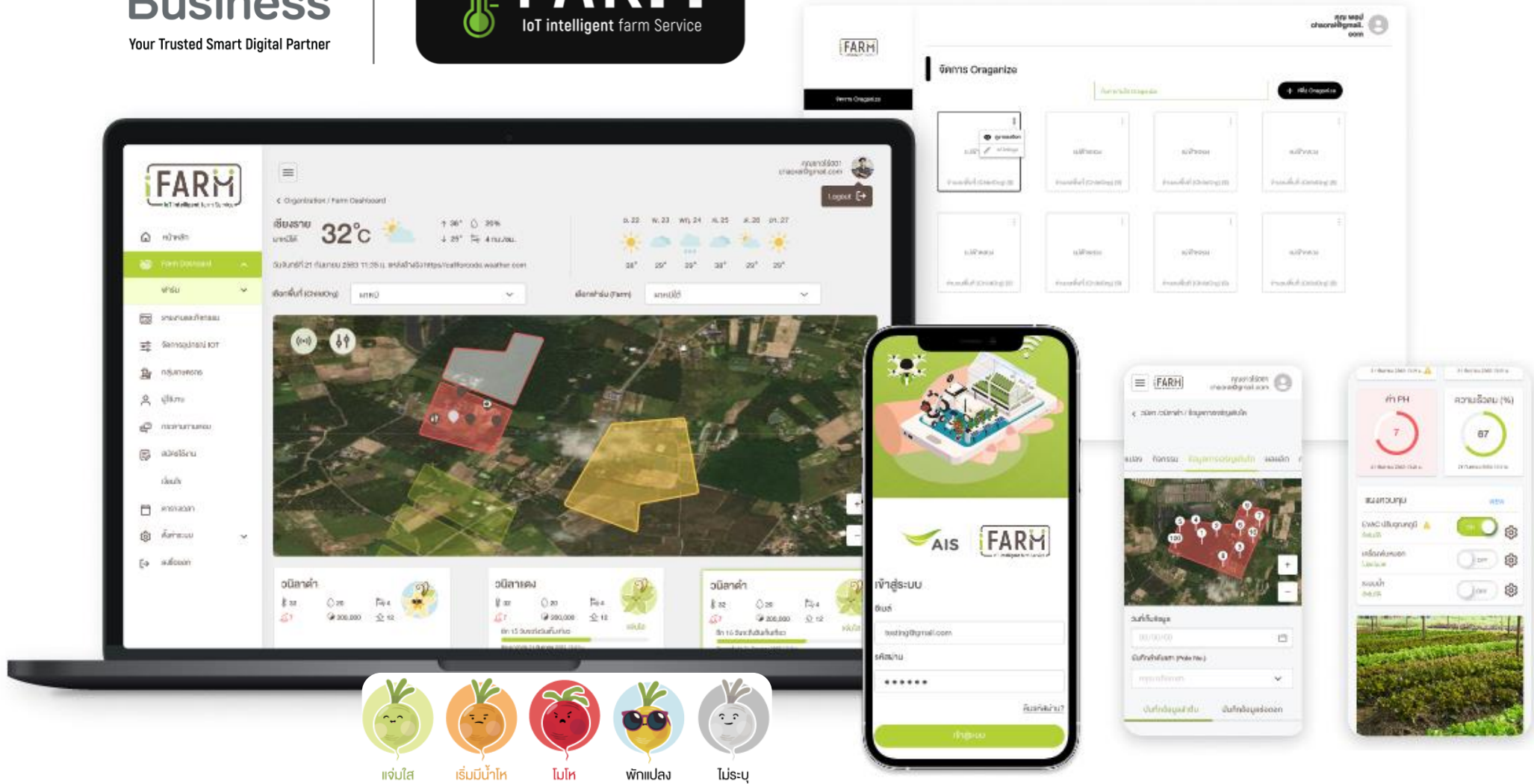




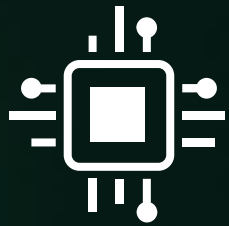
GO
WHOLESALE



VDO : GO Smart Farm by AIS iFarm
<https://www.youtube.com/watch?v=25KFeCcwQcl>



The Foundation of **Internet of Things**



Sensors &
Thing Devices



Connectivity



Computing &
Platform



AI & Data
Analytics



Application &
Virtualization

DATA

AIS IoT Ecosystems

Modules / Sensors

- NB-IoT shield
- AIS 4G Board
- Embedded SIM (eSIM)

Connectivity

- 5G / 4G / 3G
- NB-IoT
- Fiber Optics

Platform

- **Connectivity Platform**
 - AIS IoT Portal (Milkyway)
 - Global (Aeris)
- **Development Platform**
 - Magellan
- AIS PARAGON Platform



AIS DIGITAL Business EVOLUTION

SUSTAINABLE BUSINESS for a SUSTAINABLE NATION

Our Mission

Serves Thailand's Sustainable Digital Economy
by Accelerating Digital Transformation
for Thai Businesses with a Comprehensive Suite
of Digital Technologies and Services Delivered
by Highly Competent and Trusted Professionals





Your Trusted Smart Digital Partner

AIS Business
Call Center

1149



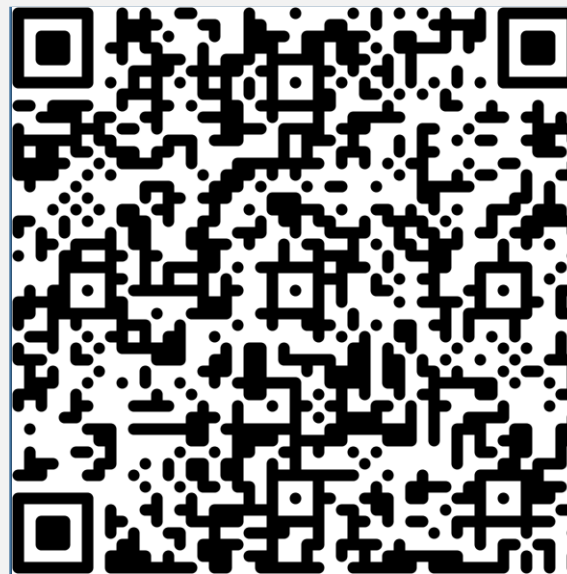
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