



MACHVISION


MACHVISION, INC

(3563 TT)

2017 / 7 / 19

MACHVISION's statements of its current expectations are forward looking statements subject to significant risks and uncertainties and actual results may differ materially from those contained in the forward-looking statements.

Except as required by law, we undertake no obligation to update any forward-looking statement, whether as a result of new information, future events, or otherwise.

- ▶ **Company Overview**
 - ▶ **Business Update**
 - ▶ **Financial Performance**
- 
- An abstract background graphic featuring a blue and white grid pattern that recedes into the distance, creating a sense of depth. Overlaid on this grid are several white squares, some of which are outlined in orange. Faint binary code (0s and 1s) is visible in the background, adding a technological or digital theme to the design.

Founded in 1998.6.9

Main Products : Automated Optical Inspection (AOI)

2015 April: Awarded The 3rd **excellent Enterprises** as Backbones in Taiwan

2017/2016: Awarded The Corporate Governance Excellence in Taiwan (top 5% of TW-listed firms)

Founder: Dr Collin Wang - PhD in industrial engineering
at Penn. State University

Research expertise – Image Processing / R&D Management



Management Team



President
Chen, Fu-Sheng
 Master of IE and
 Engineering Management,
 National Tsing Hua University



Technical Committee
Wang, Yuan-Nan
 Master of ME,
 National Taiwan University



EVP
Huang, Chia-Hsing
 Master of IE,
 Pennsylvania State University



CSO
Su, Jung-Chieh
 MBA,
 National Cheng Kung University



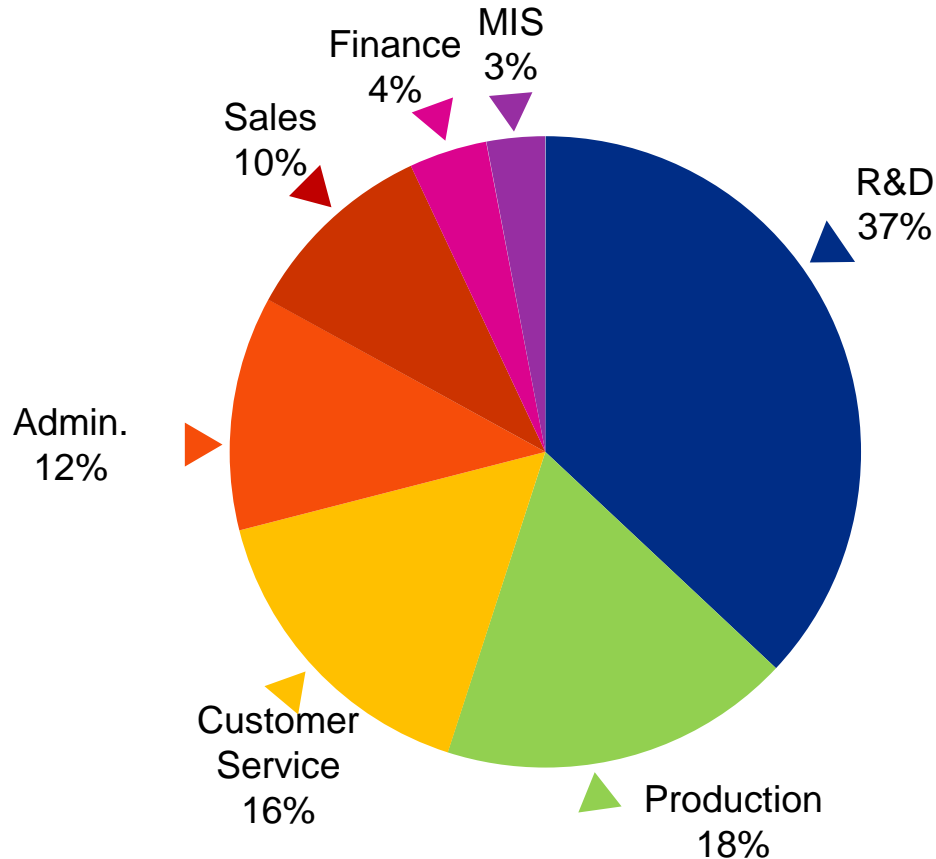
VP
Yang, Guang-Hao
 Undergraduate course of EE
 Hubei Polytechnic Institute



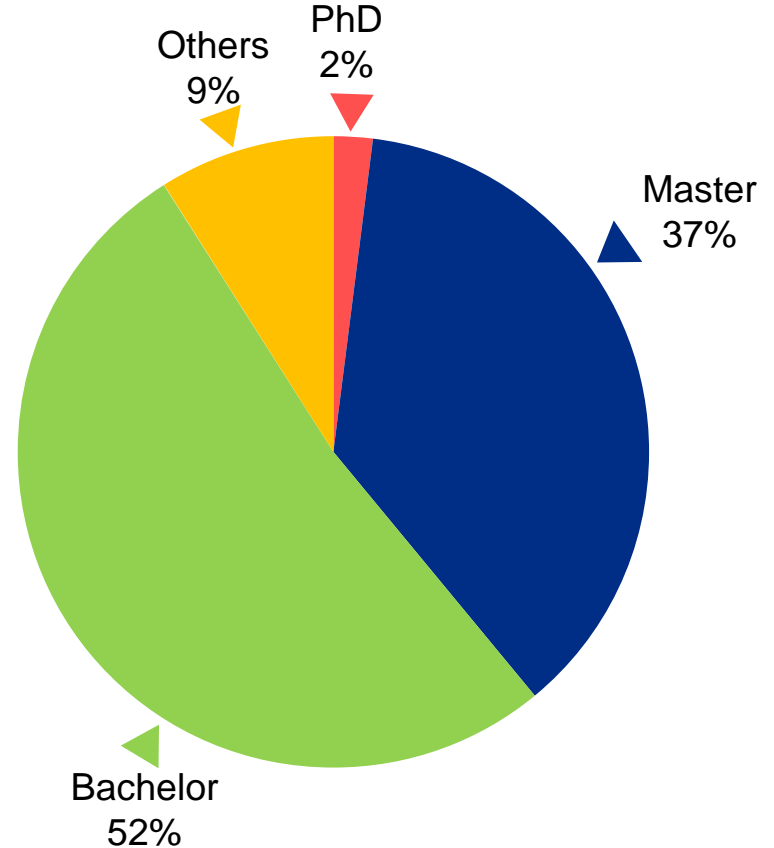
Senior manager
Hung, Ying-Kai
 MSEE,
 Chang Gung University

Breakdown of employees

► By Job Category



► By Education



Automated Optical Inspection (AOI)



AOI Technology can be applied in many industries:

- IC 、 PCB 、 PCBA 、 FPD 、 Passive 、 LED 、 Solar 、 Textile 、 Auto 、 Medicine...etc.

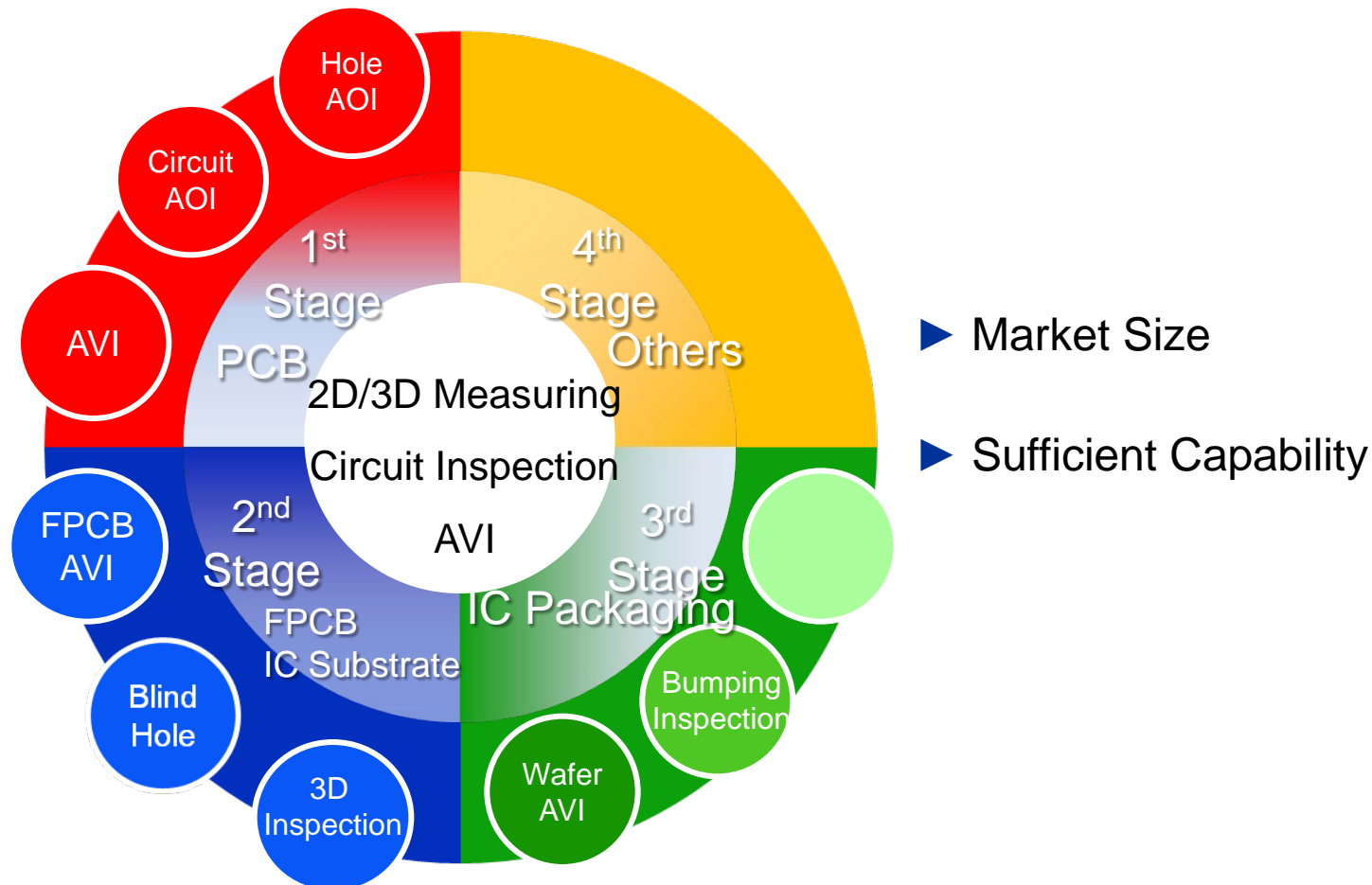
Taiwanese listed AOI Companies	Machvision	TRI	Utech	Favite
Ticker	3563	3030	3455	3535
Key Industries	PCB, IC	PCBA	FPD, PCB	FPD
2016 GM%	61.7%	54.7%	49.07%	22.76%
Major Competitors	Orbotech Rudolph	Omron Kohyoung	Takano Kubotek	Takano Kubotek

AOI markets used to be pioneered by developed countries

International AOI Peers	Orbotech	Camtek	Screen	Takano
Country	Israel	Israel	Japan	Japan
Key industries	PCB、FPD	PCB、FPD	PCB	FPD

International AOI Peers	Rudolph	Topcon	KLA-tencor	KohYoung
Country	US	Japan	US	Korea
Key industries	IC	IC	IC	PCBA

New Market Assessment



Third Arrow

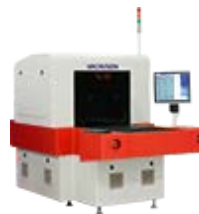
Circuit AOI Series



AOI 4.0



Circuit AOI



Artwork AOI



LineGauge

Drilling & Routing Measuring Series



Hole AOI



Hole Doctor



EZ3D

IC Substrate & HDI Measuring Series



3D AOI



FC CSP Bump Inspection



Solid Measuring Viewer



LaserVia AOIM



Dimple AOI

First Arrow

AVI Series



Auto Final Inspection



FPCB AVI



FC AVI



CSP AFI



COF AVI



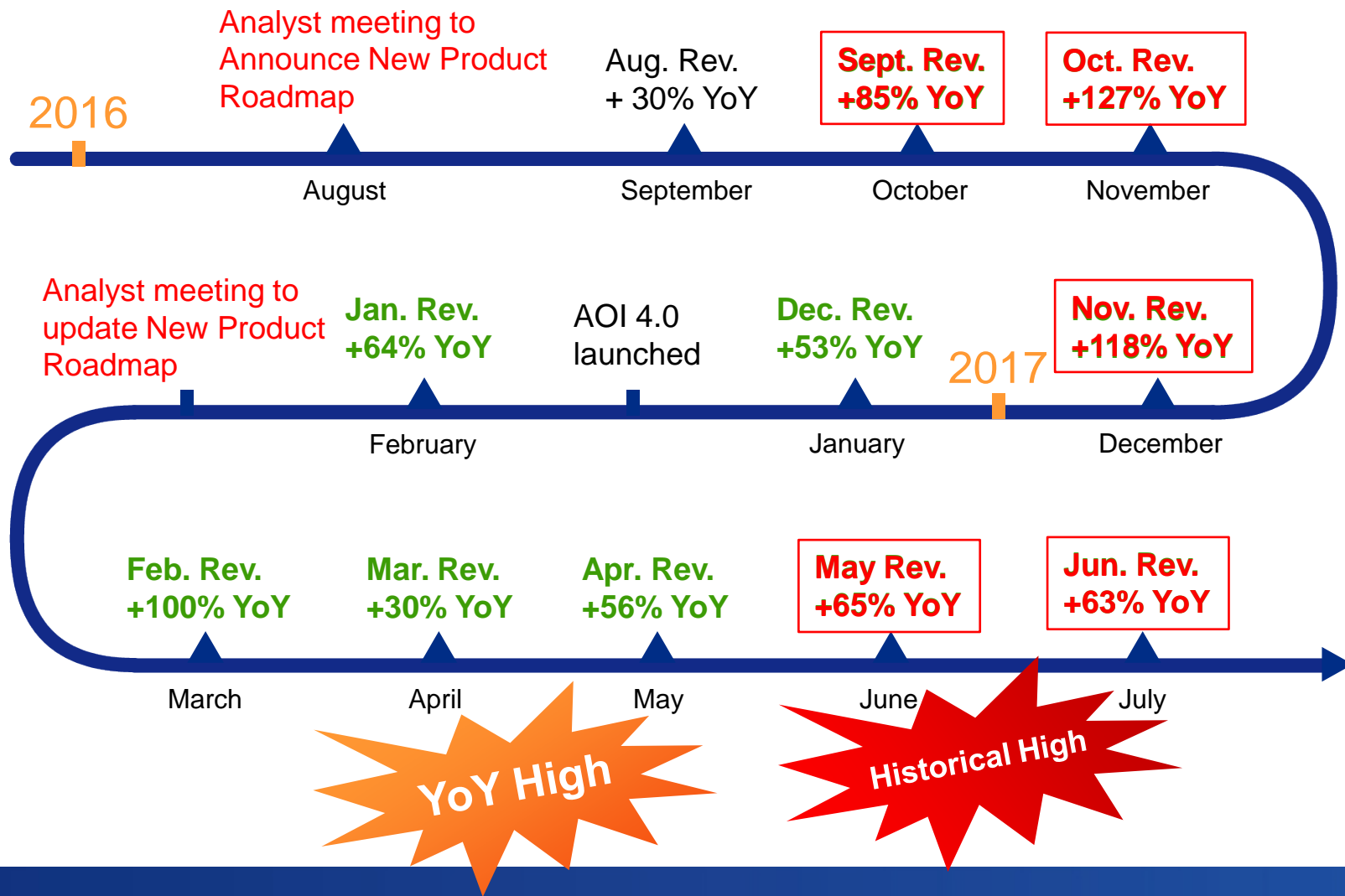
Wafer AVI



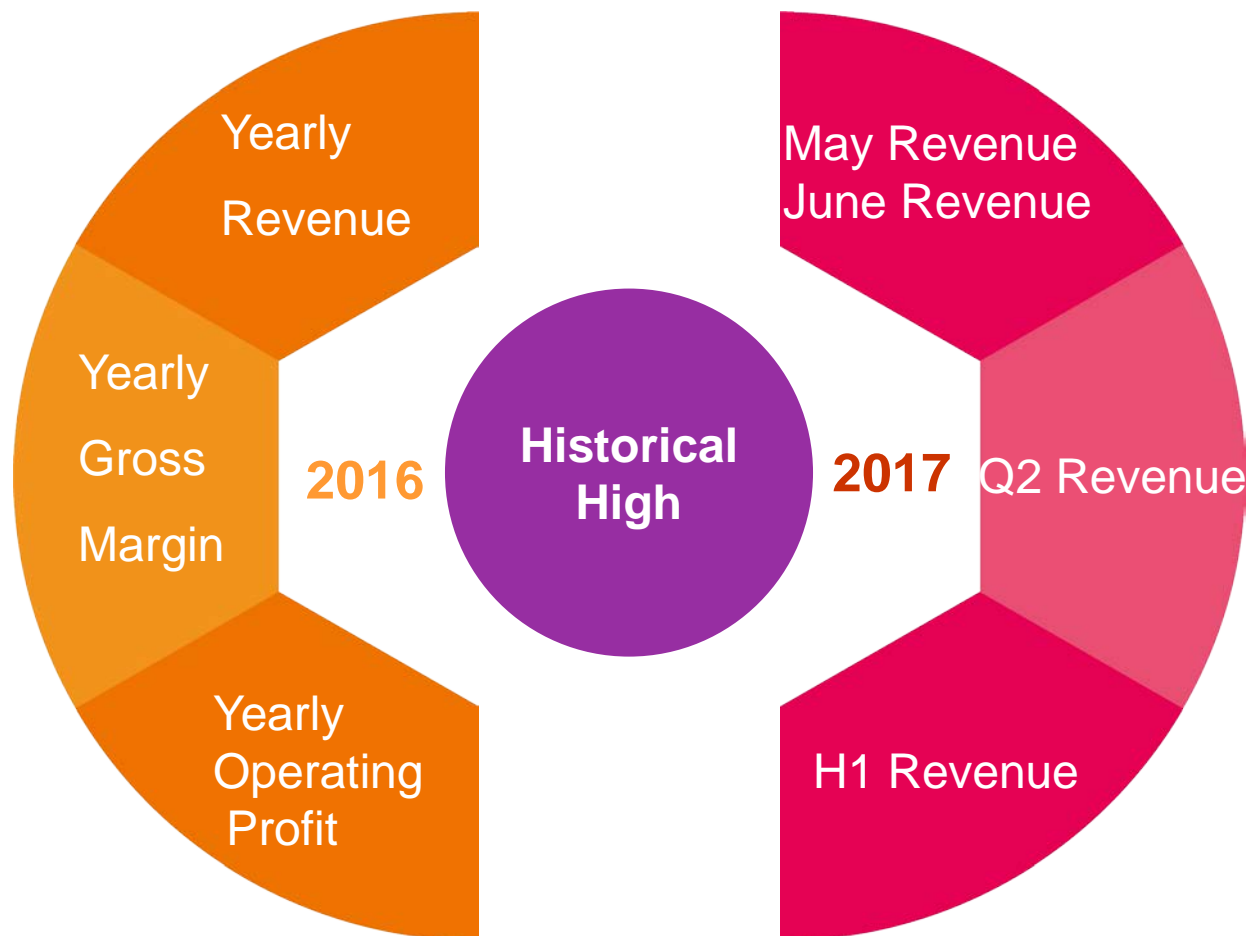
Wafer AVI

Second Arrow

Break the record in year 2016 and first half of year 2017

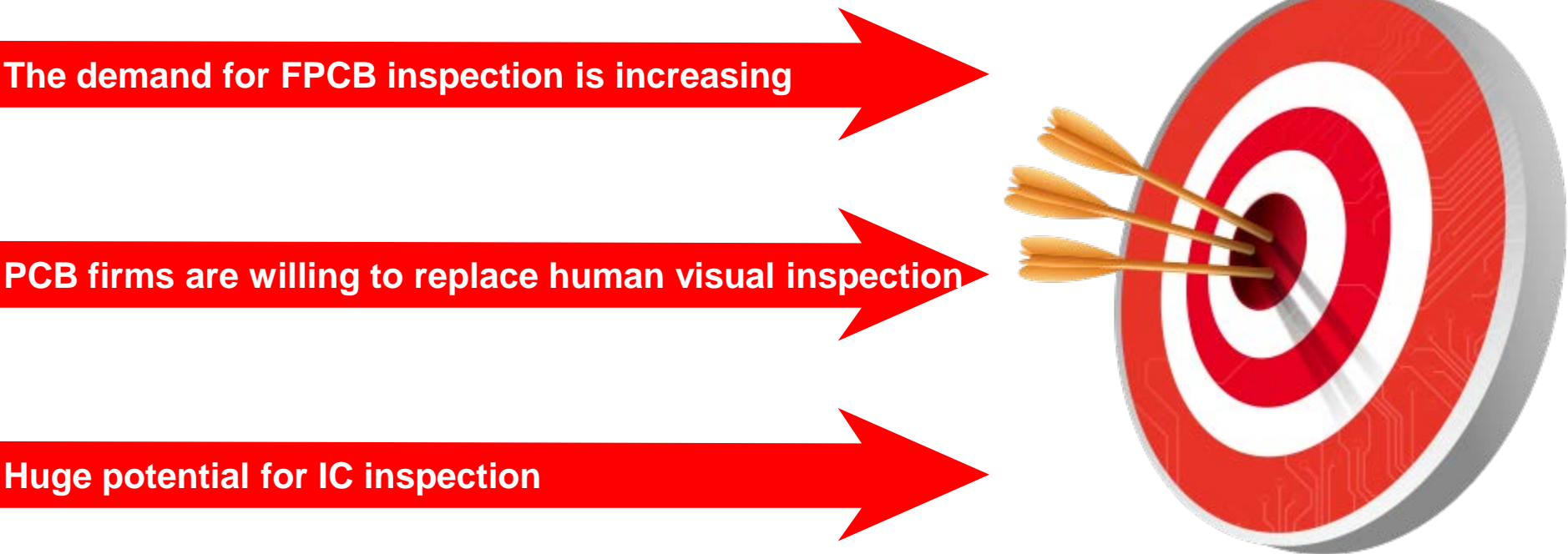


Break the record in year 2016 and first half of year 2017



Gross margin and operating profit of 2017Q2 consolidated financial statement are reviewed by CPA

“Three Arrows” New Product Roadmap proposed in first analyst meeting in 2016



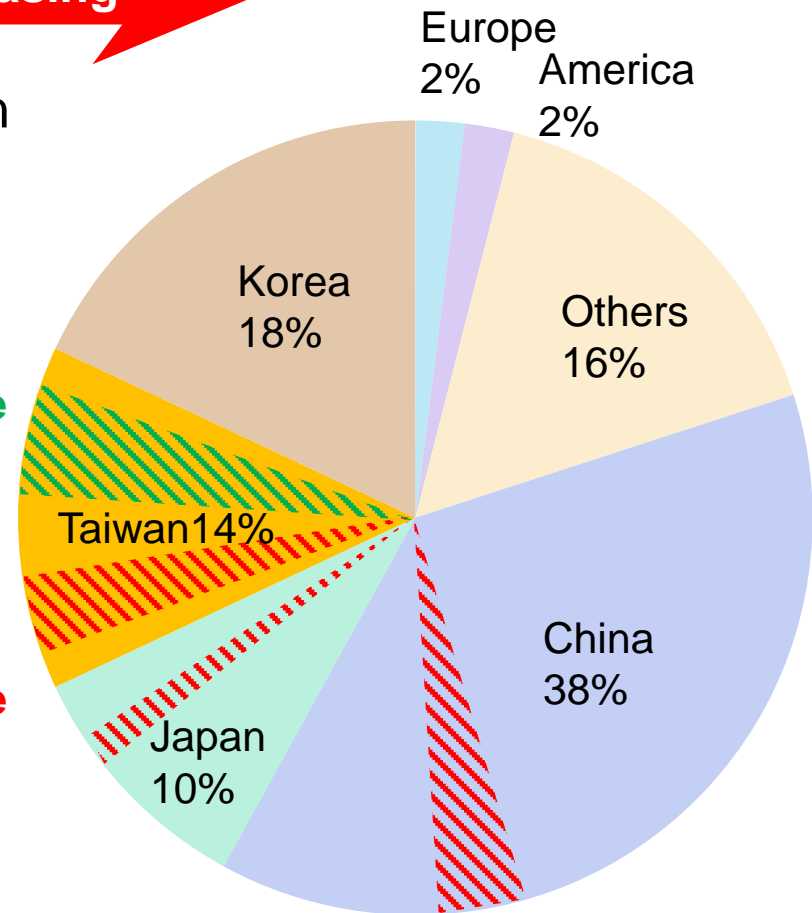
First Arrow: Flexible PCB

The demand for FPCB inspection is increasing

Breakdown of Global FPCB Production

Machvision's share
in 2016

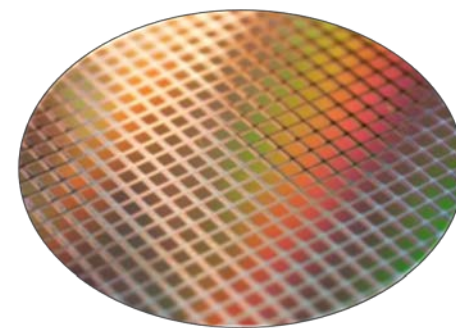
Machvision's share
in 2017H1



Source : Prismark

Second Arrow: IC Inspection

Huge potential for IC inspection



Qualified by leading manufacturer

Channel Deployment

2015.June
Wafer AVI 1 Launched

2016.March
First shipment

2017.Jan.
Qualified by
leading manufacturer

2017.Mar.
Wafer AVI 2

2017.June
Wafer AVI 3

Third Arrow: Automated Inspection

PCB firms are willing to replace human visual inspection

Replacement Demand

1 AOI 4.0 = 7 traditional AOIs + 21 Manpower

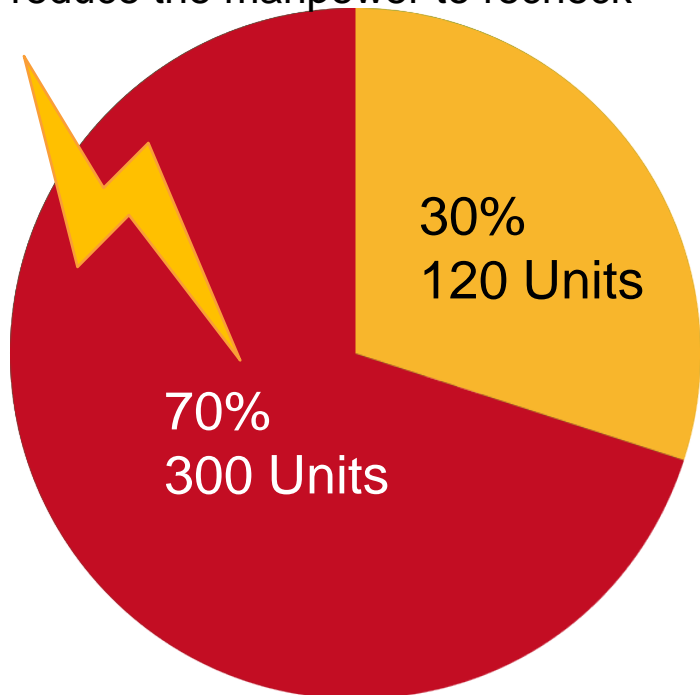


Third Arrow: Automated Inspection

PCB firms are willing to replace human visual inspection

AI Deep Learning

Substantially reduce the manpower to recheck

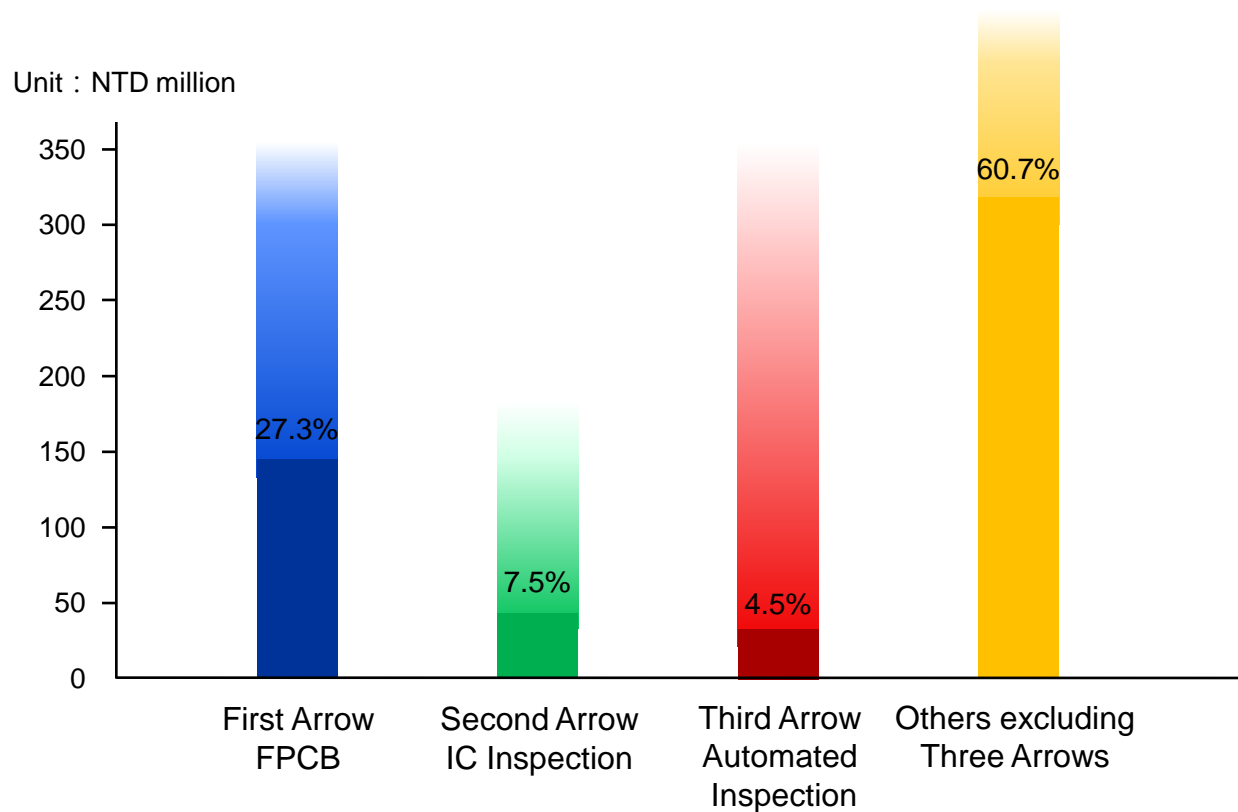


+

**New Factory
Expansion**
about 100 units
per year

Revenue Growth of Three Arrows

► 2017H1

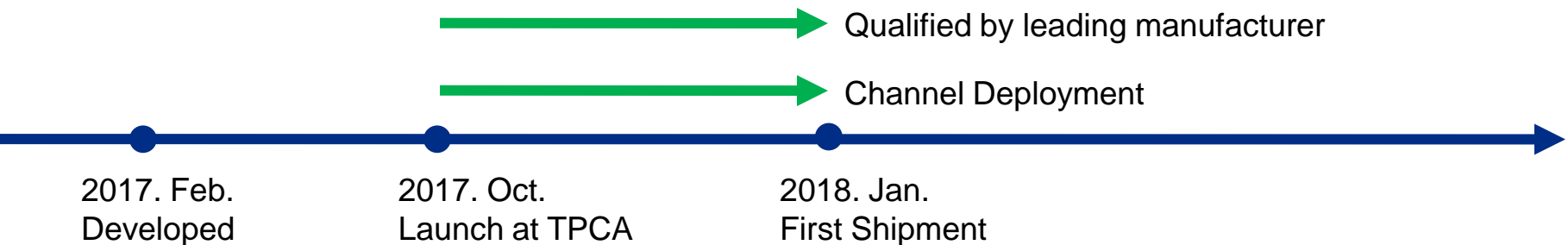


Fourth Arrow : Full Scan System

dimensional measurement used
to be sampling before

Automated measurement requirement for FPCB and PCB

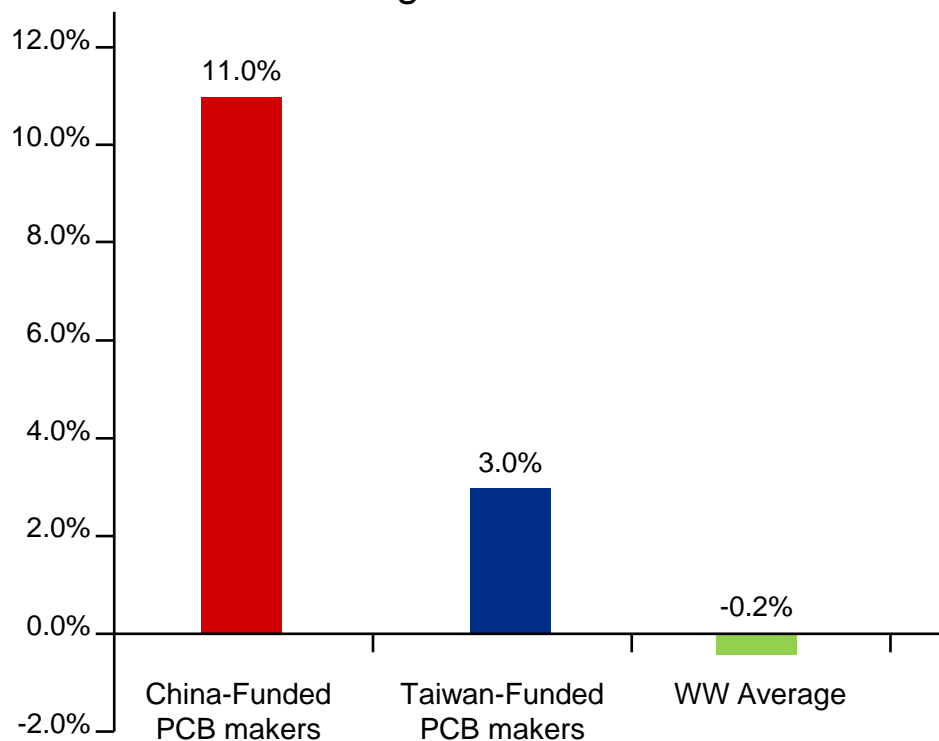
estimate about 100 units per year



Fifth Arrow: New Deployment of Expanding China-Funded Customer Base

Growth Trend of China-Funded PCB Makers

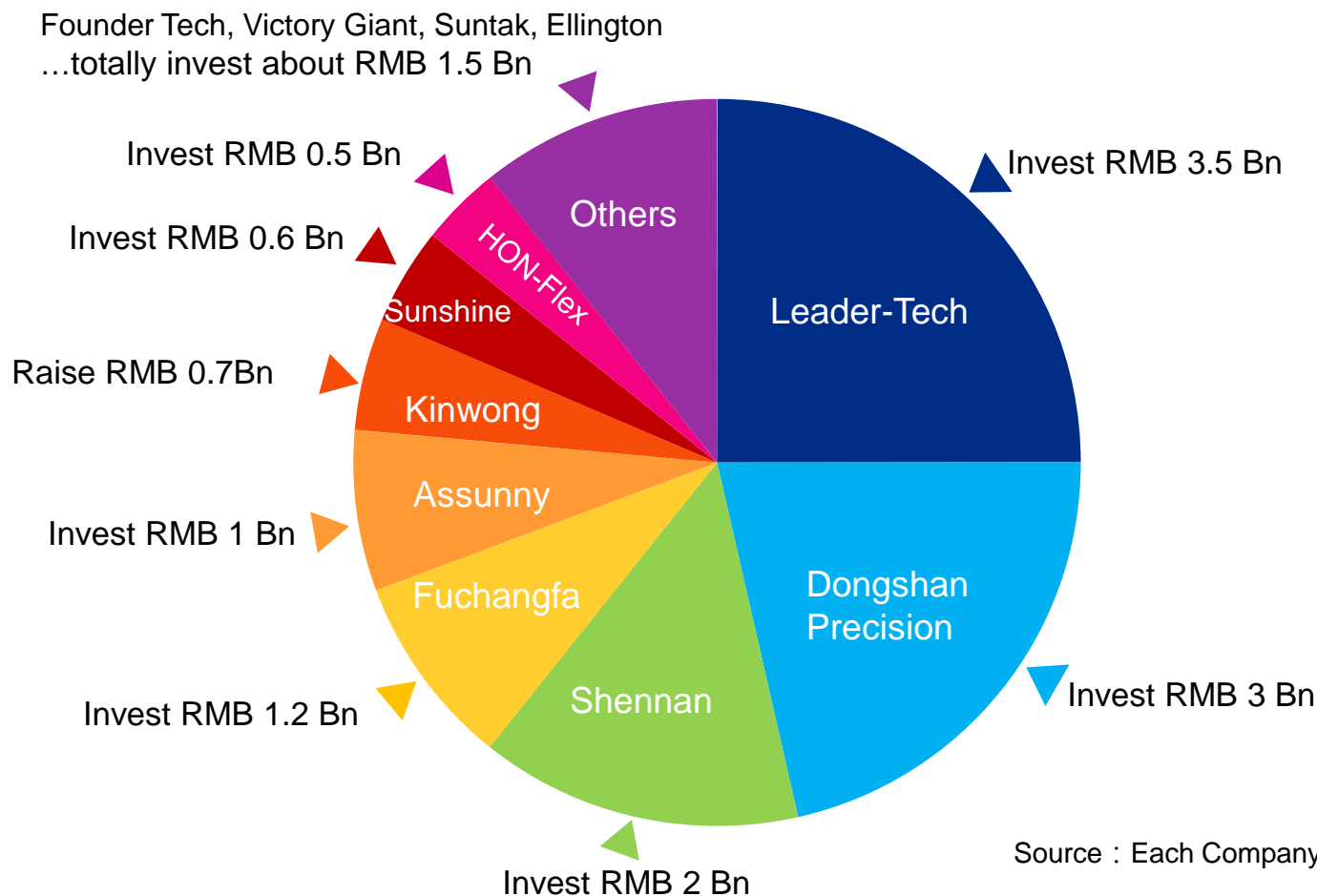
- ▶ China-Funded PCB Makers have the highest revenue CAGR from 2011 to 2015



Source : IEK

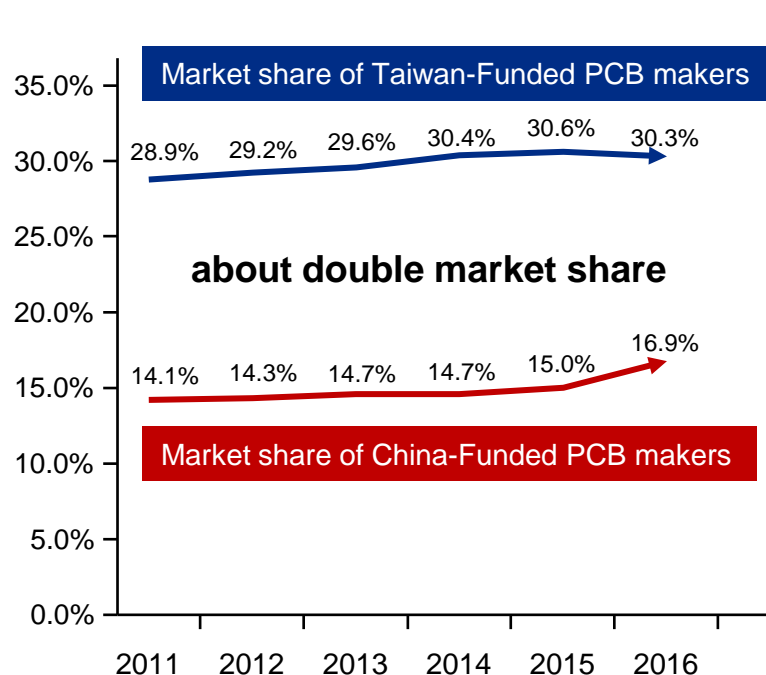
Fifth Arrow: New Deployment of Expanding China-Funded Customer Base

Expansion of China-Funded PCB Makers

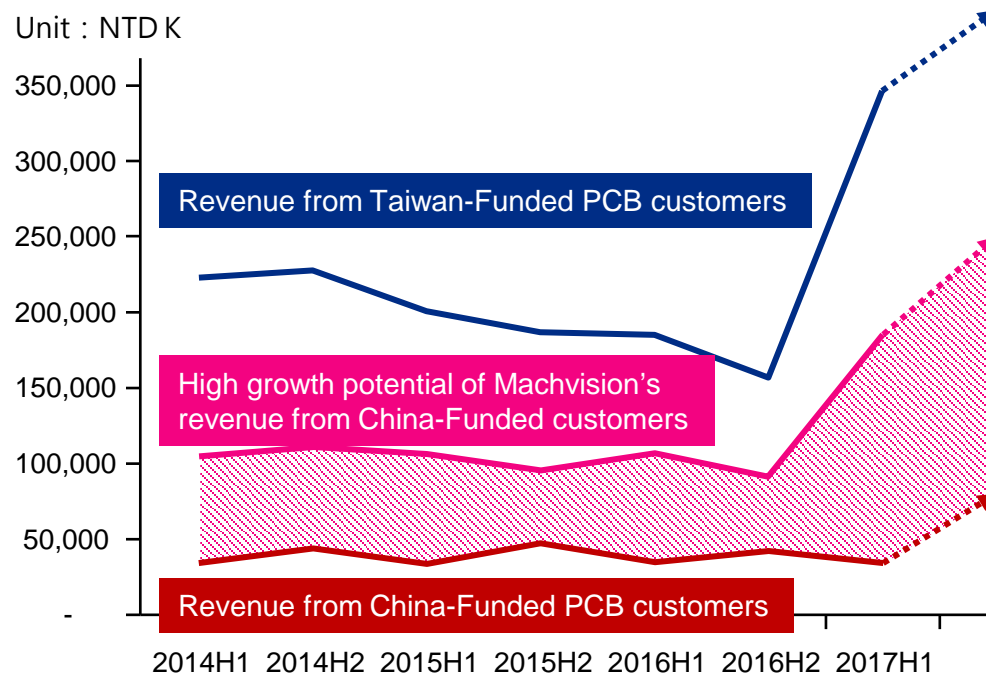


Fifth Arrow: New Deployment of Expanding China-Funded Customer Base

- ▶ Growing market share of China-Funded PCB makers in terms of revenue worldwide
- ▶ High growth potential of Machvision's revenue from China-Funded customers



Source : TPCA, IEK



Source : Machvision

Fifth Arrow: New Deployment of Expanding China-Funded Customer Base

Launch new products for China-Funded customers

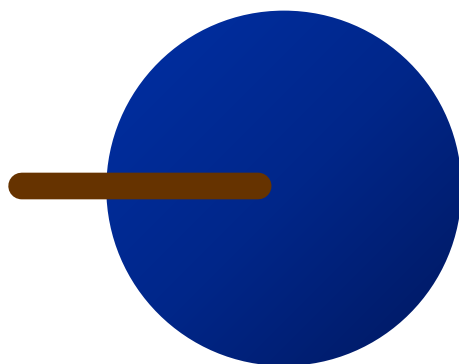
Launching new products with reducing 10% manufacturing cost, the gross margin of new products will be still kept more than 55% even if reducing 20% price.

2017. Q4
Shipment

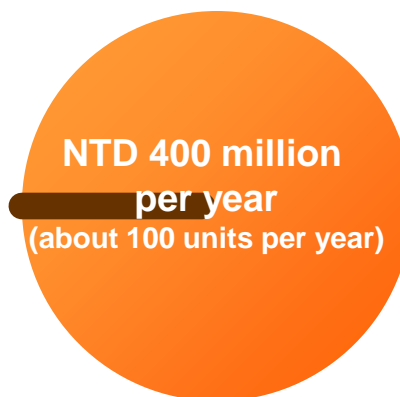


New target market: contribution from Five Arrows in the future

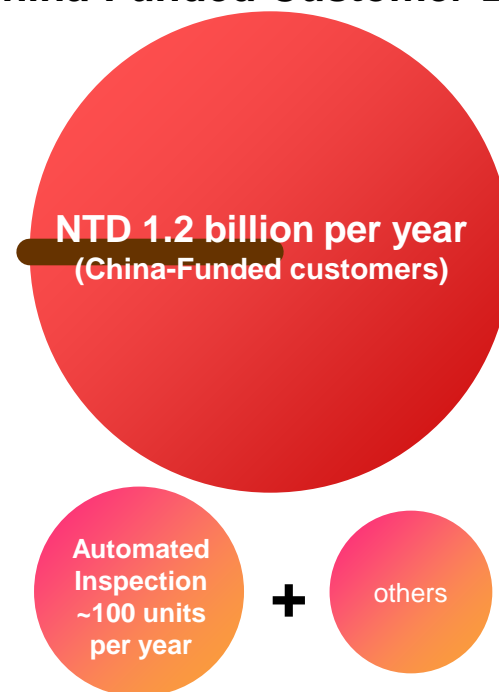
Three Arrows



**Fourth Arrow
Full Scan System**



**Fifth Arrow
New Deployment of Expanding
China-Funded Customer Base**



Unit : NTD K

Item	2017H1	2016	2015	change (2015 to 2016)	%
Revenue	528,325 (MOPS number)	809,631	610,127	199,504	32.7%
Gross Profit		499,269	372,812	126,457	33.9%
Gross margin%		61.7%	61.1%	0.6%	
OP Profit		246,184	182,013	64,171	35.3%
Non-OP		1,002	12,509	-11,507	-92.0%
Net Profit		198,785	158,622	40,163	25.3%
EPS(NTD/share)		4.67	3.72	0.95	

Unit : NTD K

Item	2017Q1	2016 Q1	Increase (Decrease)	%
Revenue	231,275	146,551	84,724	58%
Gross Profit	146,241	86,878	59,363	68%
Gross Margin %	63.2%	59.3%	3.9%	
OP Expense	61,735	50,323	11,412	23%
OP Profit	84,506	36,555	47,951	131%
Non-OP	-12,064	-5,384	-6,680	-124%
Pretax Profit	72,442	31,171	41,271	132%
Tax	10,010	4,862	5,148	105%
Minority Interest	2,434	-1,487		
After tax Profit	59,998	27,796	32,202	116%
EPS (NTD/share)	1.41	0.65	0.76	



Thank You