

TECHINU

MAPIS: SMARTER SENSING,
HEALTHIER LIVING

TechInu

Photo credits: Tatiana Shepeleva



Ryan's Story

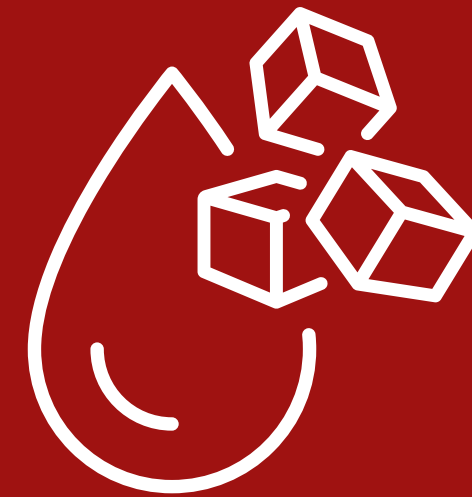
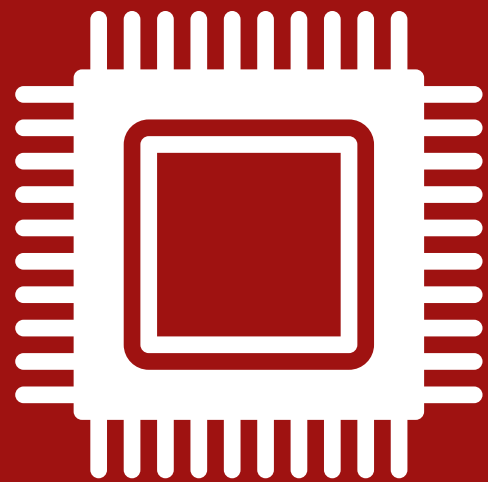
Ryan; TechInu's founder and CEO, has been living with type 2 diabetes for decades now...but his struggles are shared by millions around the world.



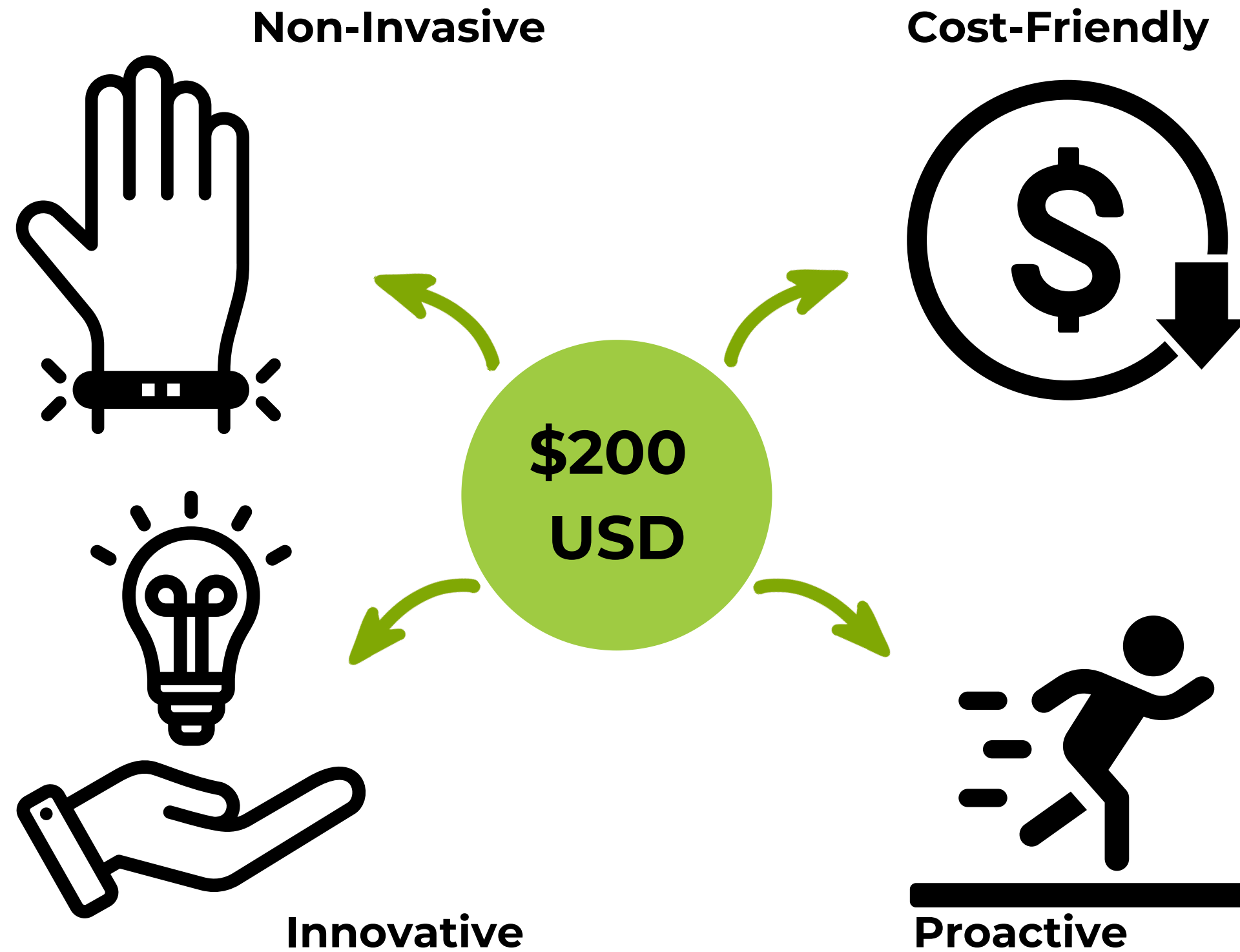
Glucose Monitoring = \$\$\$

SMBG (Self-monitoring blood glucose)	CGM (Continuous glucose monitor)	TechInu (Portable glucose monitor)
\$300–\$1200USD /year	\$1,200-\$3,600USD /year	\$200USD one-time purchase

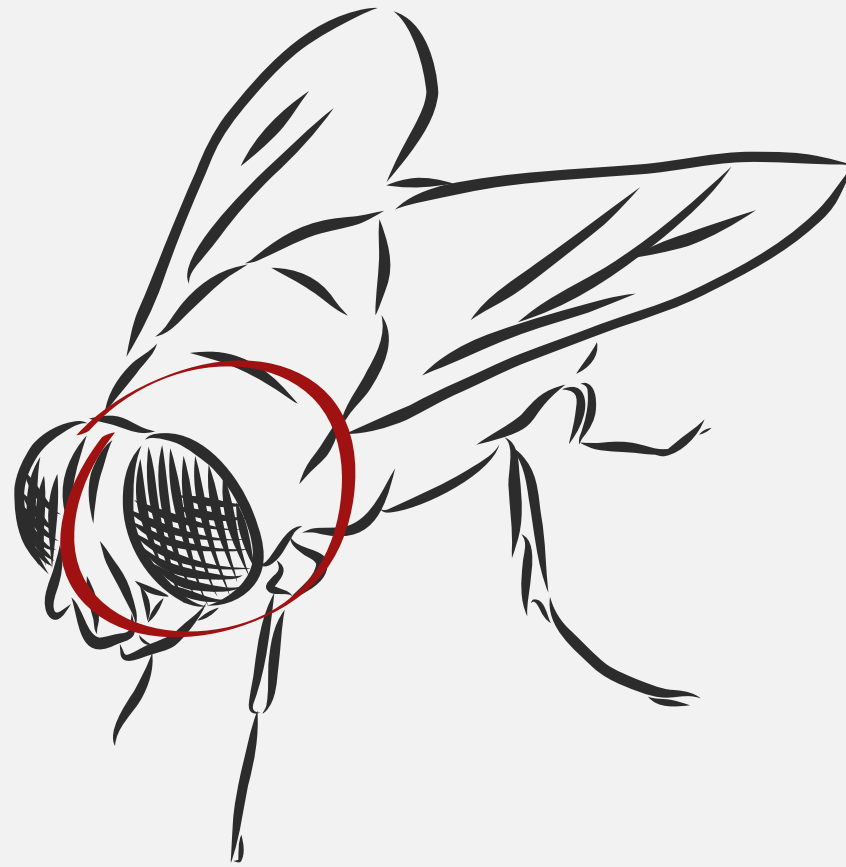
Enter TechInu: We aim to create an AI-powered chipset to achieve NIGM using Matrix Pinhole Image Sensing (MAPIS) technology



TechInu: Value Propositions

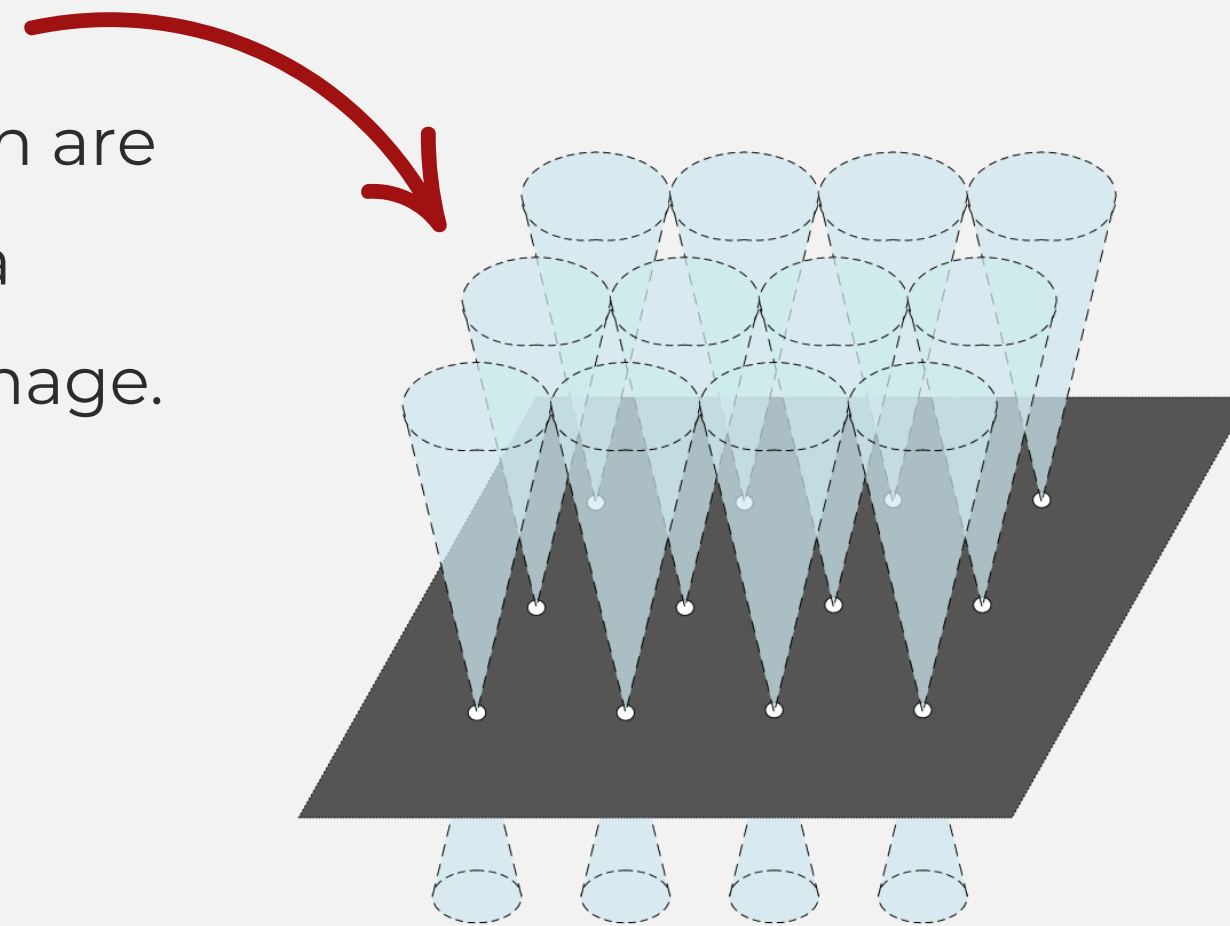


Solution Overview: Matrix Pinhole Image Sensing (MAPIS) Imaging



What is MAPIS?

Imagine a fly's eye: it gets a mosaic of smaller image fragments which are combined into a larger, clearer image.



Now imagine this same concept being used for multi-point imaging!

MAPIS and TechInu

- ✓ • MAPIS was invented by Dr. Lucas Wang, our CTO, and was patented in several countries.
- ✓ • Previously, Dr. Lucas Wang cooperated with many screen and mobile phone manufacturers, where MAPIS was used for fingerprint collection on OLED screens.
- ✓ • MAPIS has won the MWC Best Hardware Award before.

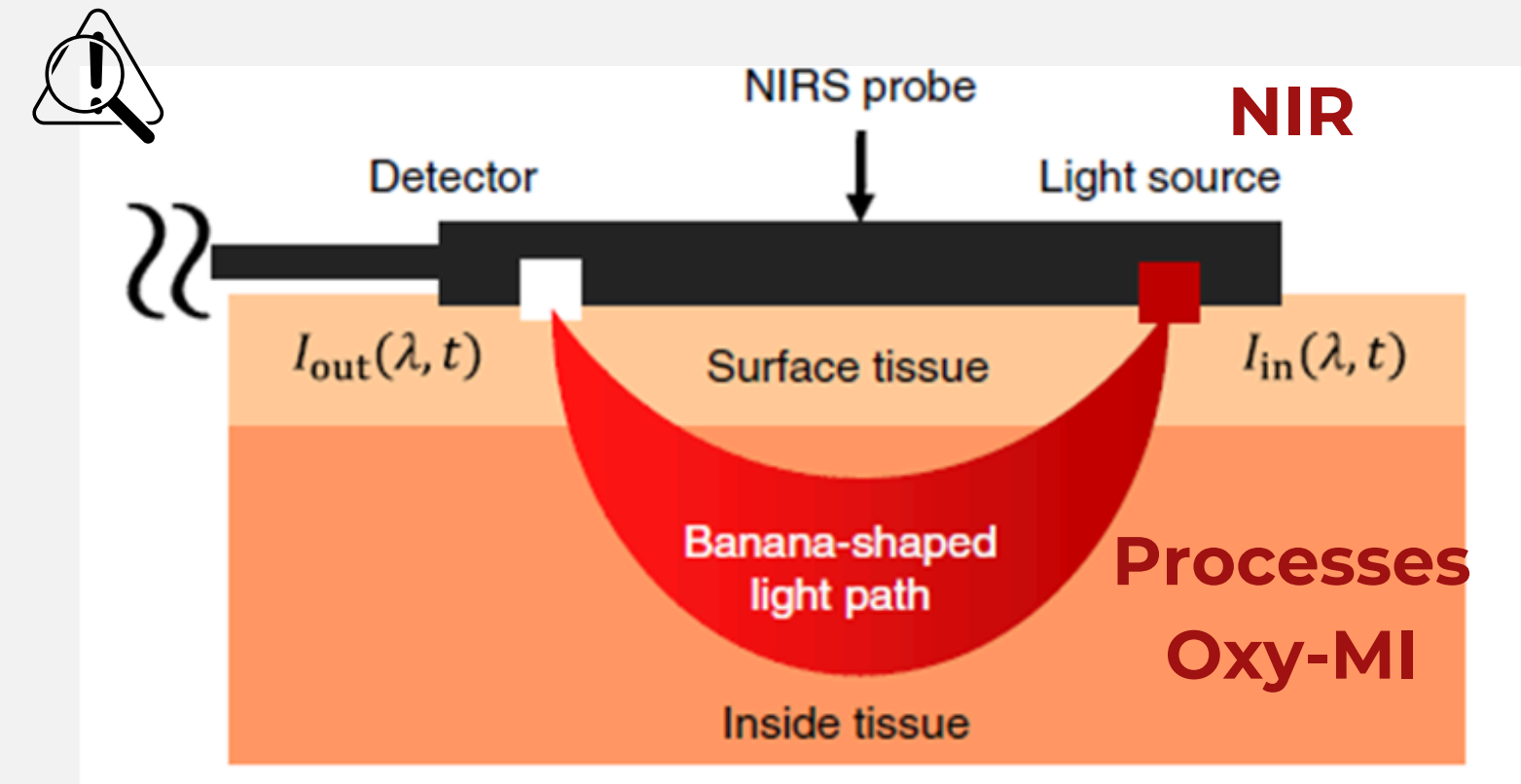
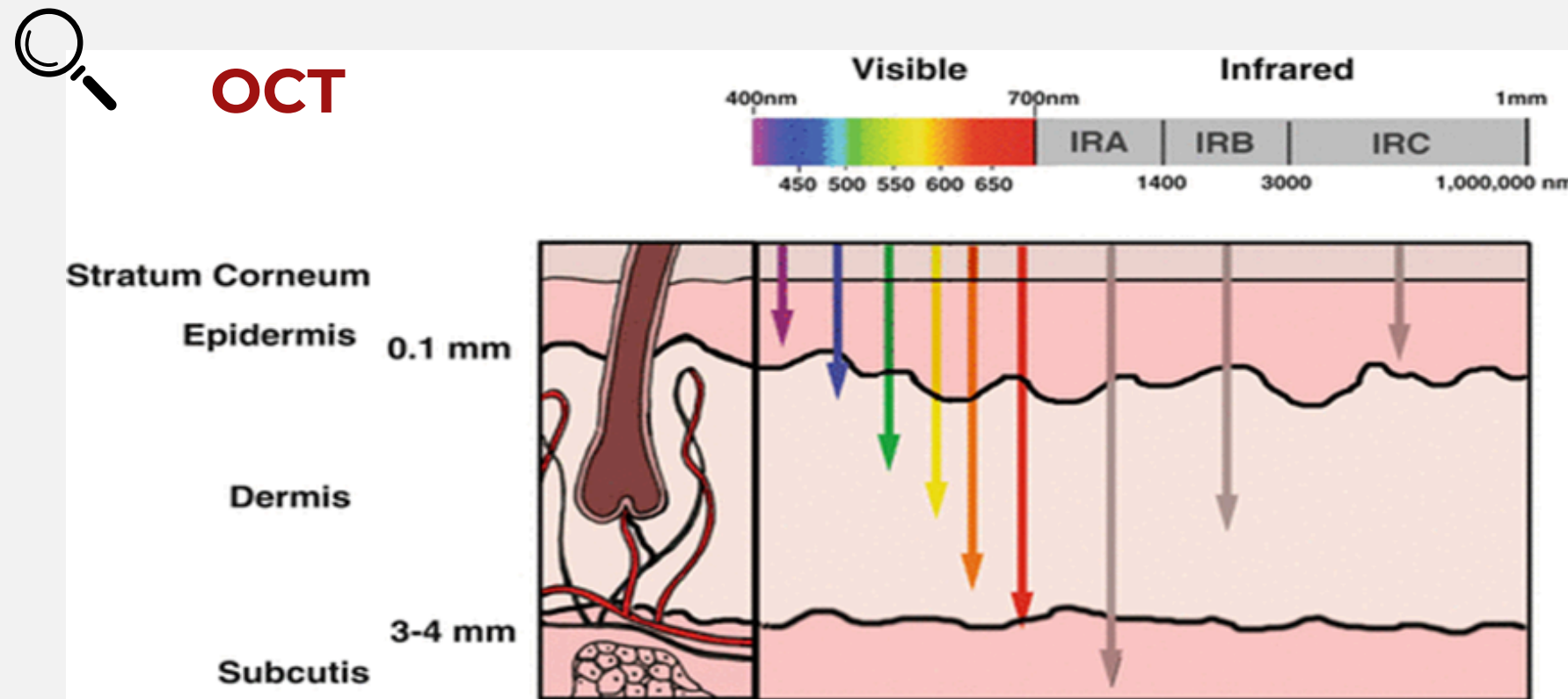
We are now exploring the potential of MAPIS in medical industry through TechInu!

MAPIS Technical Specifications



MAPIS chipset technical specification		
Module Size	15mm*15mm*1mm	Ultra-thin and compact
Imaging Area	6mm*6mm	
Imaging Depth	0~3mm	
Resolution (PPI: Pixels Per Inch)	When the depth is 0mm, resolution is ≥ 500 PPI	
Expected Price	20USD	Affordable for wearable devices
Measurable Medical Indicators & Accuracy Goals for Prototype Trials	Heart rate; Blood oxygen; Blood glucose level; Blood glucose metabolism rate	TechInu NIGM accuracy goals: Phase 1: MARD<15%, CEG: Zone A + Zone B > 97%, Zone D + Zone E = 0 (acceptable for home use and non-emergency decision-making) Phase 2: MARD<10%, CEG: Zone A + Zone B > 99%, Zone D + Zone E = 0 (comparable to clinical measures)

Imaging Capabilities

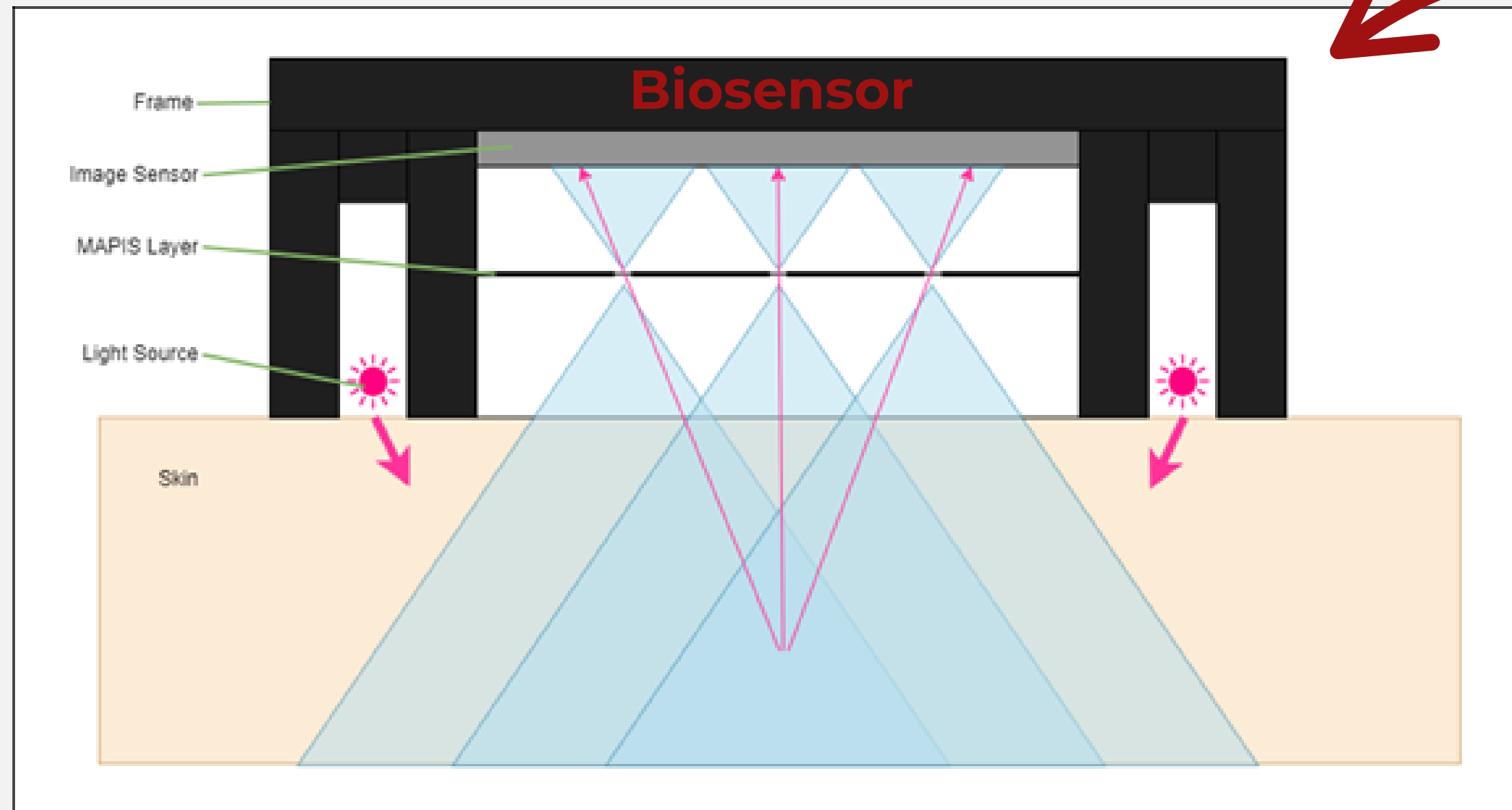


MAPIS Solution = OCT + NIR + Oxy-MI

Our MAPIS chipset combines 2 optical techniques (OCT and NIR) which measures the Oxy-MI to track blood glucose changes!

- OCT (Optical Coherence Tomography) → Like ultrasound, but uses light instead of sound, see layers inside the body without cutting anything open.
- NIR (Near Infrared Spectroscopy) → Non-invasive, shines light and measures what comes back
- Oxy-MI (Oxygen Metabolic Index) → tracks the rate at which the body utilizes oxygen

MAPIS Technical Specifications



**Chipset
prototype**

A New Generation of Glucose Monitoring

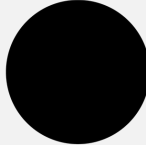
MAPIS vs. Photoplethysmography (PPG; current standard)

PPG: 1 point measurement

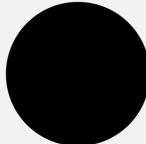




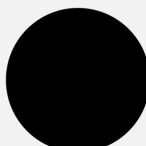
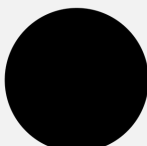
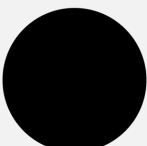
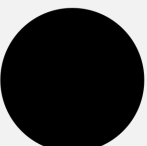
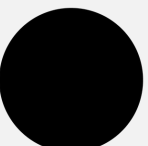
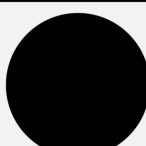
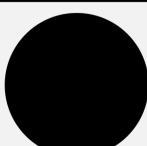
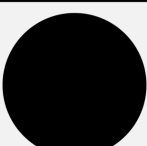
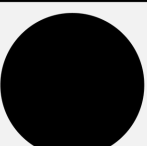
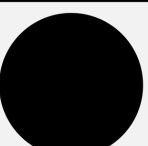
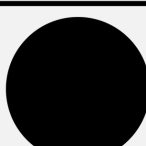
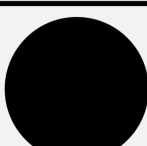
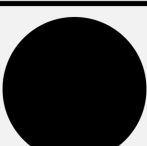
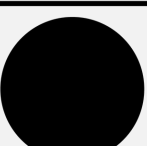
MAPIS: images at different depths with image size 200*200 pixels (40,000 points)

- MAPIS monitors medical indicators more accurately and comprehensively than PPG using 550nm + 650nm + 940nm light.
- MAPIS can image at depths up to 3mm
- MAPIS module size is 15mm*15mm*1mm in US\$20;

PPG: 1 point data collection

MAPIS: Multi-point data collection

Competitor Analysis in NIGM

Portable



MAPIS module
(NIGM)

Low Accuracy

High Accuracy



Ruijin Hospital
Solution

Non-Portable

Company	Technical Path	Accuracy	In Market?	Portability
博邦芳舟 GHA	MHC (Metabolic Heat Conformation)	Low - Medium CEG (A+B): 94.4% MARD: 26.16% ± 16.25% (95% CI, 23.88-28.43)	Yes - In China since 2019	
Ruijin Hospital	Raman Spectroscopy	High CEG (A+B) = 99.4% MARD: 14.6%	Yes - In hospitals in Feb. 2025	
TechInu Inc.	OCT + NIR + Oxy-MI	TechInu R&D simulated accuracy (to be tested in July): High CEG (A+B) = 99% MARD: 13.3%	Not yet - Currently finishing prototype dev.	✓



GHA Glucometer



Ruijin Hospital
Solution

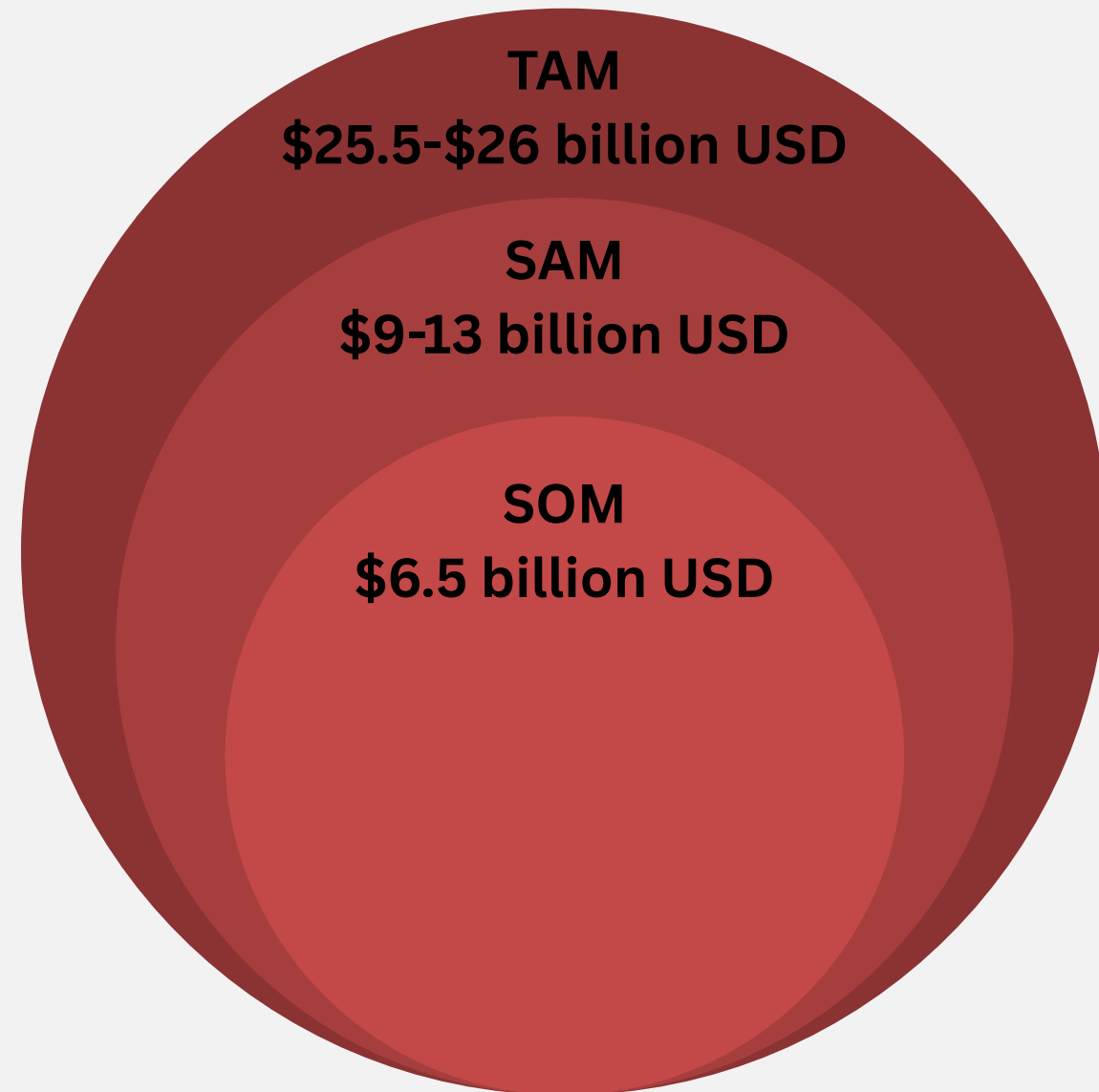


MAPIS Based NIGM

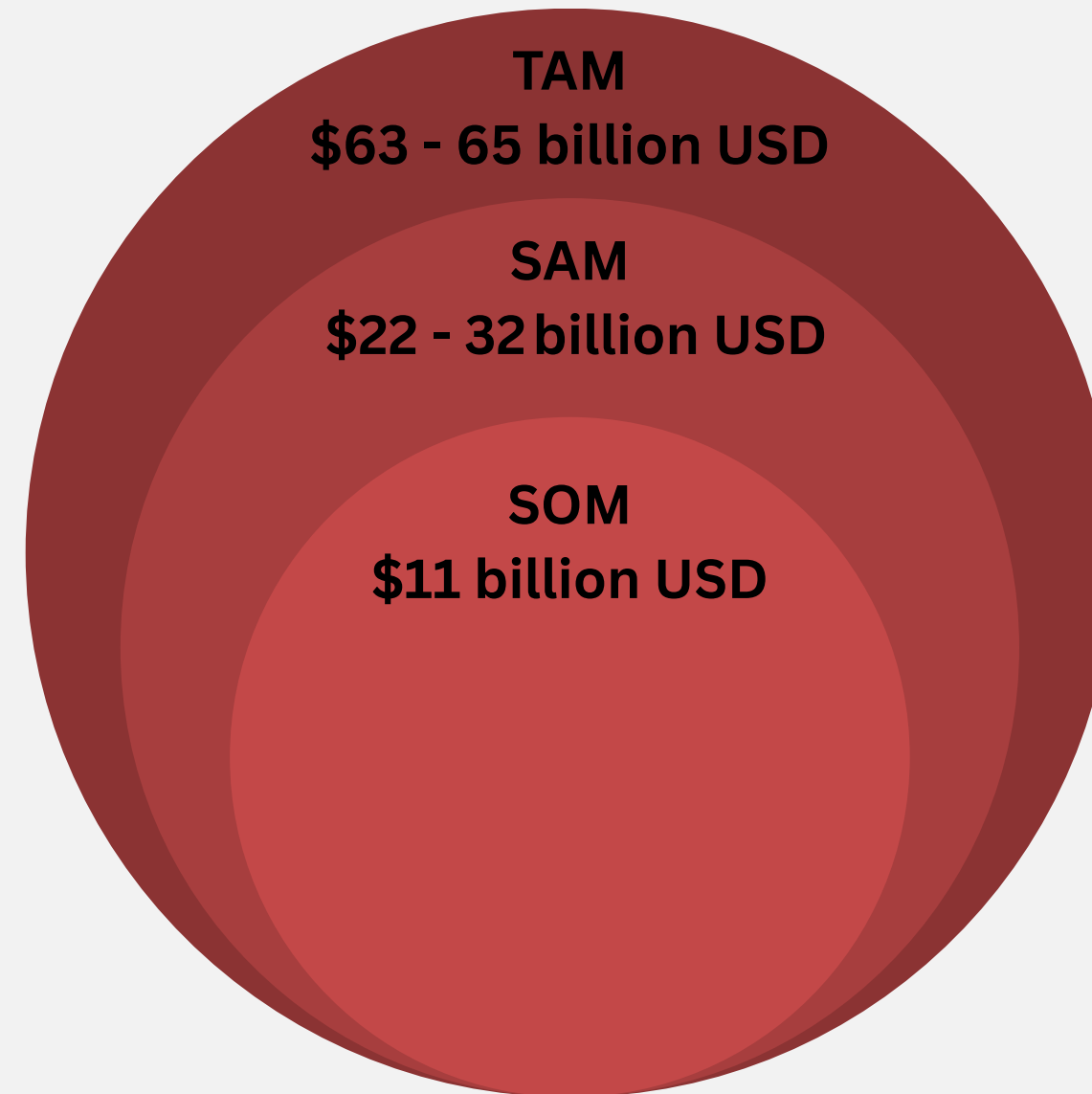
Market Size

*for wearable devices in the APAC Region

Current Market (2024)



Projected Market in 2030 (with CAGR ~9%)



TAM: all wearables

SAM: health-tech wearables

SOM: diabetes-focused wearables

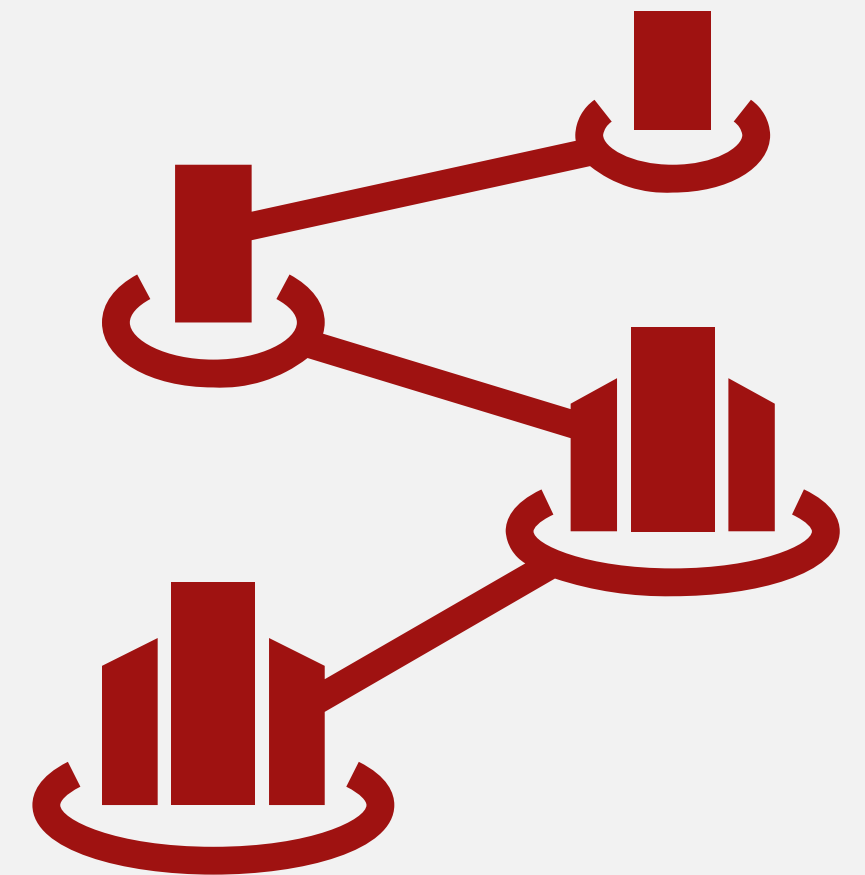
Sales Target:

MAPIS module:
5-7% market
penetration by
2030

*sources: kenresearch.com
grandviewresearch.com

Business Model

- **B2B:**
 - MAPIS module (chipset)
- **B2C:**
 - Portable health monitor
 - Health-tech Consultation Service (2028+)
 - Subscription service; provided using collected user data



TechInu

IP strategy

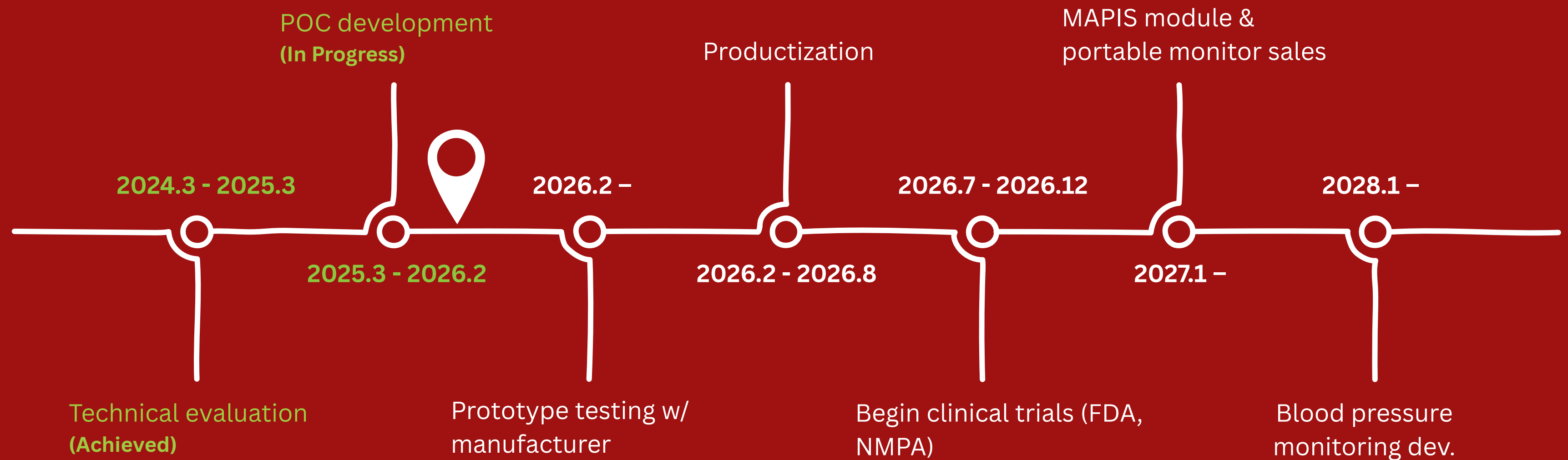
- MAPIS technology is currently patented in mainland China, the United States, Europe, Japan, and South Korea (for use in the mobile phone industry)
- Going forward, TechInu Inc. will own the new patents for employing MAPIS within the medical industry (**)

** The patents include:

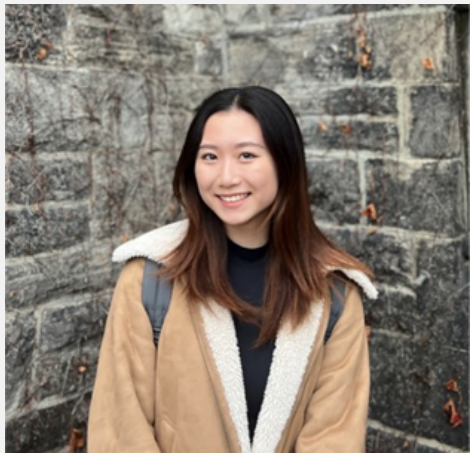
1. Sensor for Heart Rate, Blood Oxygen, and Blood Glucose Monitoring using MAPIS Technology
 2. Blood Glucose Level Detection Algorithm Based on Multi-Aperture Imaging, etc.
- **We are planning to file these patents in 2025 in Canada / USA / China and HK**

Revenue Plan												
		2025	2026	2027	2028	2029	2030	2031	2032	2033	Sub-Total (2025-2033)	Note
MAPIS Module	Sales Forecast (pcs)				1,000,000	10,000,000	20,000,000	24,000,000	28,800,000	31,680,000	115,480,000	
	Unit Price (USD)				20.00	19.00	18.05	17.15	16.29	15.48		5% annual erosion
	Annual Growth	After explosive growth in the first 3 years, will maintain 20% annual growth										
	Sub-Total (USD)				20,000,000.00	190,000,000.00	361,000,000.00	411,540,000.00	469,155,600.00	490,267,602.00	1,941,963,202.00	
Card-type Health Monitor	Sales Forecast (pcs)			12,000.00	15,600	20,280	26,364	34,273	44,555	57,922	210,994	
	Unit Price (USD)			200.00	194.00	188.18	182.53	177.06	171.75	166.59		3% annual erosion
	Annual Growth	30%										
	Sub-Total (USD)			2,400,000.00	3,026,400.00	3,816,290.40	4,812,342.19	6,068,363.51	7,652,206.38	9,649,432.25	37,425,034.73	
Cooperate Operation	2.5 Years Budget (USD)	-1,350,000	-2,910,000	-1,500,000.00								
Total (USD)	Revenue (USD)	-1,350,000	-2,910,000	1,100,000.00	23,026,400.00	193,816,290.40	365,812,342.19	417,608,363.51	476,807,806.38	499,917,034.25	1,979,388,236.73	
	Annual Revenue Growth				1993%	742%	89%	14%	14%	5%		
Reference: 1. Apple watch: 40-50M pcs per year. 2. Global wearable devices sales for 2025: 590.7-614.1M pcs. Note: No technology licensing revenue and healthcare manage service revenue included												

5 Year Strategy Planning

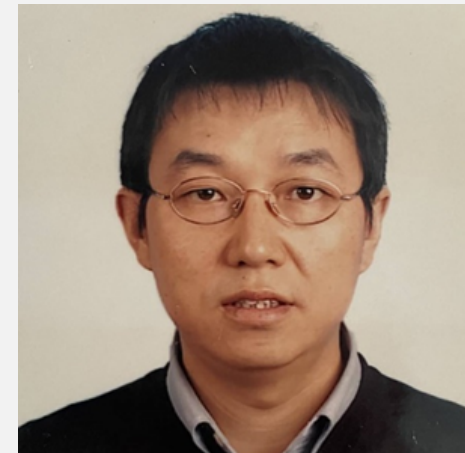


The Technu Team



Jasmine Jing (CEO)

- Undergraduate student researcher studying **life science** at the **University of Toronto**, BASc in progress



Ryan Jing (CTO)

- **Northwestern Polytechnical University (Xi'An)**, M.Eng in electrical engineering



Dr. Lucas Wang (CSO)

- **Peking University**, PhD in computer science
- MAPIS inventor and developer; 80+ invention patents



Peter Sun (COO)

- **University of International Business and Economics (Beijing)**, BBE

With Additional Support From:



- **University of Toronto**
- Professors advised the technical feasibility of MAPIS

Thank You!

TechInu Inc.



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We look forward to engaging with
you and exploring opportunities for
collaboration!