PLUG AND PLAY

SV SUMMIT

TAIWAN DEEPTECH EXPO

#PNPTCSiliconValley

Join us at **pnptc.com**

PLUG AND PLAY

SV SUMMIT



WELCOME

David Kim

New Locations Strategy

PLUG AND PLAY

#PNPTCSiliconValley

Join us at **pnptc.com**

PLUG AND PLAY

SV SUMMIT

Agenda

01:00 - 01:08 PM | Opening Remarks

01:08 - 01:13 PM | Taoyuan City Government

01:08 - 01:13 PM | Top 5 Startup Pitches

01:28 - 01:30 PM | Closing Remarks

01:30 - 03:00 PM | Deeptech Expo

PLUG AND PLAY

SV SUMMIT

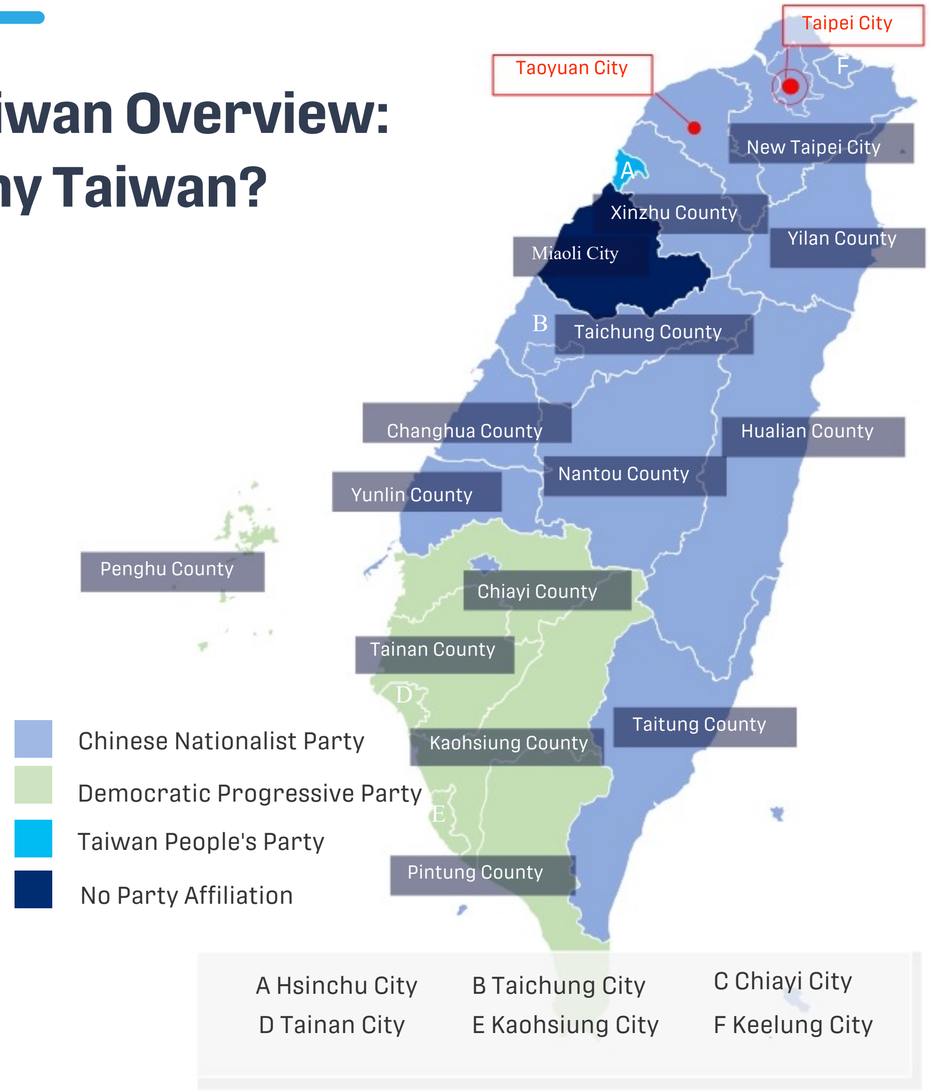
DOWNLOAD BRELLA TO NETWORK

Sign in here:
https://next.brella.io/events/SVJuneSummit25

Password: SVJuneSummit25

- 3 meeting areas to choose from across the 1st and 2nd floor *(highlighted on map)*
- You can use the web version or download the app
- Network with all attendees
- View startup profiles
- Stay updated on the weekly schedule, maps, and announcements

Taiwan Overview: Why Taiwan?



Taiwan

Metropolitan Area at a Glance

As a vital hub in the Asia-Pacific, Taiwan is known for its strong technology and manufacturing sectors, playing a key role in global supply chains. With a strategic location and a highly skilled workforce, Taiwan continues to advance its economy through innovation and international trades

23.42 Million
Population

4th
Innovation Capability

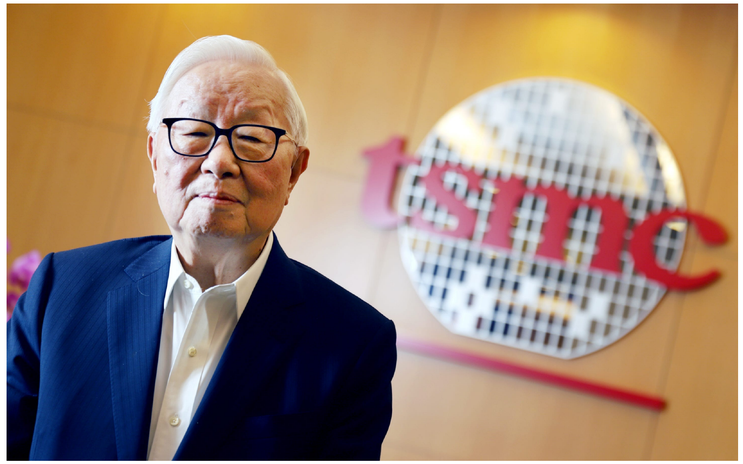
7th
Largest GDP Per Capita in Asia

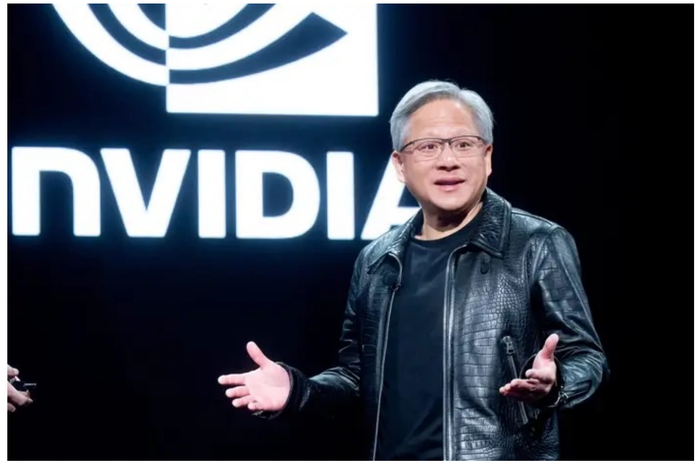
$755.1 Billion
Gross domestic Product

6th
Business Efficiency

176,000
Top Engineering Talents

Taiwan Home of Innovation and Entrepreneurship













Global Powerhouses also are looking carefully at Taiwan Open Innovation











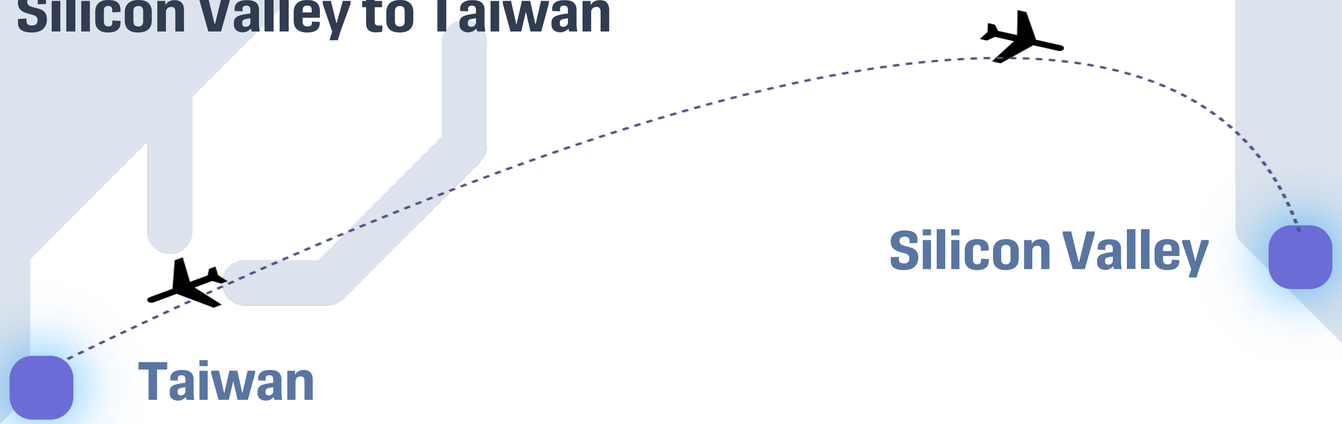








Silicon Valley to Taiwan



2025 Date founded

Verticals Served

- AIOT
- SmartCities
- Sustainability
- Drone & LTE Satellite
- Supply Chain
- Many more

Potential Partners

桃園市政府 TAOYUAN CITY GOVERNMENT

tsmc

DELTA

wistron

APPLIED MATERIALS

PEGATRON

FOXCONN

HYUNDAI MOTOR GROUP

SAMSUNG

MEDIATEK

NVIDIA

Connect Taiwan to our Global Offices



AMERICAS

- Silicon Valley (Headquarters)
- Alberta
- Arizona
- Chicago
- Cedar Park
- Cleveland
- Detroit
- Frisco
- Los Angeles
- McKinney
- North Dakota
- NeoCity
- NW Arkansas
- Orlando
- Savannah
- São Paulo
- Topeka
- Toronto
- Warsaw

EMEA

- Abu Dhabi
- Amsterdam
- Antwerp
- Barcelona
- Basel
- Ben Guerir
- Cairo
- Frankfurt
- Gothenburg
- Hamburg
- Istanbul
- Johannesburg
- Madrid
- Malta
- Milan
- Modena
- Munich
- Paris
- Saudi Arabia
- Stuttgart
- Turin
- United Kingdom
- Valencia
- Vienna
- Vilnius

APAC

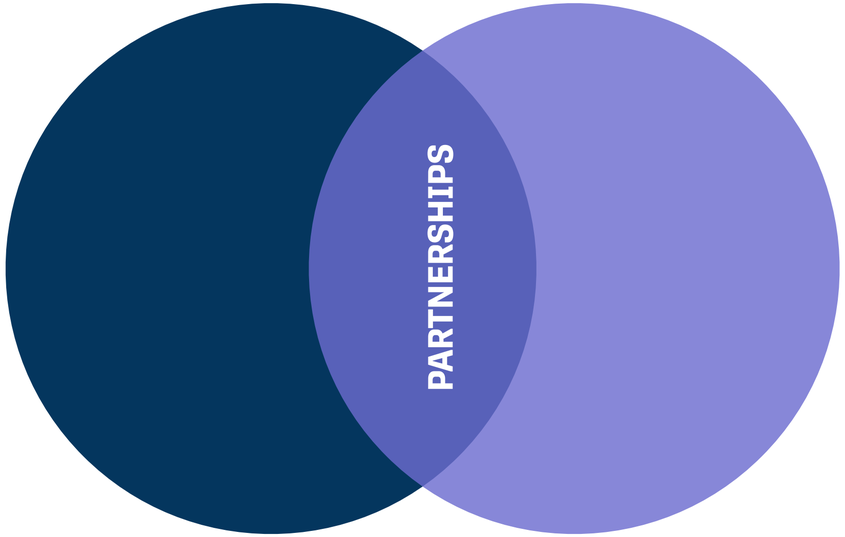
- Bangkok
- Beijing
- Jakarta
- Kyoto
- Kuala Lumpur
- Nanjing
- Osaka
- Seoul
- Shanghai
- Shenzhen
- Singapore
- Tokyo
- Uzbekistan
- Wuhan
- Wuxi

JOIN THE PLATFORM
PNPTC.COM/JOIN

Plug and Play's vision is to connect the most disruptive startups to the world's largest corporations.

Organizations

Industry leaders and top-level executives



Startups

The brightest minds and innovators on the planet.

Plug and Play Taiwan Open Innovation

1

STARTUP ACCELERATION

- 30+ startups engaged yearly
- Access to global investors, pilots, and expansion via PnP's worldwide network
- Boost to AIoT, SmartCities, SupplyChain, and sustainability-focused ventures

2

CORPORATE INNOVATION

- Taiwan corporates collaborate with global startups
- 10–20 PoCs per year per vertical (PnP global average)
- Use cases in semiconductors, AIoT, green tech, and Smart Cities

3

GLOBAL CONNECTIVITY

- Connects Taiwan to Silicon Valley, Japan, Singapore, Korea , and Europe
- Serves as a neutral, IP-safe innovation hub in Asia
- Enables cross-border R&D and commercialization

Taiwan-Centric Value

ECOSYSTEM CONNECTIVITY

- Link startups with corporates, VCs & universities
- Corporates: ASE Group, Delta, AU Optronics, Quanta
- VCs: AppWorks, Hive Ventures, Taiwania Capital
- Universities: NCU, Yuan Ze, Chang Gung, CYCU

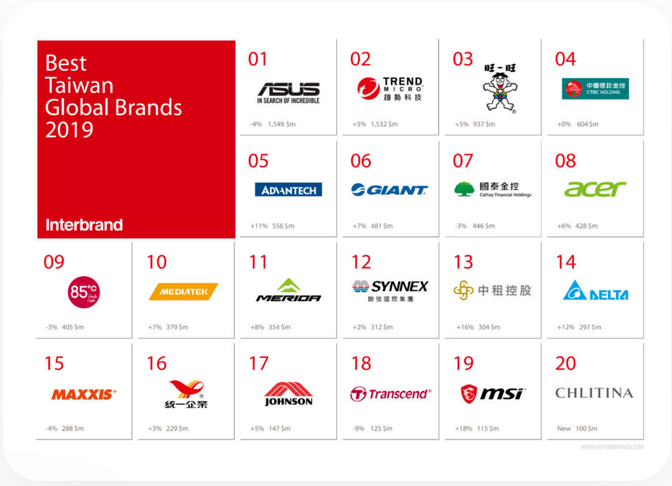
GLOBAL INNOVATION FLOW

- Bring in global startups through PnP's 60+ hubs
- Connect Taoyuan to Hyundai, Bosch, Panasonic & more
- Enable cross-border pilots, investment, and mentorship

LOCAL IMPACT

- Drive job creation & startup growth
- Attract foreign investment
- Boost Taoyuan's visibility as a smart innovation hub









Plug and Play has been boosting startup ecosystem in Taiwan



Silicon Valley Taiwan Event



Batch 0 Selection Day: **Taiwan**

PLUG AND PLAY TAIWAN

Deeptech Batch 0

Startups

iCHASE
Ranictek
Moldintel
MORALE AI
TRIEUSS
CHELPIS
Chelpis Quantum Corp.
3drens
AIRECO
astra
MetAI

Founding Partner

桃園市政府
TAOYUAN CITY GOVERNMENT



Learn more about
Taoyuan City's program

PLUG AND PLAY

SV SUMMIT



WELCOME

Cheng Chang

Director, Taoyuan City Government

桃園市政府
TAOYUAN CITY GOVERNMENT

#PNPTCSiliconValley

Join us at **pnptc.com**

PLUG AND PLAY

SV SUMMIT

STARTUP PRESENTATION

Ranictek

Ranictek

Energy-saving and cost-effective baseband chips for 5G/6G O-RAN base stations & satcom

#PNPTCSiliconValley

Join us at **pnptc.com**

Ranictek

Energy-Saving Chips
for 5G/6G Base Stations & Satellite Communications

繁晶科技
Founder & CEO
王易凡 博士
Yi-Fan (Mike) Wang, PhD

© Ranictek Inc. 2025, All Rights Reserved.

Ranictek Confidential

Ranictek

Providing the most **Energy-Saving** and **Cost-Effective** Base Station Chip Solutions to Wireless Networks.

© Ranictek Inc. 2025, All Rights Reserved.

Ranictek Confidential

Problem of 5G deployment

Traditional All-in-One base stations
are too expensive!

All-in-One Base Stations

NOKIA

ERICSSON

HUAWEI

#Expensive

O-RAN (Open RAN) base stations:
Reducing cost by multi-vendors

O-RAN Base Stations

MAVENIR

Radisys

WNC

FOXCONN 鴻海科技集團

Accton
Making Partnership Work

LITEON

Quanta Computer

COMPAL

PEGATRON

NEC

FUJITSU

#Low cost

Pain point: No Suitable Chip Solutions!

© Ranictek Inc. 2025, All Rights Reserved.

Satellite Communications (Satcom)

Satcom Applications:

- Transportation: Automobile, Boats, Aircrafts…
- Mobile devices: Cell Phones, Notebooks…
- IOT devices: Sensors, Vending Machines…





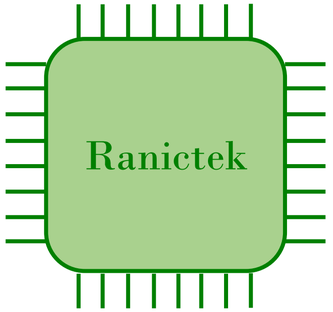
© Ranictek Inc. 2025, All Rights Reserved.

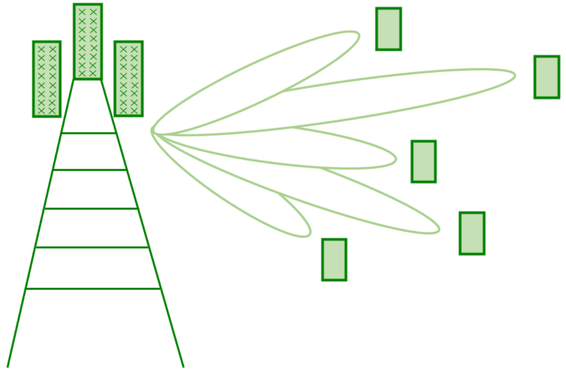
Ranictek Confidential

Our Solutions/Products

(1) Baseband ICs for 5G/6G Bases Stations

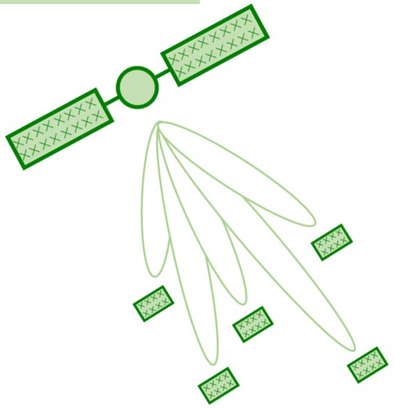
- ✓ For O-RAN Base Stations (RUs)
- ✓ **Macro/Microcells** (strong market need)
- ➢ Private Network
- ➢ **Public Network**

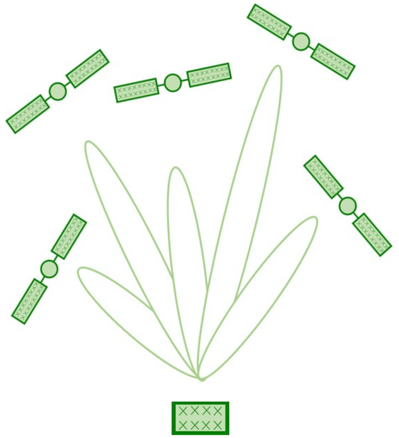




(2) Baseband ICs for Satellite Communications

- ✓ For LEO/MEO/GEO Satellites
- ✓ For Ground Stations





© Ranictek Inc. 2025, All Rights Reserved.

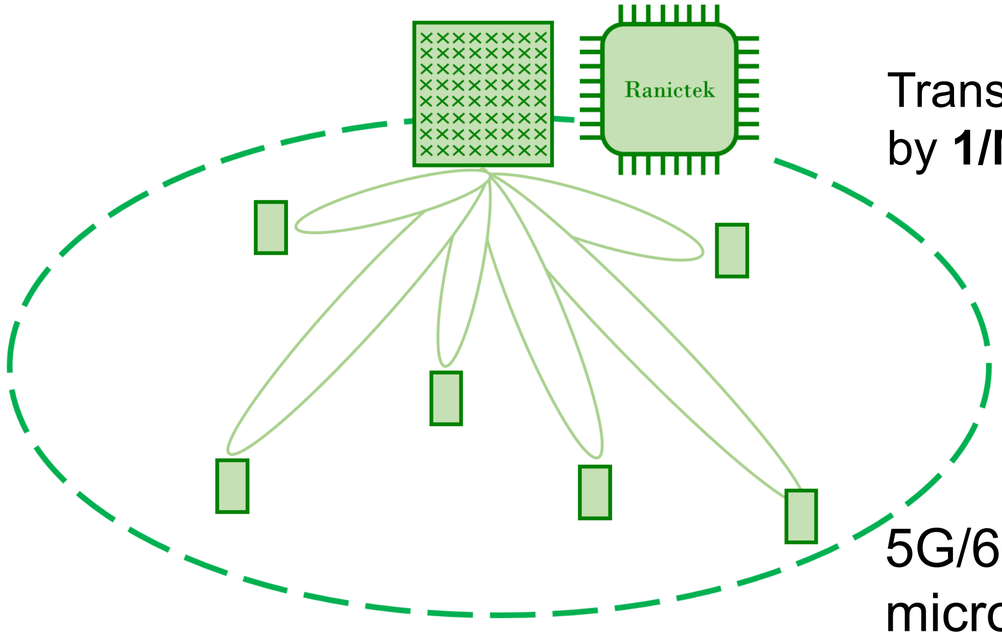
Ranictek Confidential

Core Technology

Massive MIMO

(Large Antenna Array with our Baseband Chip)

- ✓ **Energy Saving**
- ✓ **Larger Coverage**
- ✓ **Better Performance**
  (Multiple Users at the Same Time)

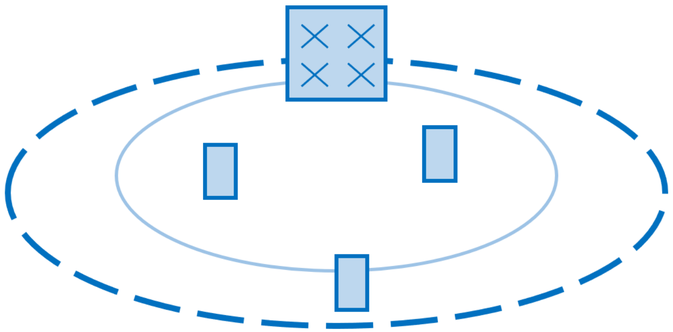


Transmit powers, reduced by **1/M, M: # of Antennas**

5G/6G macrocells & microcells

MIMO

(Few Antennas)



4G macrocells,
5G small cells

© Ranictek Inc. 2025, All Rights Reserved.

Ranictek Confidential

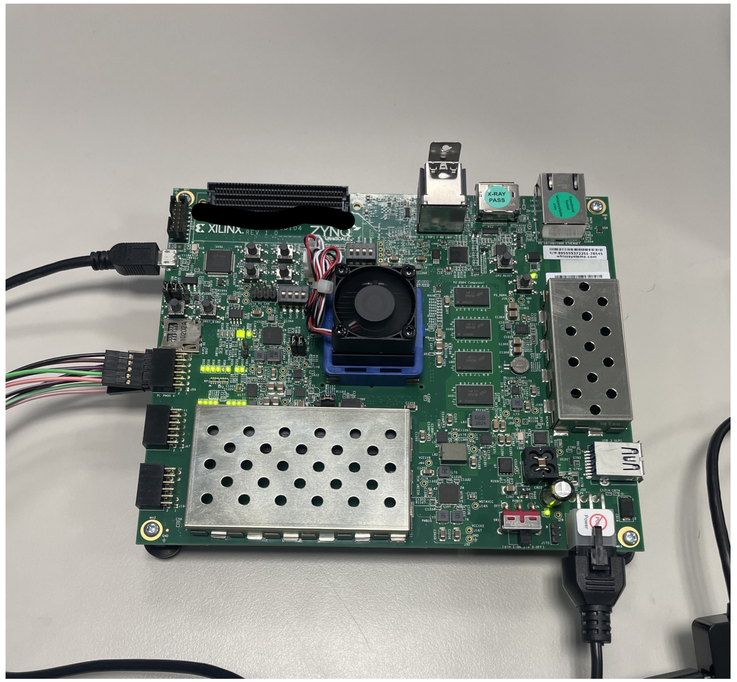
IPs & FPGA Solutions/Products by Ranictek

“Massive MIMO core RU IPs on FPGA”

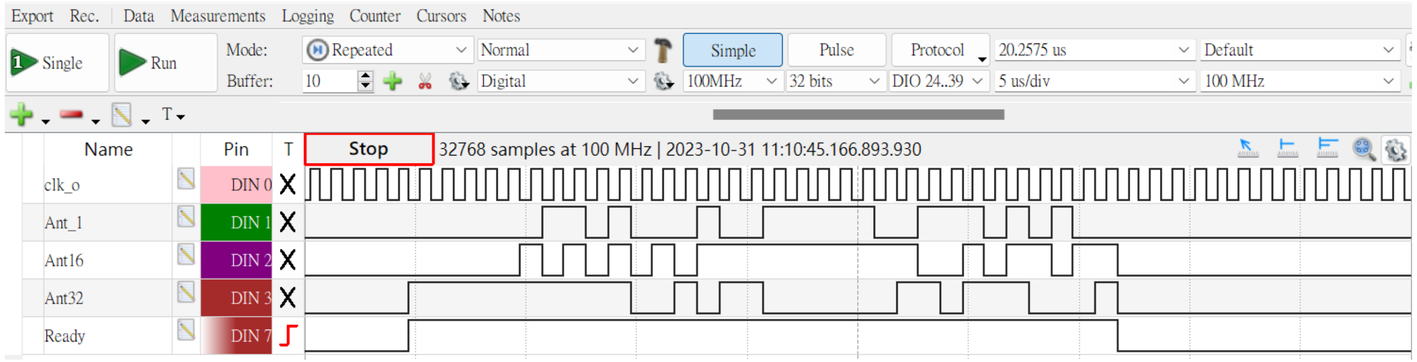
Software-Defined Radio

Main SPEC

- Macro/Microcells
- **32/64** antennas or larger (32T/32R, 64T/64R)
- O-RAN interface
- 5G NR FR1 Band
- BW 100, 200MHz



OUTPUT



Bit true pattern:

00000011010001001111100111010100
00000101010101111111111001011011
11111111110010110000001101110001

© Ranictek Inc. 2025, All Rights Reserved.

Energy-Saving (ESG)

About **30-60%** Power Saving

Up to **2X** Battery life

Base Stations

Cell Phones

Merely in Taiwan (per year):

Roughly **1 Bn Degree (Kilowatt-Hour)** Power-Saving

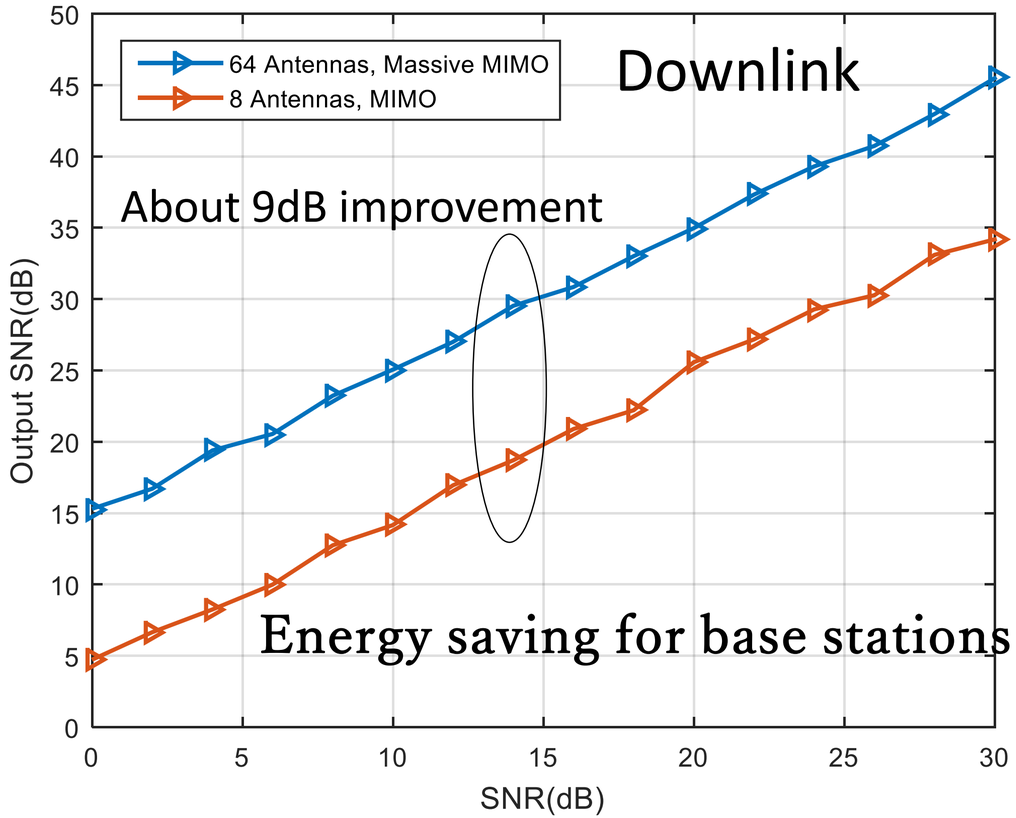
More countries, more energy-saving!

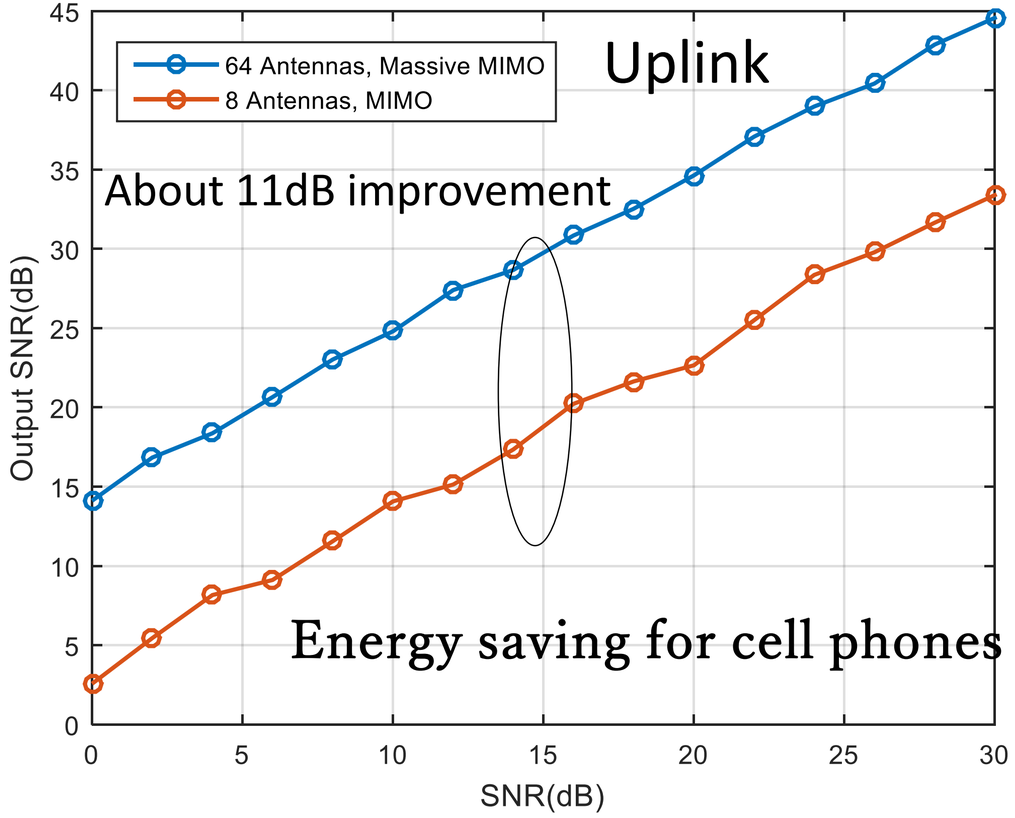
© Ranictek Inc. 2025, All Rights Reserved.

Energy-Saving (ESG)

Energy-saving performance: SNR improvement: About 9~11dB

5G Massive MIMO BS (64 antennas) VS 4G MIMO BS (8 antennas)





© Ranictek Inc. 2025, All Rights Reserved.

Ranictek Confidential

Baseband Chips for Satellites

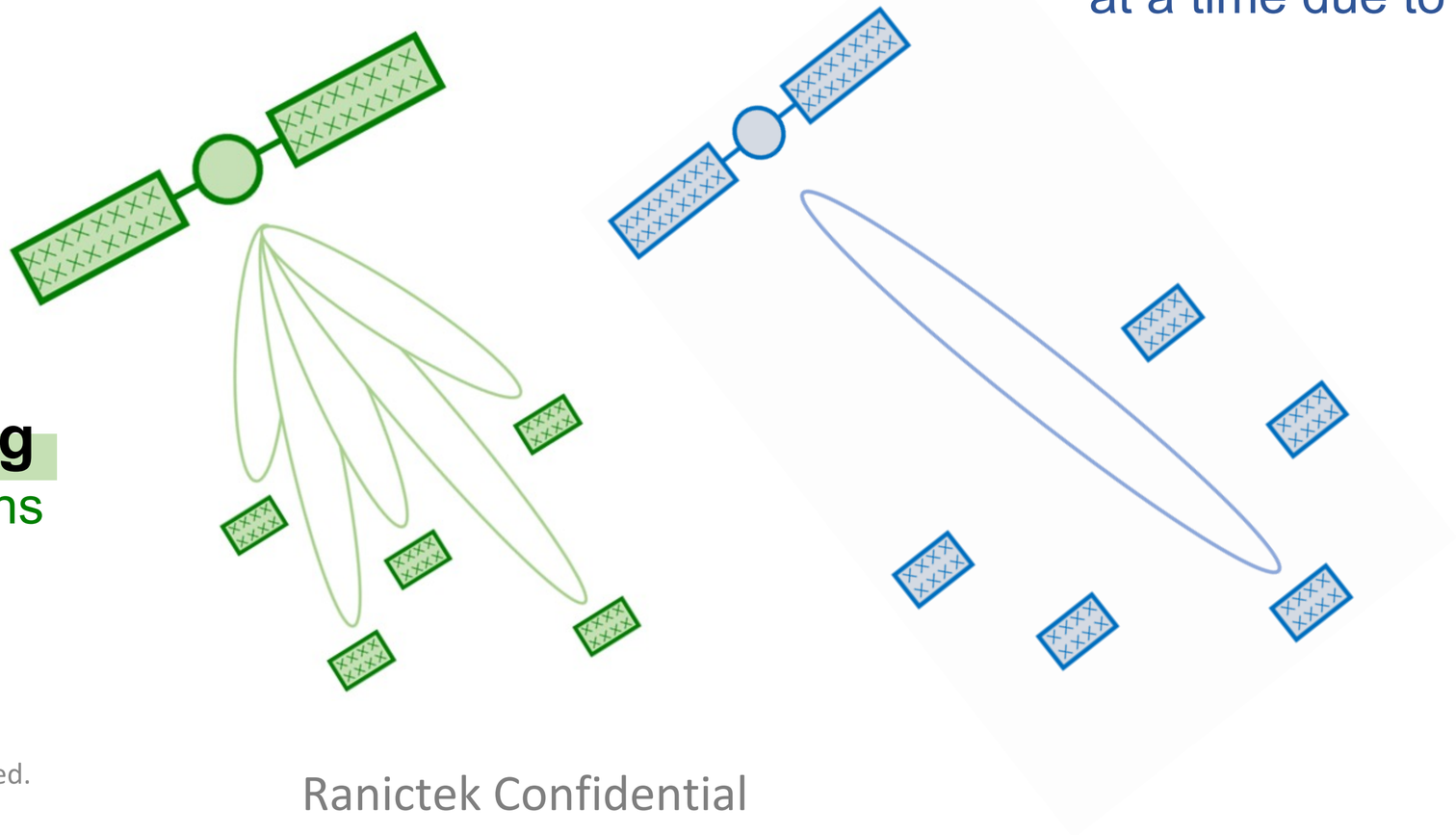
Supporting digital beamforming with multi-beams:

- Serving more Ground stations simultaneously

Current solution:
Analog Beamforming

- One ground station

at a time due to single beam



Our solution:
Digital Beamforming

- Multiple ground stations
- 8X ⬆ performance

© Ranictek Inc. 2025, All Rights Reserved.

Ranictek Confidential

Baseband Chips for Ground Stations

Supporting digital beamforming with multi-beams:

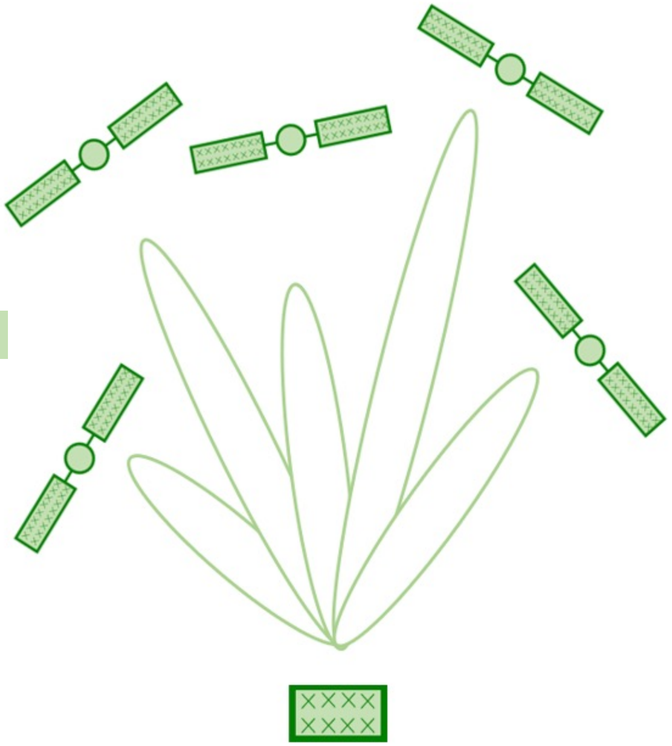
- Receiving more satellites' data simultaneously

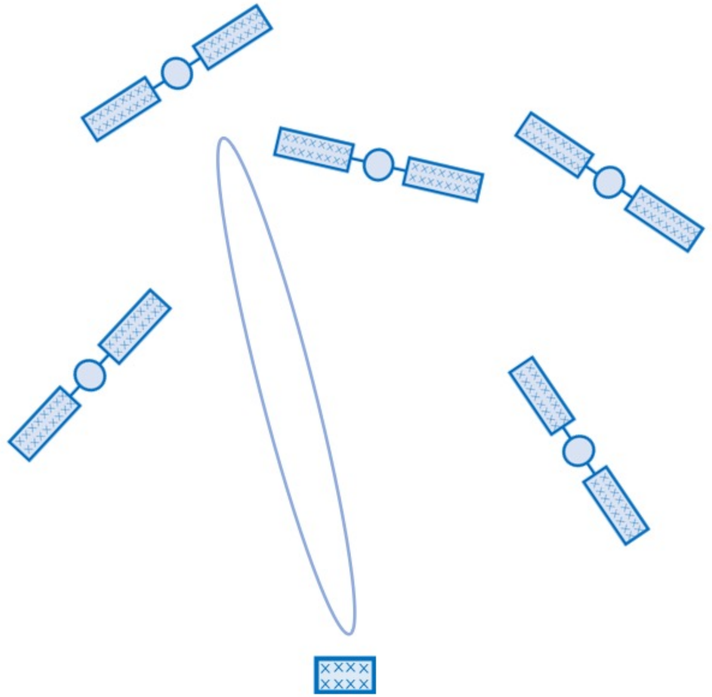
Current solution:
Analog Beamforming

- One satellite at a time due to single beam

Our solution:
Digital Beamforming

- Multiple Satellites
- Reliable performance by satellite diversity





© Ranictek Inc. 2025, All Rights Reserved.

Ranictek Confidential

Patents

Patents by Ranictek:

1. Digital Circuit for Multiple Antenna Remote Radio Head and Radio Unit (Granted)

2. Circuit Structure for Multiple Antenna Radio Unit, Base Station, and Satellite Communications (Granted)

Note: US, EUR, Japan, China, etc. patents applied/patent pending



中華民國專利證書

新型第 M648760 號

新型名稱：用於多天線遠距射頻頭端與射頻單元之數位電路

專利權人：繁晶科技股份有限公司

新型創作人：王易凡

專利權期間：自2023年12月1日至2032年12月21日止

上開新型乘依專利法規定通過形式審查取得專利權
行使專利權如未提示新型專利技術報告不得進行警告

經濟部智慧財產局 局長 廖承威

中華民國 112 年 12 月 1 日

注意：專利權人未依法繳納年費者，其專利權自原繳費期限屆滿後消滅。



中華民國專利證書

新型第 M643729 號

新型名稱：用於多天線射頻單元、基地台、以及衛星通訊之電路架構

專利權人：繁晶科技股份有限公司

新型創作人：王易凡

專利權期間：自2023年7月11日至2033年2月14日止

上開新型乘依專利法規定通過形式審查取得專利權
行使專利權如未提示新型專利技術報告不得進行警告

經濟部智慧財產局 局長 廖承威

中華民國 112 年 7 月 11 日

注意：專利權人未依法繳納年費者，其專利權自原繳費期限屆滿後消滅。

© Ranictek Inc. 2025, All Rights Reserved.

Ranictek Confidential

Technical Papers

- IEEE journal and conference papers, by our Founder:

[1] **Yi-Fan Wang** and Ju-Hong Lee, "A ZF-based Precoding Scheme with Phase Noise Suppression for Massive MIMO Downlink Systems," *IEEE Transactions on Vehicular Technology*, 2018. (Full paper)

[2] **Yi-Fan Wang** and Ju-Hong Lee, "A Simple Phase Noise Suppression Scheme for Massive MIMO Uplink Systems," *IEEE Transactions on Vehicular Technology*, vol. 66, no. 6, pp. 4769-4780, June 2017. (Full paper)

[3] **Yi-Fan Wang** and Ju-Hong Lee, "Frame Structure Design for Massive MIMO Systems-PHY Perspective," *IEEE WCNC*, 2018.

[4] **Yi-Fan Wang** and Ju-Hong Lee, "A Novel Symbol-Based Near ML Detection Scheme with Unequal Error Protection for MIMO Systems", *IEEE WCNC*, 2017.

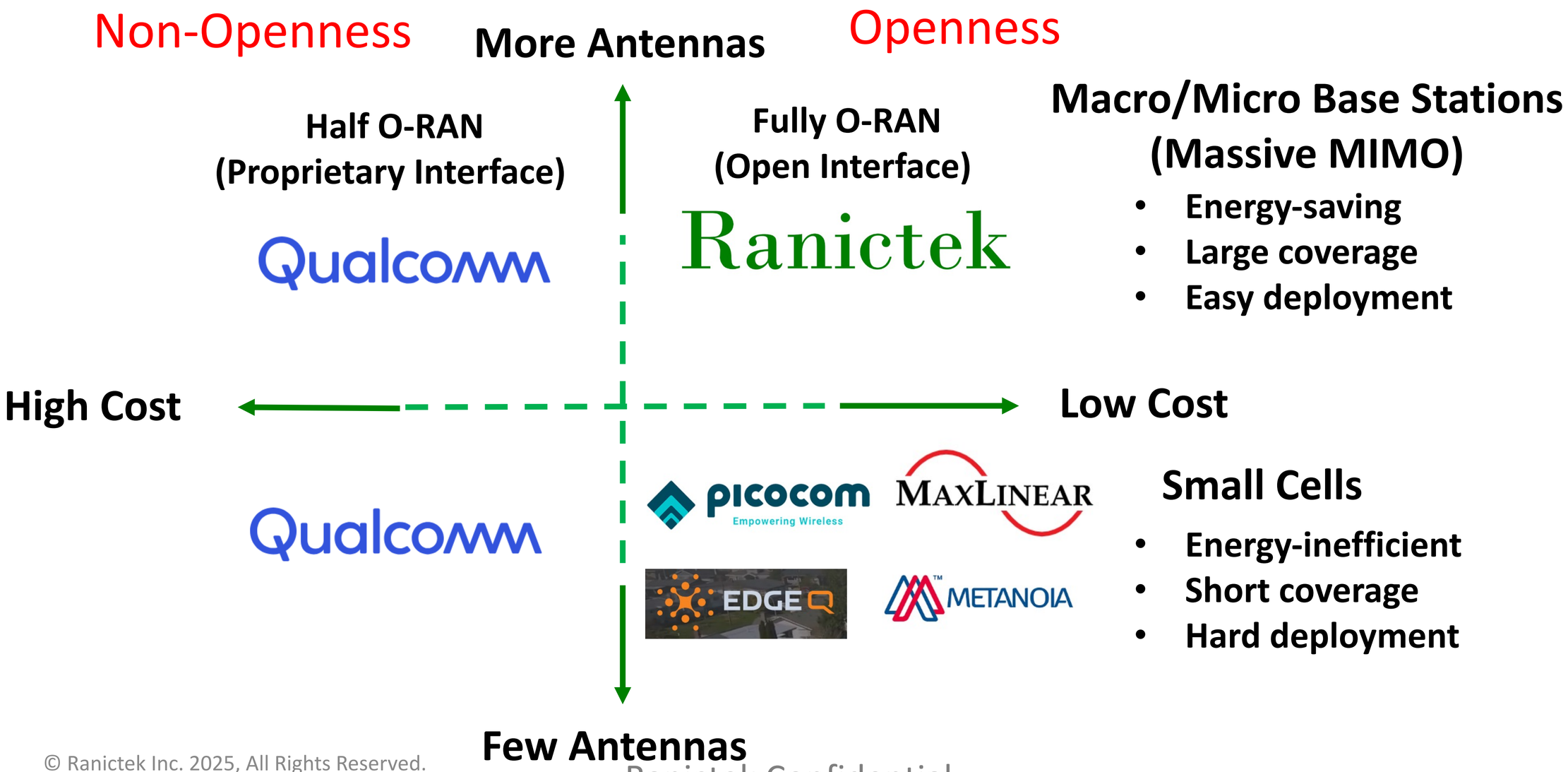
[5] **Yi-Fan Wang** and Yung-Fang Chen, "Iterative Methods for Blind Carrier Frequency Offset Estimation in OFDMA Uplink," *IEEE ICCSC* 2008, pp. 430-433.

[6] **Yi-Fan Wang** and Yung-Fang Chen, "Bayesian-Based Methods for Blind Carrier Frequency Offset Estimation in OFDMA Uplink," *IEEE ICCSC* 2008, pp. 857-861.

© Ranictek Inc. 2025, All Rights Reserved.

Ranictek Confidential

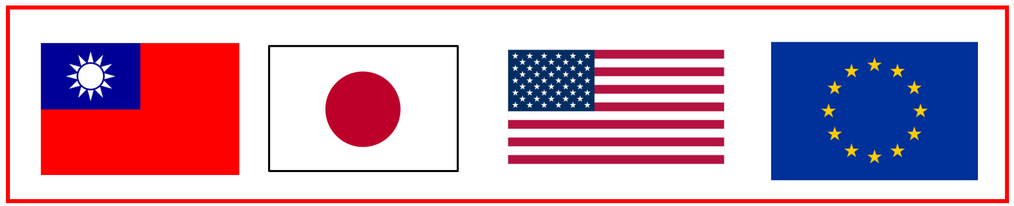
Competition (for O-RAN Radio Unit Chips)



© Ranictek Inc. 2025, All Rights Reserved.

Ranictek Confidential

Target Customers



Worldwide target customers:

O-RAN base station & SATCOM vendors

MAVENIR
NEC
bubble ran
JABIL
SERMA TECHNOLOGIES
SERCOMM
D-Link
Comba
Azcom Technology
Zillnk
SUNWAVE
PROSE
Connect the Everyday
COMPAL
CableFree
Wireless Excellence
FOXCONN
Benetel
GXC
PEGATRON
airpuls
SOLiD
NewEdge
Signal Solutions
Lions
ALPHA
arcadyan
Accton
Making Partnership Work
LITEON
QCT
WNC
microamp
SOLUTIONS
FUJITSU

STARLINK

eutelsat
ONEWEB
eutelsat GROUP

amazon

TELESAT

© Ranictek Inc. 2025, All Rights Reserved.

Business Model & Charge

Our business model is simple:

Selling IP, FPGA, IC solutions to our customers

We charge 4 fees:

(1) License fee: NRE

(2) Unit price: charge per chips

(3) Royalty

(4) Software maintenance/update



© Ranictek Inc. 2025, All Rights Reserved.

Financial Status

So far, about 2 years, we have obtained the **Revenue**:

Over **2X Capital**

(without any debt)

YoY (Year on Year): from 2023 to 2024

About **528% Revenue Growth**

© Ranictek Inc. 2025, All Rights Reserved.

Ranictek Confidential

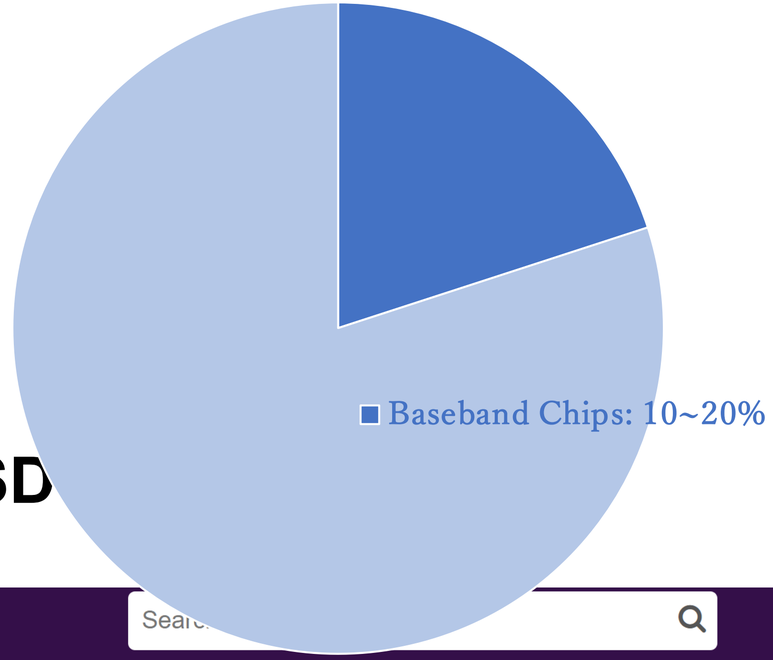
Market Size

$ 192 Billion USD

Market size by 2030:

O-RAN base stations [1]: **$ 32 Billion USD**

Satellite Communications [2]: **$ 159.6 Billion USD**




GlobeNewswire by notified

ESG NEWS COVID-19 NEWS SERVICES CONTACT US FRANÇAIS SIGN IN REGISTER

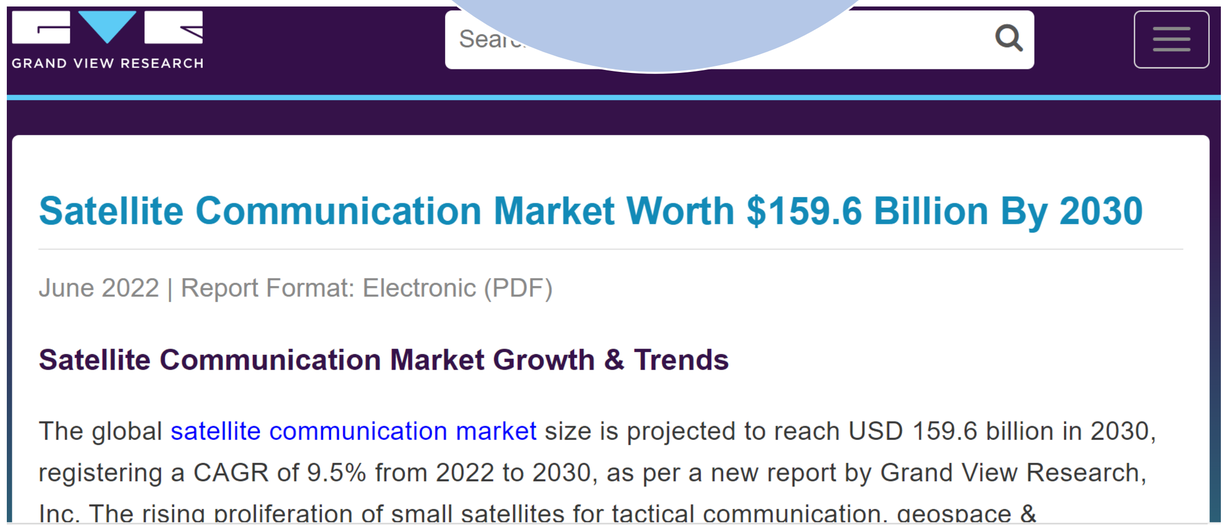
RESEARCHANDMARKETS
THE WORLD'S LARGEST MARKET RESEARCH STORE

Global OPEN RAN Market Outlook: An Opportunity worth $32 Billion by 2030

March 08, 2022 04:23 ET | Source: Research and Markets

Dublin, March 08, 2022 (GLOBE NEWSWIRE) -- The "OPEN RAN Market Outlook (O-RAN) - An Opportunity worth $32 Billion by 2030" report has been added to **ResearchAndMarkets.com's** offering.

OPEN RAN transforms Radio Access Network (RAN) technology from design to operation of the network. OPEN RAN creates the possibility of an open RAN environment, with interoperability between different vendors over defined interfaces.


GRAND VIEW RESEARCH

Satellite Communication Market Worth $159.6 Billion By 2030

June 2022 | Report Format: Electronic (PDF)

Satellite Communication Market Growth & Trends

The global satellite communication market size is projected to reach USD 159.6 billion in 2030, registering a CAGR of 9.5% from 2022 to 2030, as per a new report by Grand View Research, Inc. The rising proliferation of small satellites for tactical communication, geospace &

[1] Source from https://www.globenewswire.com/en/news-release/2022/03/08/2398558/28124/en/Global-OPEN-RAN-Market-Outlook-An-Opportunity-worth-32-Billion-by-2030.html

[2] Source from: https://www.grandviewresearch.com/press-release/global-satellite-communication-market

© Ranictek Inc. 2025, All Rights Reserved.

Ranictek Confidential

Market Opportunity

- Ratio of O-RAN base stations [1]:

  > 15% by 2027



DELL'ORO GROUP

Market Research How to Buy Knowledge Center Events

Post Share Print PDF RSS FEED

Open RAN Still Projected to Comprise 15 Percent to 20 Percent of Global RAN by 2027

REDWOOD CITY, Calif. – July 19, 2023 – According to a recently published report by Dell'Oro Group, the trusted source for market information about the telecommunications, security, networks, and data center industries, the Open

- **Max. Achievable Profit** (AP) by 2027: (O-RAN base stations only)

$$\widehat{AP} = \underbrace{10\ \text{Million}}_{\substack{\text{Conservative}\\ \text{achievable}\\ \text{total amount}}} \times \underbrace{15\%}_{\substack{\text{Conservative}\\ \text{ratio}}} \times \underbrace{\$3.5\text{K USD}}_{\substack{\text{Achievable profit}\\ \text{for each piece}}} = \$\ 5.2\ \text{Billion USD}$$

© Ranictek Inc. 2025, All Rights Reserved.

[1] https://www.delloro.com/news/5-year-open-ran-forecast-revised-downward/

Ranictek Confidential

Founder



王易凡 博士
Dr. Mike Wang

Dr. Yi-Fan (Mike) Wang:

- **National Taiwan University, Ph.D.** in communication engineering
- **National Chung-Shan Institute of Science and Technology (NCSIST)**

  Military phased-array radar R&D engineer:
  - Analog/Digital Beamforming, Radar signal processing, Digital circuit design
- **Airoha (MediaTek Group),** Deputy Technical Manager: **(IC design)**
  - Digital circuit design for WiFi/Bluetooth and Audio/Speech, IC design, Technical management
- **Chunghwa Telecom,** Research Fellow and R&D: **(Telecom Operator)**
  - O-RAN Spec study
- **Aethertek,** Director: **(System manufacturer)**
  - 5G mmWave small cell development, R&D team management

© Ranictek Inc. 2025, All Rights Reserved.

Ranictek Confidential

About Ranictek



Ranictek is an IC design company,

- Founded in Nov. 2022
- Headquartered in Taiwan





© Ranictek Inc. 2025, All Rights Reserved.

Why Ranictek?

Unique advantages:

1. Industry experiences on IC design, Telecom Operators, and System Manufacturers
2. Core technologies on Massive MIMO as technical barrier
3. Engaging with target customers



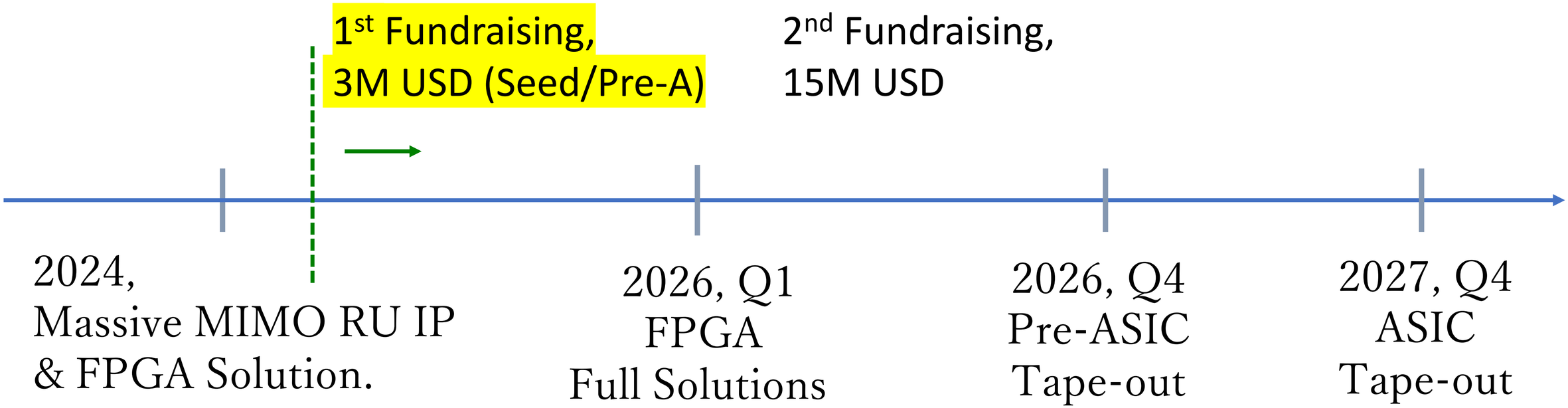


© Ranictek Inc. 2025, All Rights Reserved.

Product Roadmap

Ranictek provides both FPGA and IC solutions:

- Massive MIMO RU core IPs and FPGA are ready



© Ranictek Inc. 2025, All Rights Reserved.

Our Customers and Partners

Paid Customers:

- O-RAN RU and SATCOM vendors in Taiwan

Partners:

- 中華電信(Chunghwa Telecom)
- 台智雲/華碩(ASUS)
- 工研院(ITRI)

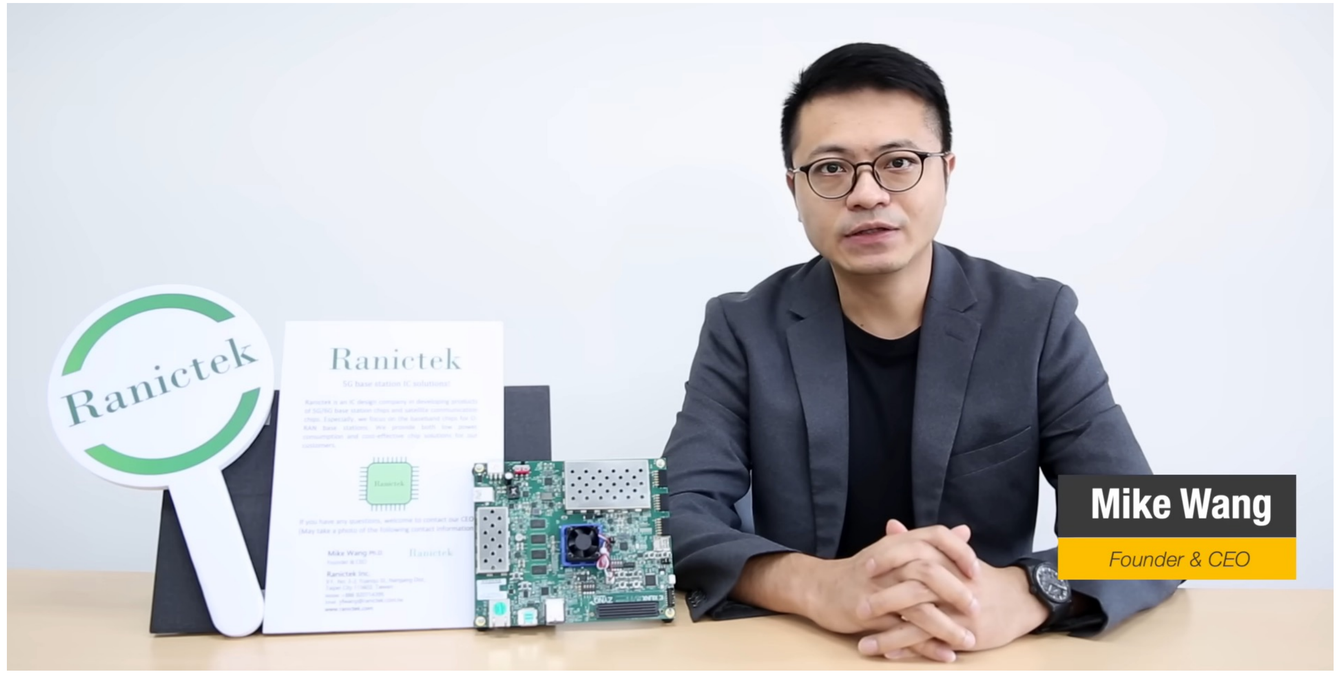
© Ranictek Inc. 2025, All Rights Reserved.

Thank you!

Contact Information:

Yi-Fan (Mike) Wang, CEO:

Email: yfwang@ranictek.com.tw



Website

https://www.ranictek.com

LinkedIn

© Ranictek Inc. 2025, All Rights Reserved.

PLUG AND PLAY

SV SUMMIT

STARTUP PRESENTATION

Tricuss

Make every plan and decision AI- and data-driven with Tricuss Data Researcher AI Agent

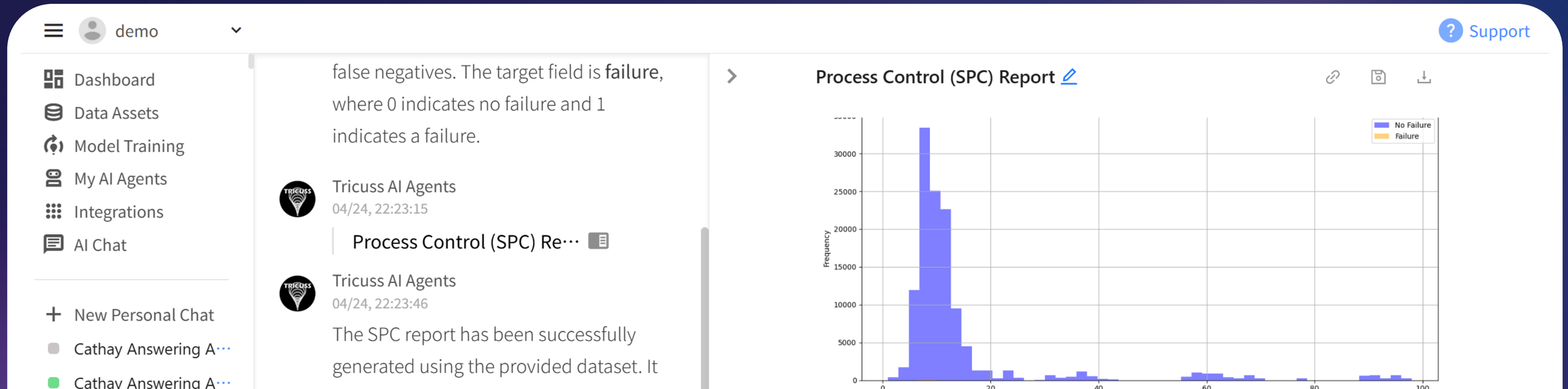
#PNPTCSiliconValley

Join us at **pnptc.com**

Local Enterprise AI Agent Platform Featuring Data Researcher AI Agent

Fastest & Easiest Way to 100x the Efficiency of Research, Planning, and Decision Making

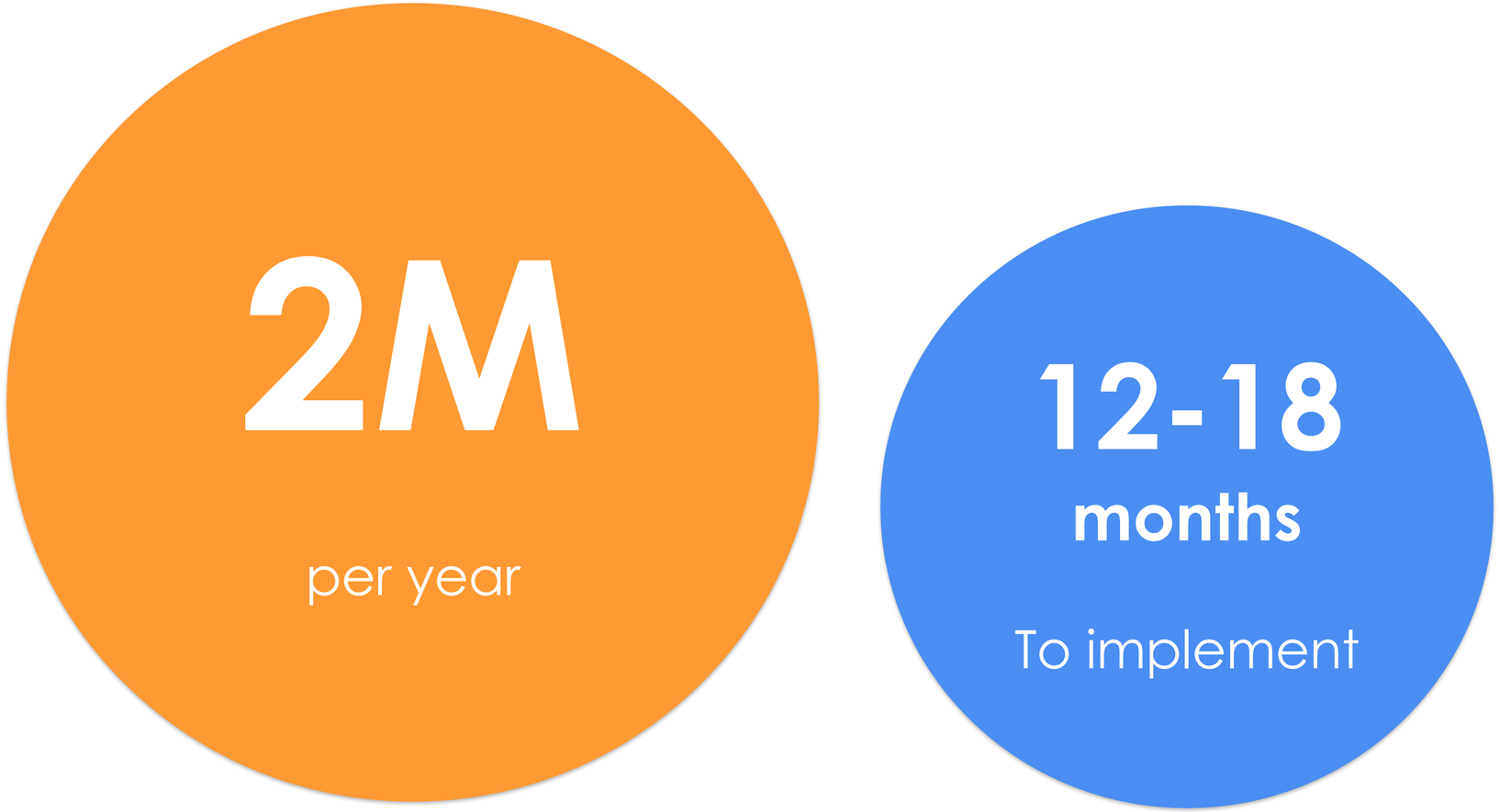
Founder, CEO
Nai-Hsiang Wang
nhwang@tricuss.ai



Problem/Obstacle

"Full of Data, Lack of Insight"

Building or Expanding the data research team takes plenty of time & money

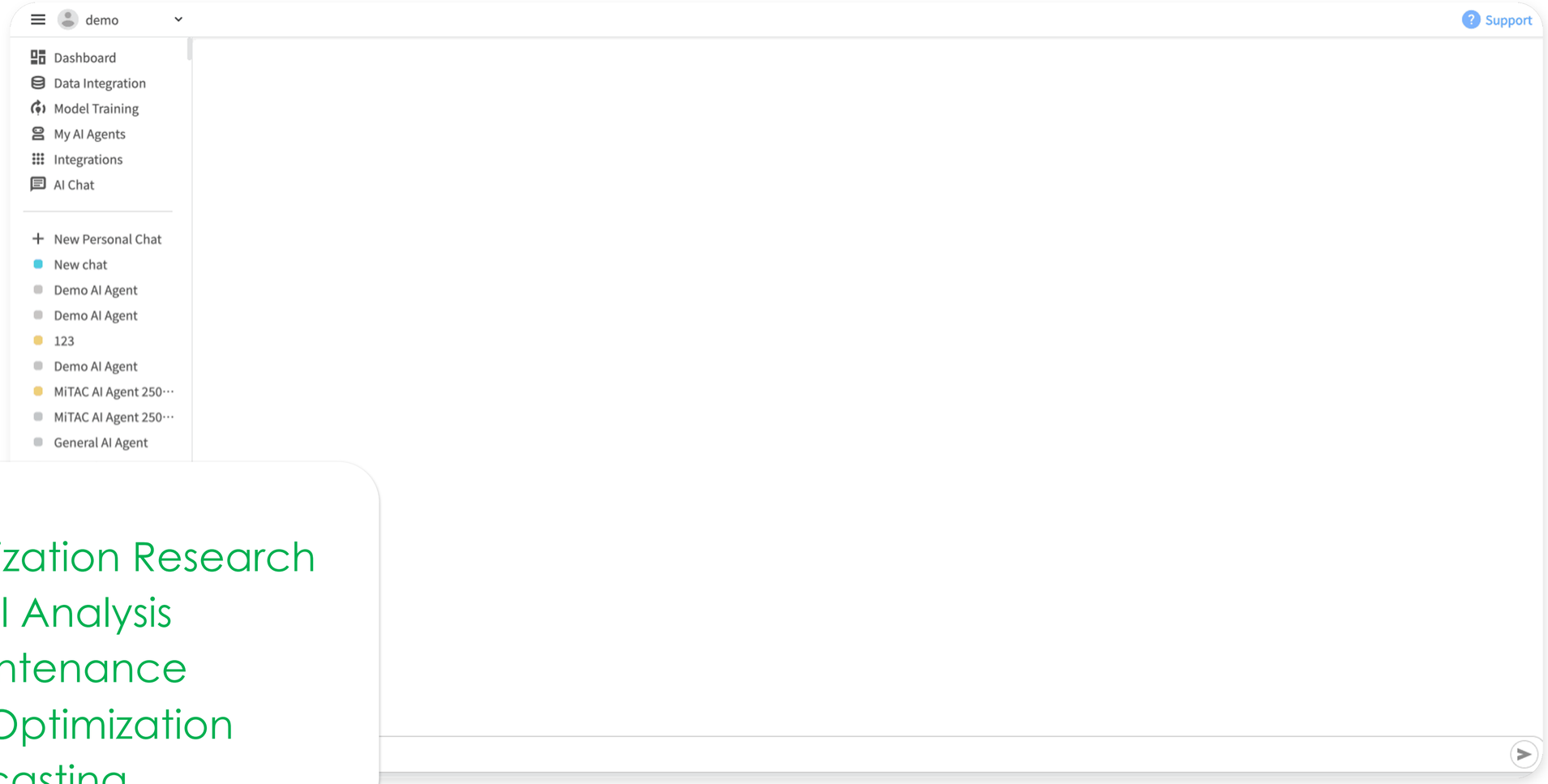


Copyright © 2025 **Tricuss Inc.** All rights reserved. Strictly confidential.

Researcher AI Agent for the Most Advanced and Most Challenging Jobs

Not only the ‘Numbers,' but also provide Insights and Suggested Next Actions from Papers

Advanced “AI on AI” technique → perform forecasting, anomaly prediction, optimization etc.



Other Use Cases

✅ Process Optimization Research
✅ Quality Control Analysis
✅ Predictive Maintenance
✅ Supply Chain Optimization
✅ Demand Forecasting

Copyright © 2025 **Tricuss Inc.** All rights reserved. Strictly confidential.

Game-Changing AI for Next-Gen Enterprise Planning & Decisions

Truly 100x the Efficiency of Research, Planning, and Decision Making

Depth

Analysis from Surface → Root Cause & Prediction/Forecast/Optimization

Speed

Insight from Days → Seconds (10M data in 12 sec)

Reach

Access from Experts → Everyone

Proactivity

Decisions from Reactive →Predictive

✨ **100% Local and Secure**
✨ **Our own Fine-Tuned Models**

Copyright © 2025 **Tricuss Inc.** All rights reserved. Strictly confidential.

Team

From AI paper to Enterprise-Production level LLM Application

Taiwan's No.1 Enterprise AI Agent Solution

10x revenue growth compared to last year



Nai-Hsiang
CEO



Zu-Yi
CTO



Dima
AI Scientist



Dat
Tech Lead



Yu-Ting
AI Engineer



Wag
Operation Manager



Kevin
BD Manager

National Taiwan University

國立清華大學 NATIONAL TSING HUA UNIVERSITY

QNAP®

MEDIATEK

IBM

tsmc

Copyright © 2025 **Tricuss Inc.** All rights reserved. Strictly confidential.

Customers & Partners

AUO

MiTAC

Hermes Epitek

台灣電力公司 TAIWAN POWER COMPANY

臺北市政府 Taipei City Government

and many more…

Customers

QCT

Quanta Computer

SYSTEX

ADVANTECH

SYNNEX

Partners

PLUG AND PLAY

NVIDIA Inception Program

Qualcomm

DRAPER UNIVERSITY

intel partner alliance

Microsoft for Startups

aws startups

Accelerators/Partners

Copyright © 2025 **Tricuss Inc.** All rights reserved. Strictly confidential.

Fundraising

Tricuss Inc.

Delaware C Corp

(bootstrapped to date)

1M

(Angels, VCs)

Use of Fund

Build a team of 25 people

Build the Strong Moat in the Semiconductor Industry

70% Product Research & Development

20% Sales; 10% Operation

Plan

2025H2	Productization & Increase ARR Build the Domain Expertise and Algorithms
2026H1	Validate the Sales Pipeline & US Market
2026H2	Hiring Sales
2027H1	**Reach 2.5M Revenue**

Copyright © 2025 **Tricuss Inc.** All rights reserved. Strictly confidential.

Our Mission & Vision



Tricuss – Discuss with AI

Empowering Brilliant Minds with AI to Solve Critical Challenges and Shape A Better Future.

PLUG AND PLAY

SV SUMMIT

STARTUP PRESENTATION

MORALE AI

Morale AI

Advanced AI Solution for Industrial Excellence and ESG

#PNPTCSiliconValley

Join us at **pnptc.com**

MORALE AI

Morale AI

Advanced AI Solution for Industrial Excellence and ESG

CEO & Co-Fonder

Phill Kao Ph.D.



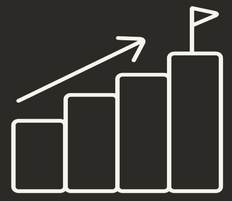


MORALE AI

Reformat the Future of Manufacturing with Morale AI Agent

AI Agents for Smart Manufacturing

Key Problems



Aging Workforce/Labor Shortage



Increasing Competitiveness



Sustainable & Resilience

Solution Overview

Machine Learning Module

Integrate Morale AI's machine learning , data science module, providing accurate decision support (a total of 10+ AI modules for the industry)

Flexible Deployment

Morale AI provides private cloud deployment, and on-premise deployment models



Morale AI Agent

Integrate LLM and AI agent applications for Smart Manufacturing. Support knowledge inherence, manufacturing applications, ESG applications

Domain Specific Data Pipeline

Integrate domain expertise data. Integrate NVIDIA NeMo for multi-modal data pipeline

NVIDIA NEMO

Product

Domain-Specific LLM

Textile GPT

Agentic Platform

Manufacturing Application
ESG Application

Data Layer

- Domain Specific Data
- Manufacturing System



- Data ETL Pipeline

Milvus

- Vector Database

AI Modules

- Predictive Model
- Explainable AI
- Anomaly Detection
- 10+ ML/Data Science Modules

LLM Application



- Advanced RAG
- Fine-Tuning
- AI Agent

Service



- PaaS/SaaS
- QA Chat
- Agent Workflow

Deployment

Private Cloud
On-Premise Deployment

Domain Specific LLM – Textile GPT

Data Sources

28y Textile Knowledge Base

TTRI 財團法人紡織產業綜合研究所 Taiwan Textile Research Institute

Client Private Data

Private Data
SOP, Terms…

Manufacturing System
ERP, MES, CRM

Vector Database

External

Collection

Internal

Collection

Morale AI Agent Platform



Basic Edition: SaaS Service

Enterprise Edition: On-Premises Deployment

Deployment Time: 1~3 months for on-premises solutions.

User Scenarios

- Expertise Inheritance
- Multilingual Integration
- Advanced Textile Insights
- Manufacturing Assistant
- Function Calling

Domain Specific LLM – Scalability

We are building industry-specific LLMs for different manufacturing industries

Data Sources

Database form different domain

Client Private Data

- Private Data
  SOP, Terms…
- Manufacturing System
  ERP, MES, CRM

Vector Database

External

Collection

Internal

Collection

Morale AI Agent Platform



Basic Edition: SaaS Service

Enterprise Edition: On-Premises Deployment

Deployment Time: 1~3 months for on-premises solutions.

User Scenarios

- Expertise Inheritance
- Multilingual Integration
- Advanced Insights
- Manufacturing Assistant
- Function Calling

Successful Product Application

LLM for Quality Compliant and Anomaly

MPI CORPORATION

History Complaint

RDBMS

Classification Model

Morale AI Agent

Case Recommendation
Investigation Chat
Root Cause Reasoning

No Hallucination

80 %
Efficiency Improvement

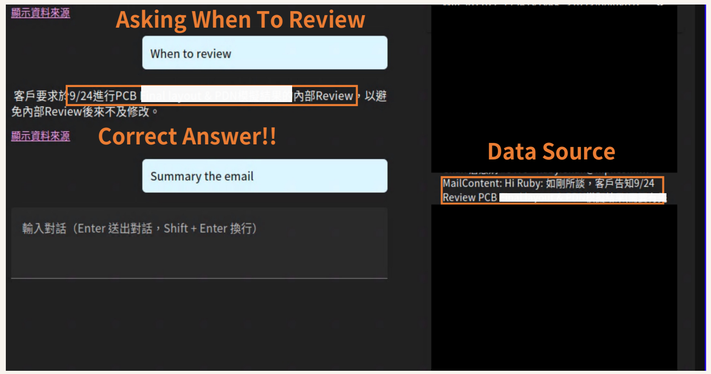
1M
Cost Saving per year

95 %
Recommendation Accuracy



Fixed Template for User

LLM summarize similar cases



Successful Product Application

LLM for Equipment Anomaly and ESG



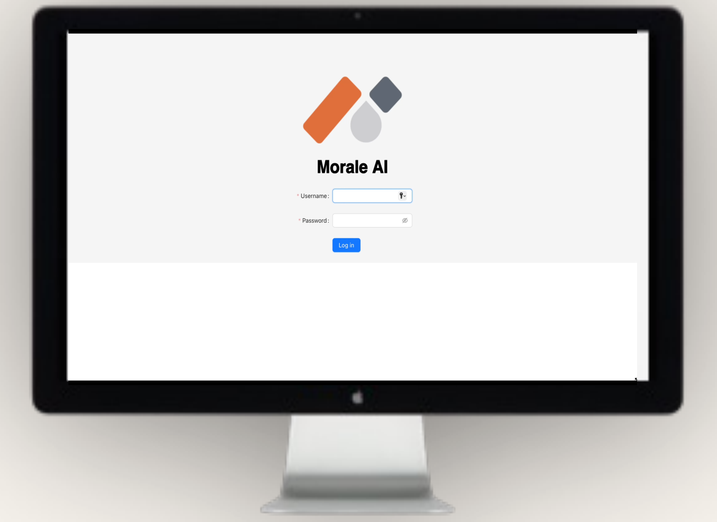
Equipment Data/Log

LLM Agent

Fault Prognosis
Solution Mapping
Optimization

Fault Prognosis Model
Explainable AI Model

機台	QQ-Plot	Actual-Predict	機台	QQ-Plot	Actual-Predict
A	R^2: 0.86/ MAPE: 0.13	MSE: 0.1/ Accuracy: 88%	C	R^2: 0.92/ MAPE: 0.08	MSE: 0.12/ Accuracy: 93%
B	R^2: 0.96/ MAPE: 0.16	MSE: 1.4/ Accuracy: 83%	D	R^2: 0.99/ MAPE: 0.02	MSE: 0.01/ Accuracy: 98%



10%
Energy Saving

30 %
Reduction in MTTR

150K
Monthly Maintenance
Cost Saving

Successful Product Application

AI ESG agent for carbon reduction path reporting



MORALE AI

- Multimodal data Pipeline
- Reasoning LLM
  Llama-Nemotron Super
- Explainable AI
- Report outputs

Integrate carbon reduction pathway reporting

EVERCOMM
Thrive to Net-Zero

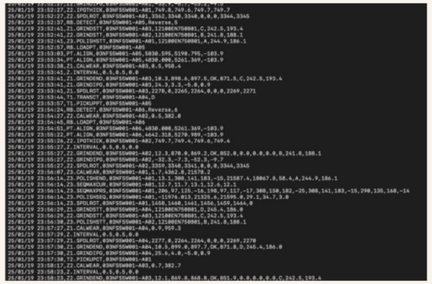
- Sustainability Reporting & Compliance
- NXPlan Carbon reduction pathways
- Verification services for third-party carbon emission data

Application field

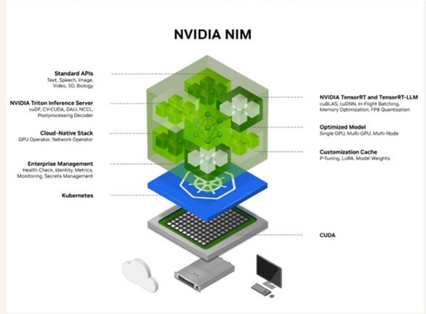
- Green credit
- Application of sustainable finance
- Standardized process validation specifications

Machine



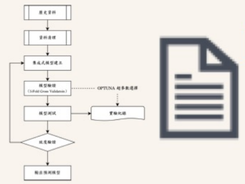


Machine operation log data, EMS data



Reasoning LLM
AI Agent

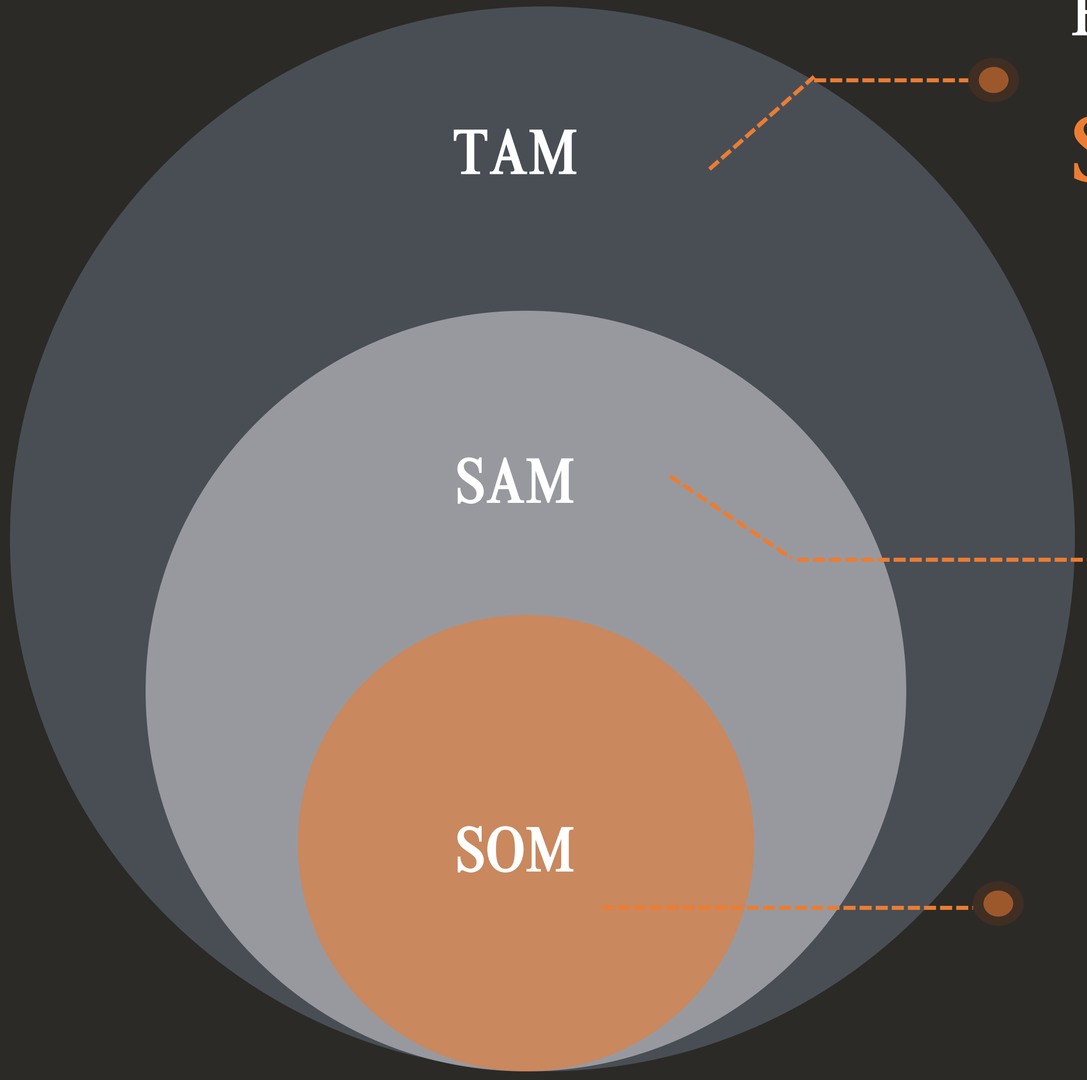
Flow Chart output
Report output



carbon reduction pathways



Market



Data governance/ Data Science/ AI Market
From $81.47 billion in 2022 to

$484.17 billion by 2029

Manufacturing AI/ Data Science Market
expected to reach

$ 23.72 billion by 2029

5% of marketing share

$ 1 billion by 2029

CAGR 37.7%

Traction

Started from 2024 Q1

Validated by Industry Leaders with great Partnerships

Revenue 600K
60% of Gross Margin

Current 8 Clients
10+ in Pipeline

NVIDIA Inception Program
ASE
MPI CORPORATION
PLUGANDPLAY
NEXCOM
trueway From Fabric to Future
CMP
Hwacom
YU YUANG
EVERCOMM Thrive to Net-Zero
TTRI
竹業引鳳

Why Us?

 # Practical: We design AI for manufacturing.

 # Proven: Trusted by industry leaders.

 # Scalable: Our domain-specific LLMs

National Tsing Hua University Spin-off

Hsinchu Science Park Business

Nvidia Inception Program

Morale AI

Meet Our Team



We’re AI Team with strong manufacturing knowledge



CEO
Phill Kao PhD



Co-Founder
David Kao



CTO
CT Cheng



COO
Eddie Shih



CDO
Eric Chang



CIO
Kevin Lin



Legal
Vicky Lee

Talent From: Google micron intel

MORALE AI

Seed Round Fundraising
USD 1.5 M

Validated by leading clients and strategic partners

PLUG AND PLAY
NVIDIA Inception Program
MPI CORPORATION
ASE
PSMC
CMD
Hwacom
EVERCOMM Thrive to Net-Zero
YU YUANG
竹巢引鳳
trueway From Fabric to Future
TTRI
NEXCOM
CTWS TAIWAN WEB SERVICE
Garage+
台灣人工智慧學校

Fund Allocation:

- **Product Development (50%):** To continuously enhance the product, modularize solutions, and invest in ongoing technical learning.
- **International Expansion (20%):** To enter new markets and scale global operations.
- **Marketing and Promotion (15%):** For marketing campaigns, brand awareness, and customer acquisition.
- **Operational Expenses (15%):** To support day-to-day operations and team growth.



MORALE AI

Contact Us

Email: kaophill@moraleai.com

Mobile: +886 925023663

NVIDIA Inception Program

PLUG AND PLAY

PLUG AND PLAY

SV SUMMIT

STARTUP PRESENTATION



iChase

AI-driven livestock health monitoring system and disease protections for sustainable farming worldwide

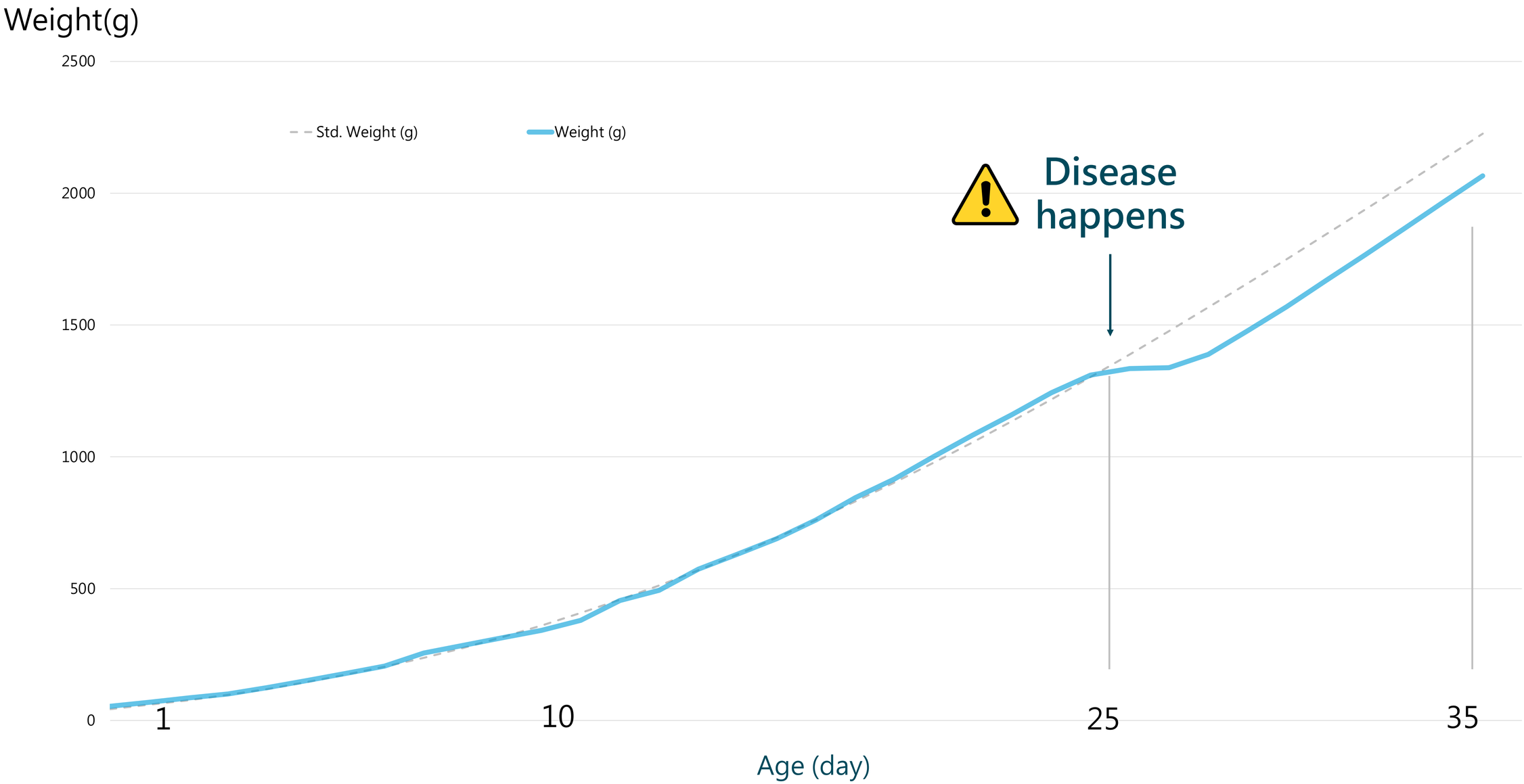
#PNPTCSiliconValley

Join us at **pnptc.com**



V1.2.5, 2025-03

Chicken Weight is Important



Problems in Poultry

- Weight is related to the health status of the flock, manual weighing is costly and inefficient.
- Chicken weight and uniformity are curial of slaughterhouse as highest priority. *
- The slaughterhouse requires a weight accuracy higher than 98%. *



* From a processing plant manager whose company supplies broiler for KFC in Netherlands.

Problems in Dairy

Reuters World Business Markets Sustainability Legal Breakingviews Technology Investigations

Bird flu pushes US dairy farmers to ban visitors, chop trees

By **Tom Polansek**

April 12, 2024 11:48 AM GMT+8 · Updated 3 months ago



April 12, 2024

California declares state of emergency due to H5N1 in dairy cattle

The action, aimed to streamline and expedite the state's response to H5N1, comes as cases were detected in dairy cows on farms in Southern California.

Press release
December 18, 2024



December 18, 2024

Reuters World Business Markets Sustainability Legal Breakingviews Technology Investigations

Australia reports first human avian flu infection

By **Peter Hobson**

May 22, 2024 3:13 PM GMT+8 · Updated a month ago



May 22, 2024

Problems in Dairy

- The avian flu spread not only in the poultry industry but also in dairy industry that cause **billion loss** every year.
- The wild birds eat 3-5% feed for the dairy farm. It was a **$6B loss** every year and make the lactation yield unstable.




iCHASE

InsightScale

Weighing scale + Camera

Camera





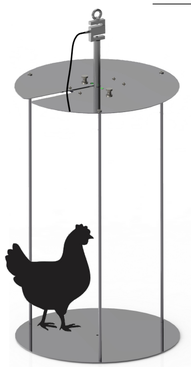


Image A + Weight A

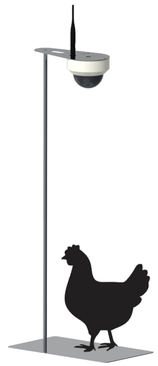
Image B + Weight B

Image C + Weight C

Image D

Weight D

Real-time AI Vision
Calibration



AI Bird Repeller





InsightScale integrates diverse AI monitoring functions, including **AI laser disturbance** to enhance animal welfare, **AI acoustic analysis**, and **AI manure analysis**, serving as an all-in-one AI health monitoring system.

InsightScale Competition

[1] Yearly revenue: $160B

[2] Yearly revenue: $1B







		InsightScale	Birdoo (sold by Cargill[1])	Big dutchman[2]
Weighing function	Working principle	Swing scale with AI camera	AI camera	Swing scale
	Area of use	Unlimited	Only for broiler	Only for broiler and turkey
	Weighing accuracy	98%	95%	95%
Sensor	Temperature sensor	●		●
	Humidity sensor	●		●
	Light sensor	●		
	AI manure analysis	●		

AI Bird Repeller can **precisely target** and deter wild birds, **preventing habituation**. Its high-power laser covers a radius of up to 650 feet, making it ideal for use in livestock and feed facilities.

AI Bird Repeller Competition

[3] Yearly revenue: $8M

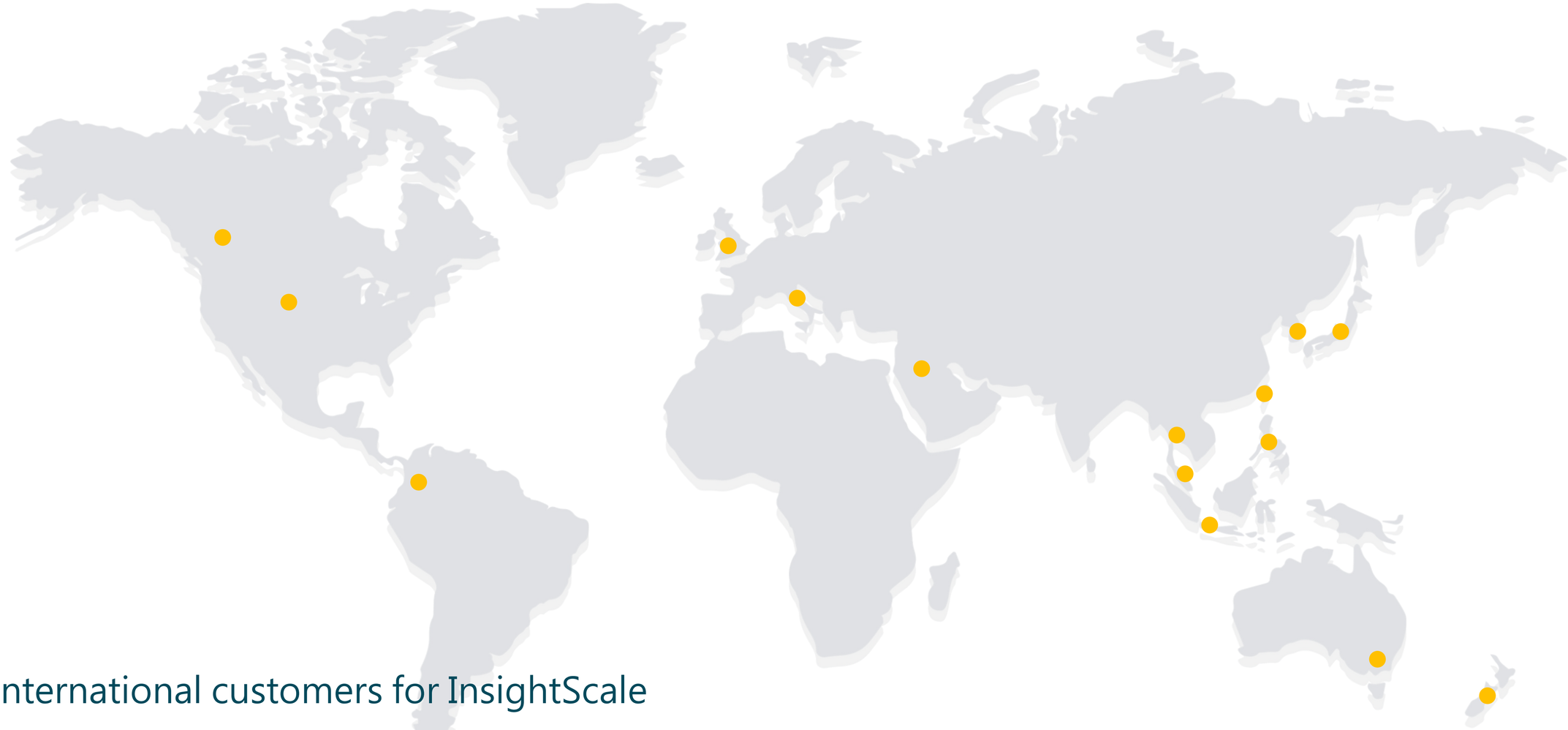






		AI Bird Repeller	Ultrasonic	Bird Control Group[3]
AI function	Working principle	Green laser	Ultrasonic	Green laser
	Dispersal radius	650 feet (in the daytime)	30 feet	650 feet (in the daytime)
	Remote control	●		●
	Online dashboard	●		
	AI bird detection	●		
	AI path calculation	Human/ Cattle detection		
	AI live detection	●		
	Long term effectiveness	●		

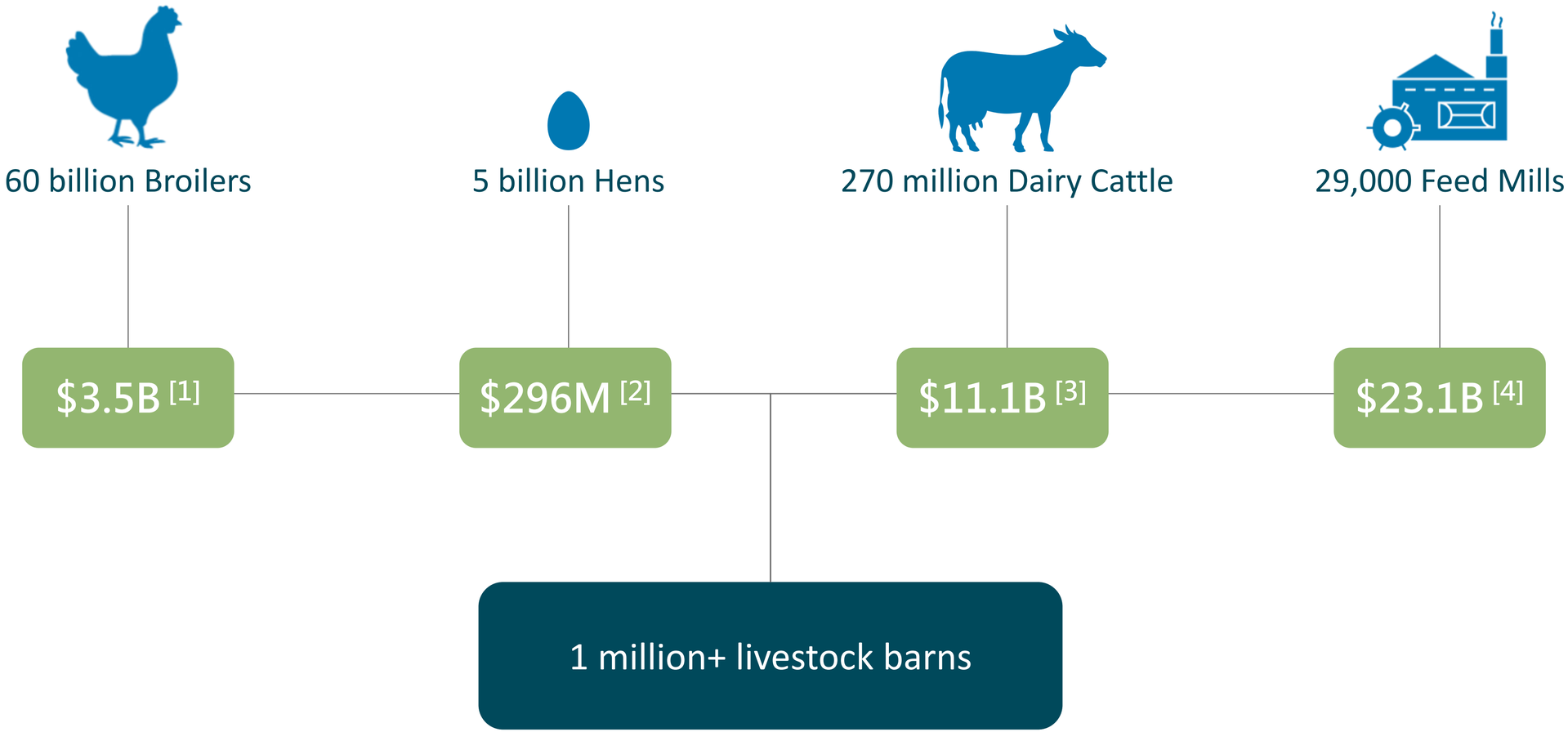
Customers



5 international customers for InsightScale

16 international customers for AI Bird Repeller

Global Farming Equipment Market



[1] Future Market Insight: Poultry Farming Equipment Market, [2] Layer Chicken Breeding Equipment Market Statistics, [3] Dairy Processing Equipment Market Size & Forecast, [4] Animal Feed Processing Equipment Market - Size & Analysis

Meet Our Team



Aidan Chang/CEO

10yr product R&D experience

Mechanical design expert

50yr family agricultural tillers business

FOXCONN



Joe Huang/CTO

5yr AIoT experience

5yr electronic circuit design

6yr embedded system design

CARDIO RING



Jennifer Chang/CMO

9yr marketing experience

Taiwan 4A Creative Marketing Gold Award

50yr family agricultural tillers business



Johsua Huang/ Advisor and investor

President of All Tech, FYJ. Co., Ltd.

30yr of experience in poultry automation design.

Chore-Time top-performing distributor in Asia from 2022 to 2024.

Chore-Time Platinum Award (annual turnover exceeding $10 million)

CHORE-TIME



Joe Chi /AI Consultant

AI computer vision expert

30yr Family chicken farming business

Leonardo.Ai

Investor: 500

THANK YOU

iCHASE

AI TRANSFORMING LIVESTOCK CARE

PLUG AND PLAY

SV SUMMIT

STARTUP PRESENTATION

Moldintel

Moldintel

Moldintel provides engineering data solutions for plastic injection molding industry.

#PNPTCSiliconValley

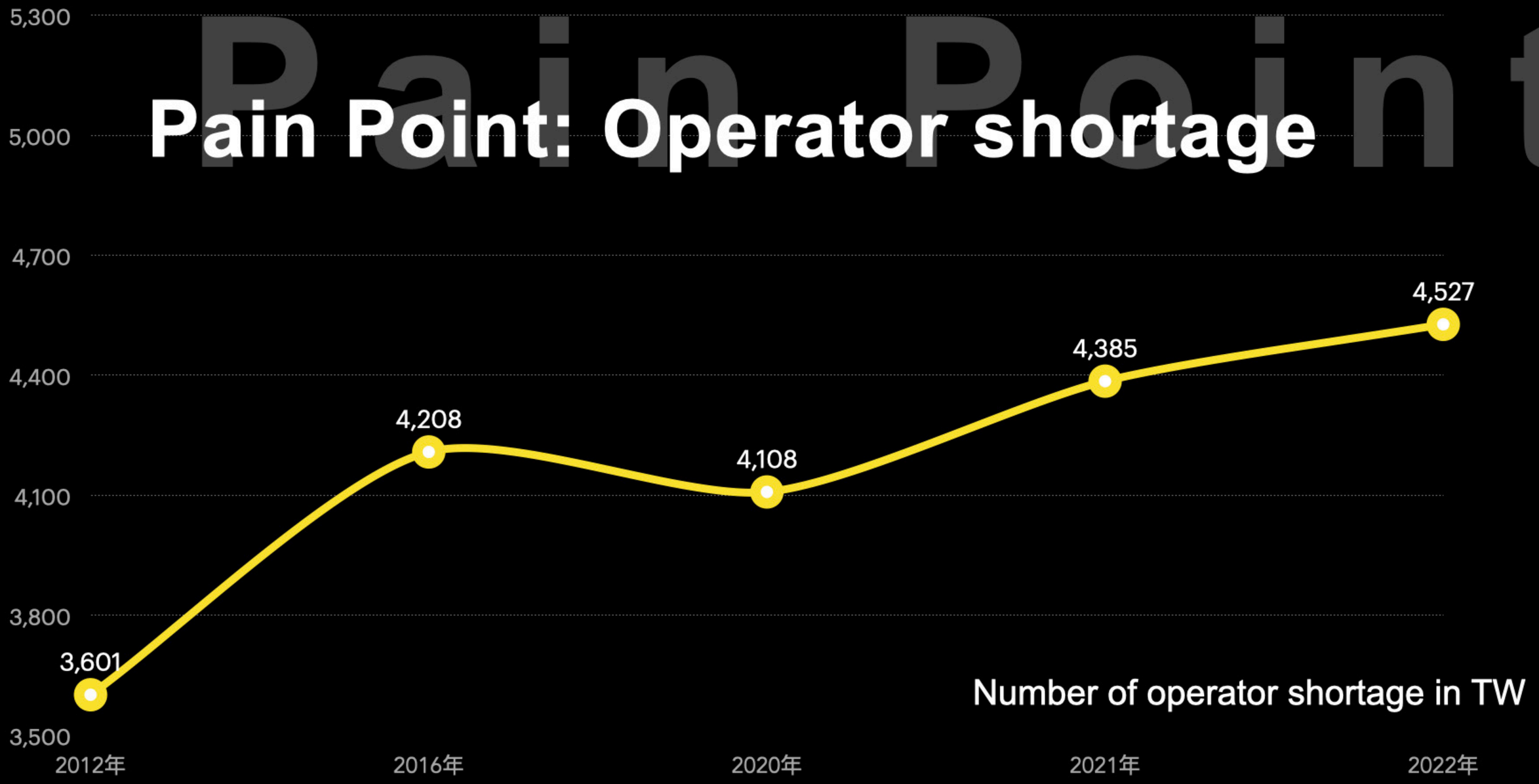
Join us at **pnptc.com**




innovative

Moldintel

Pain Point: Operator shortage











1

2

3

Proj. Editing

Simple info. establish for product dimension, material, and machine

Proj. Selection

Choosing proj. which is going to the production.

Parameter

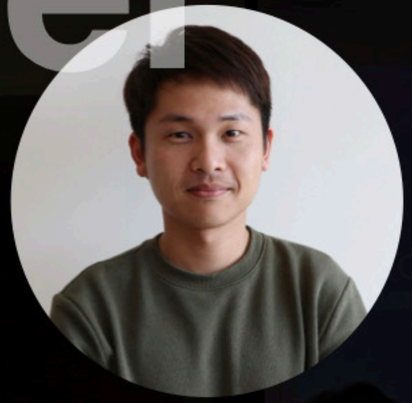
Setup molding parameter by calculation result and start processing


台中精機

Founder



John Chang Ph. D



YW Chen Ph. D



August Ting Ph. D



SC Chen Ph. D

Manage Team



Core Technology

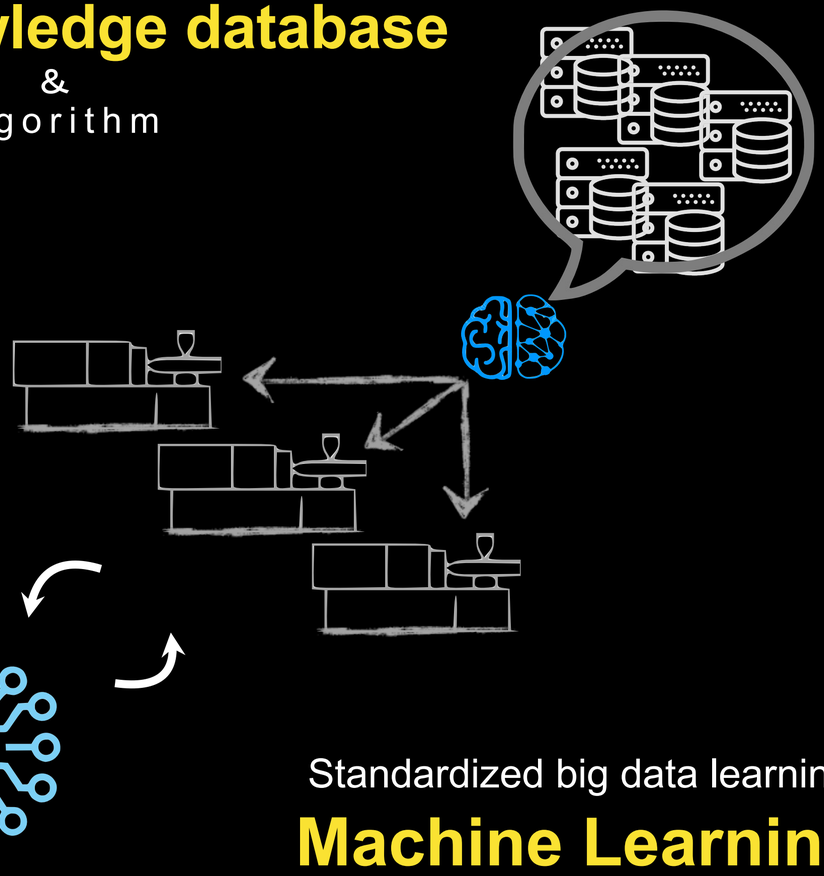
Moldintel

Knowledge-Driven

>30yr Knowledge database

&

Algorithm



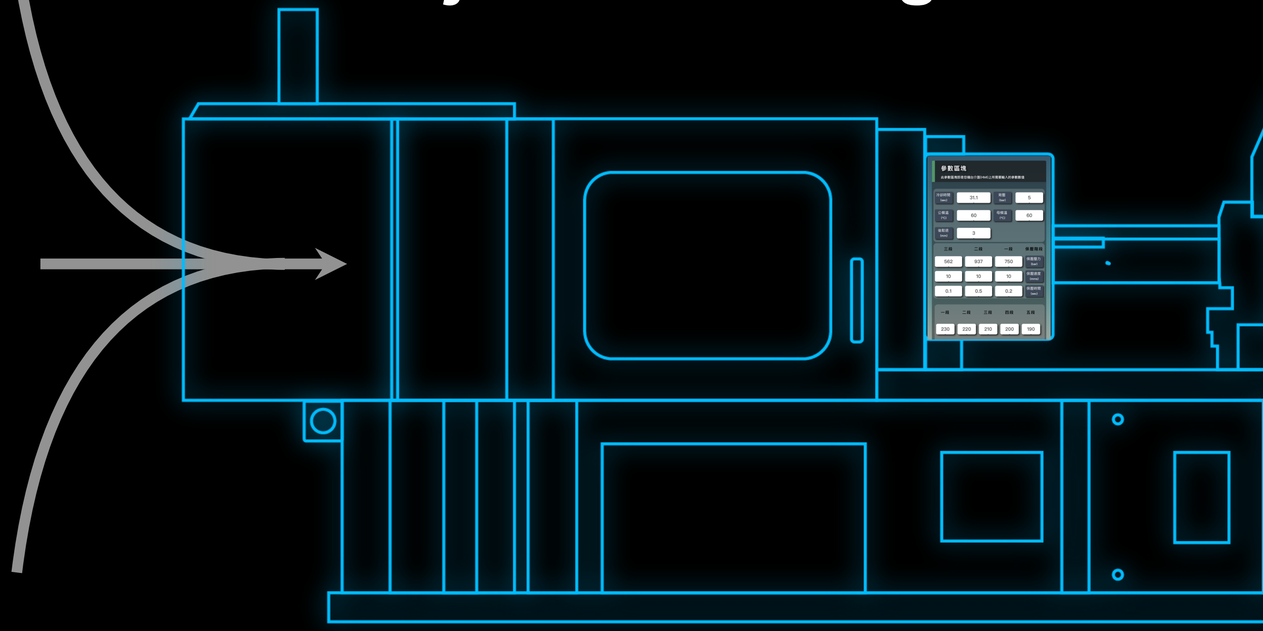
Standardized big data learning

Machine Learning

AI technology

1# in the world

Smart Injection Molding Solution




DELTA

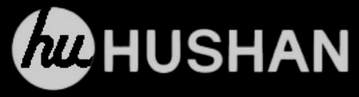

Ewell
Medical & Plastics Manufacturing


Getac


Moldintel


Hisense
海信


家登精密
Gudeng Precision


HUSHAN


FOXCONN
富士康科技集團


YKK


AmTRAN
瑞軒科技股份有限公司


RICH EASY




Panasonic


SIRTEC
協益電子


KIWORKS


良器集團
PRO-DESIGN GROUP


SHEN DING
神鼎工業


Unvac


SUNRAIN




RICH EASY




HARLIN


MIPRO


DECOPLAS


Jing Dai

Competitor

Moldintel

	Moldintel	ENGEL	Wittmann Battenfeld	KraussMaffei	IMFLUX FEARLESS INNOVATION	TOYO	JSW
Feature							
Parameter Setup	✓				✓	✓	✓
Production Stablizer	✓	✓	✓	✓	✓		
AI Machine learning	✓						
Cross Machine Brand Control	✓				✓		

Moldintel

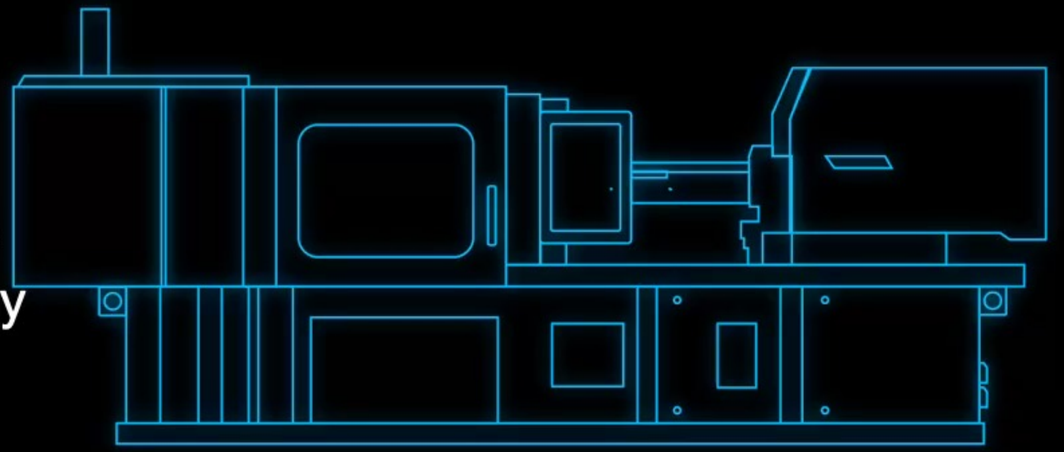


Top 1 Taiwanese Automation controller company

Worldwide famous machinery & controller partners

Top 1 China controller supplier for EV machine

Controller supplier for top 5 globally machinery company



Top 10 HK machinery company

Controller supplier for top 1 global machinery company

Top 3 JP machinery company, top 10 in the world





Labor-experience Based Machine Setup

AI Parameter Setup Process

Building RoboMolding Ecosystem

Providing Order Matching and Brokerage Services

Improving traditional, inefficient order methods and helping small manufacturers access high-value and international orders.

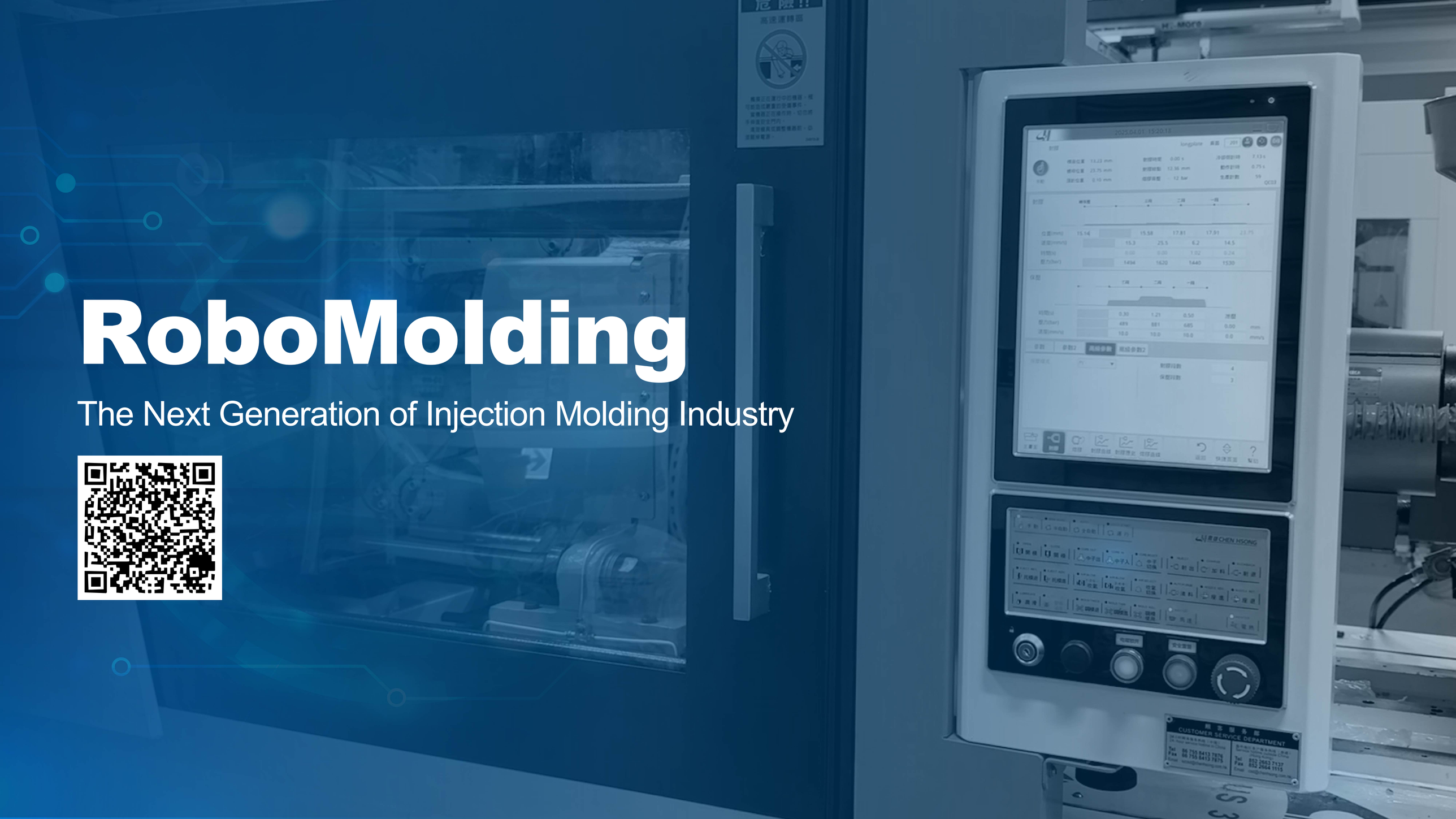
Establishing a Manufacturing Capability Certification System

Implementing data verification and traceability to help manufacturers obtain certifications like cleanroom and ISO 13485, expanding order opportunities.

Deepening Platform Trust and Enabling a Complete Business Ecosystem

Based on manufacturing data and certification results, establish a transparent and efficient supply-demand matching process to prevent order jumping and loss.





RoboMolding

The Next Generation of Injection Molding Industry

PLUG AND PLAY

SV SUMMIT

UPCOMING TAIWAN DEEPTECH EVENTS

B1 Selection Day

- Taoyuan, Taiwan
- Wednesday, July 23rd

B1 Expo

- Taiwan
- Tuesday, November 11th

#PNPTCSiliconValley

Join us at **pnptc.com**

PLUG AND PLAY

Learn more & join the ecosystem!



#PNPTCSiliconValley

Join us at **pnptc.com**

PLUG AND PLAY

SV SUMMIT

THANK YOU FOR ATTENDING

#PNPTCSiliconValley

Join us at **pnptc.com**