winovus

NUS National University of Singapore | Institute for Engineering Leadership, Faculty of Engineering

Nanotechnology That Makes Manufacturing Better

Our Nanoimprinting technology can improve the manufacturing process and performance of AR/VR lenses while reducing the cost.

Problem

Poor performance of **optical components** results in a poor AR/VR experience

- **Transmittance (85%)**
- **Low field of view (20-35°)**

The Lenses

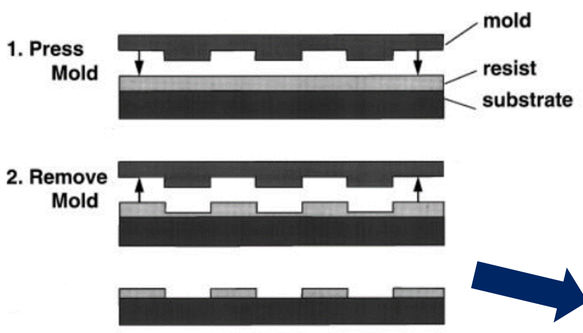
Other shortcomings in manufacturing
- **Complicated process**
- **Difficult mass production**
- **High cost**

Solution

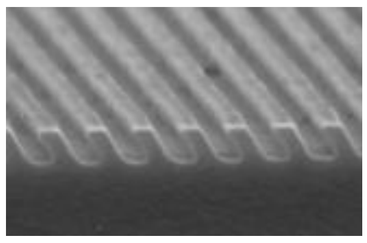
Nanoimprinting Technology

Performance of Lenses	➢ High transmittance (＞95%) ➢ Large FOV (~60°)
Manufacture Process	➢ Simple process (3 steps) ➢ Mass production (Increased by 20~30%) ➢ Lower cost and price (30-50% lower)

Nano-fabrication



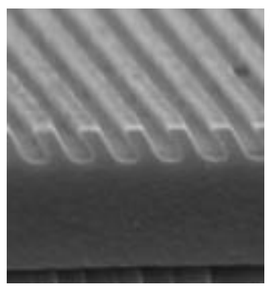
Nanostructured gratings



The substrate can be glass or resin.

Business Model

B2B



OEM
Original Equipment Manufacturer
Contract Manufacturing

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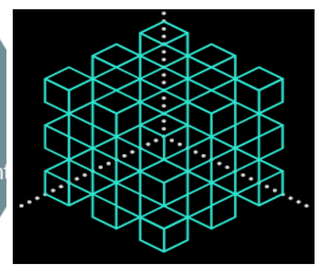
ODM
Original Design Manufacturing
Conception - Development
Design - Production



S$ 15/lens (average)

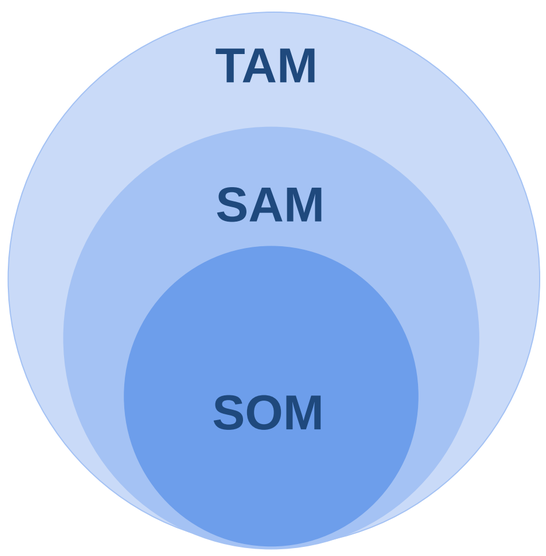
(Flexible pricing via customers)

Nanoimprinting Processing

Direct Customers: AR/VR Device Companies

Nanostructure Design & Production

Potential Market Size



Total Available Market
Global: ~S$ 280 B (by 2022)
(AR/VR devices market)

Serviceable Available Market
Asia-Pacific: ~S$ $47 B (by 2022)
(AR/VR devices market)

Serviceable Obtainable Market
~S$ 47 Million
(Lenses: 1% of the AR/VR market)

Source: https://www.prnewswire.com/news-releases/asia-pacifics-172bn-augmented-reality-ar-and-virtual-reality-vr-market-2019-2026-300975339.html

Go To Market Strategy

LLVISION
MADGAZE
NIANTIC
KURA
TECHBRIDGE VENTURES

Manufacturing & Design

Technology Transfer

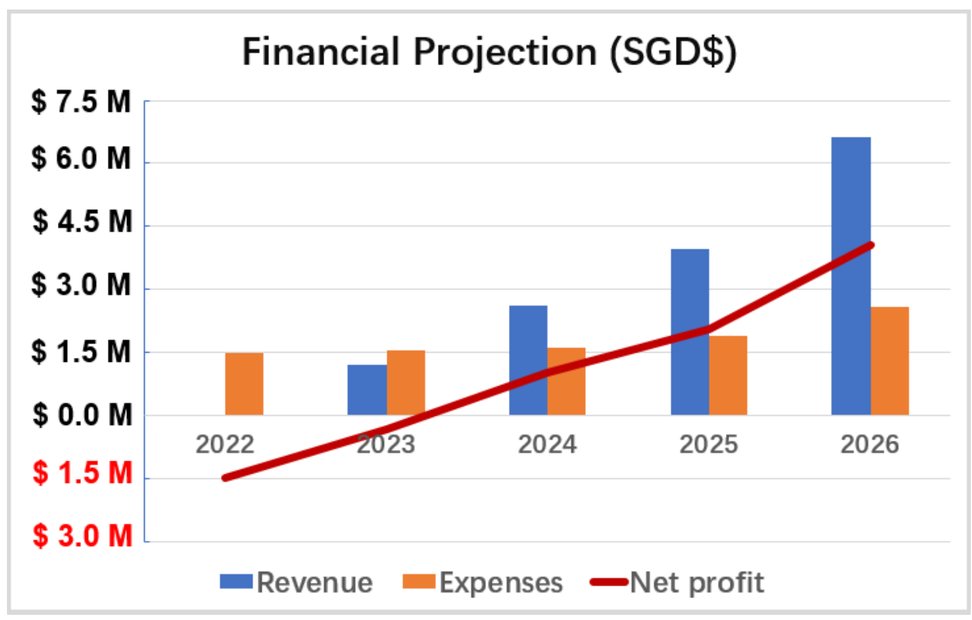
Asian Expansion

Build Brand & Expansion

Year 1 → Year 2 → Year 3 → Year 4 → Year 5 ……

5-year Financial Projection

Year 5 Earning $4.1 M



Break-even Date The Third Year (2024)

Our Teams

CHEW Ker Yee
Co-founder & CEO

DR LOKE Yee Chong
Chief Scientist

Zhang Yiwei
Technical Leader
3 years in materials science research

Chen Luming
Business Development
3 years working experience in BCI

Wang Shuangxu
Financial Researcher
2 years researching in microelectronics project

Wang Jiaqi
Market Researcher
2 years internship in R&D department

Contact

For more information and business enquiries,
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or scan the QR Code at the side --->