

Greater Value Together

LS



Who is Jin?

- Education
 - ✓ BS from SNU & MS and Ph.D. in ME from Stanford University
- Experiences both in large global corporations and SV start-ups
 - ✓ President of LS SVO, Palo Alto, CA
 - ✓ General Manager at GE Healthcare IT
 - ✓ CTO at Mobile Money ventures, San Mateo, CA
 - ✓ CTO at Tmaxsoft, San Jose, CA
 - ✓ CEO at Amicuswireless, Sunnyvale, CA
 - ✓ 11.5 Years at Intel Corporation, Santa Clara, CA
- Mixed background both in technology and business
 - ✓ 10+ patents and 10+ papers
 - ✓ Legal, Finance, Operation, Engineering
- Broad Technology Areas
 - ✓ ME, EE, CS, Robotics, Semiconductors, Enterprise SW, Mobile SW
- Extensive human networking both in US and Korea

LS SMART & GREEN TECHNOLOGY COMPANY



**CABLES &
CABLING
SYSTEMS**



**ELECTRIC
POWER &
AUTOMATION**



**MATERIALS &
RECYCLING**

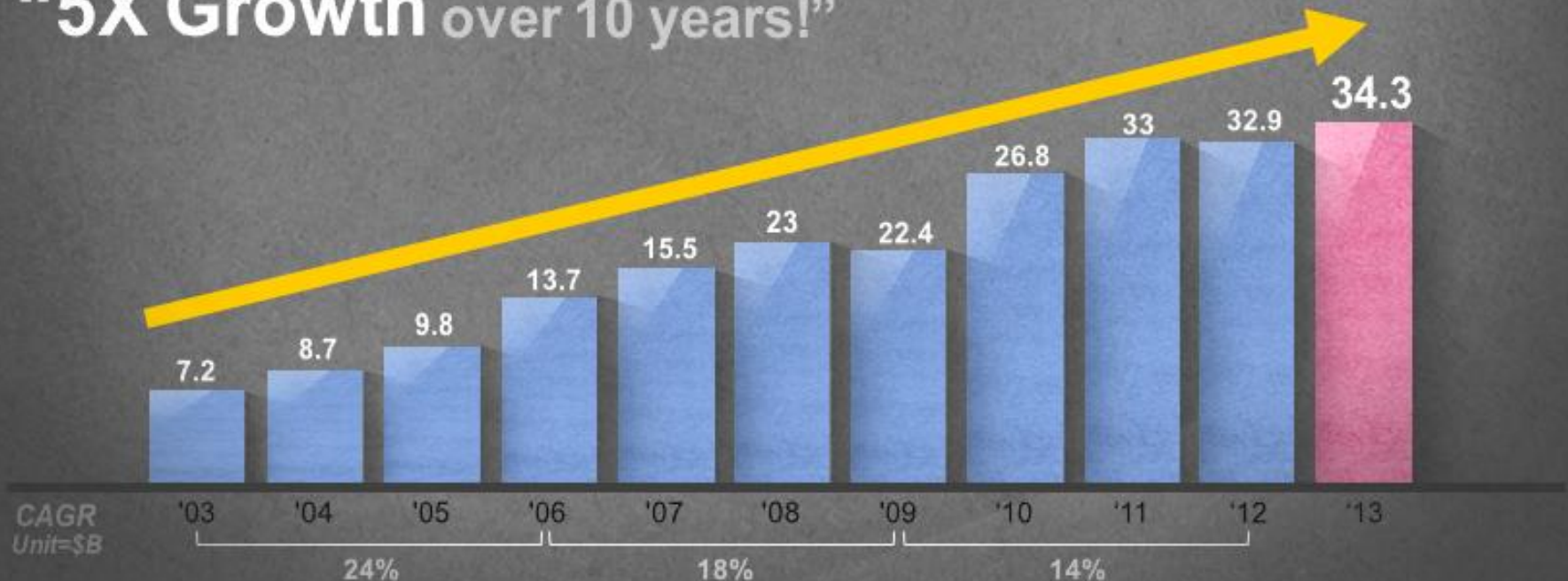


**LIFE
ENERGY**



**MACHINERY &
COMPONENTS**

“5X Growth over 10 years!”





LS SVO

Open Innovation

Next Generation Power Infra Technologies

Smart
Grid

S/W

Adv.
Material

Silicon Valley

Greater Chance to Success

Joint Venture

Worldwide
Markets

M&A

LS

Hi-Tech Business Environment in Korea (Healthcare)

Medical infra structure



California vs S. Korea



Size: ranked 3rd,
Population : 1st
in the U.S.

- **1/4** of CA in terms of land mass
- **30%** more population
- **3** times more hospitals
- **4** times more Beds
- **1st** HIMSS Level 7 digital hospital outside US
- **100%** EMR penetration in general hospital

Concentrated and digitalized

Digital DNA



The New York Times

February 21, 2011
Home Internet May Get Even Faster in South Korea
By MARK McDONALD

- **#1** Internet distribution rate: 95.9%
- **3** times faster than US @ office
- **20** times faster than US @ home
- **200** times faster than US in 2012

Early adopters

Government Support



Gov't investment



- **97** U-health projects
- Over **\$1B** investment so far

Policy



- 2002 : e-prescribing service
- 2010 Jan.: remote medical practice
- 2010 Apr.~: pending decision of HIE service
- Plan: incentive scheme of HIE

Early Market Support

Korea Ecosystem as Growth Vehicle

Reference Sites

Early Adopter Market

Regional Markets



Universities / Government

Eng. Talents Supports



Global Top-Tier Corporations



Ecosystem

- Global Top-Tier Corporation Partnership
- Eng. Talents and Government Support
- Early Adopter Market
- Proximity to JPN/CHN Markets

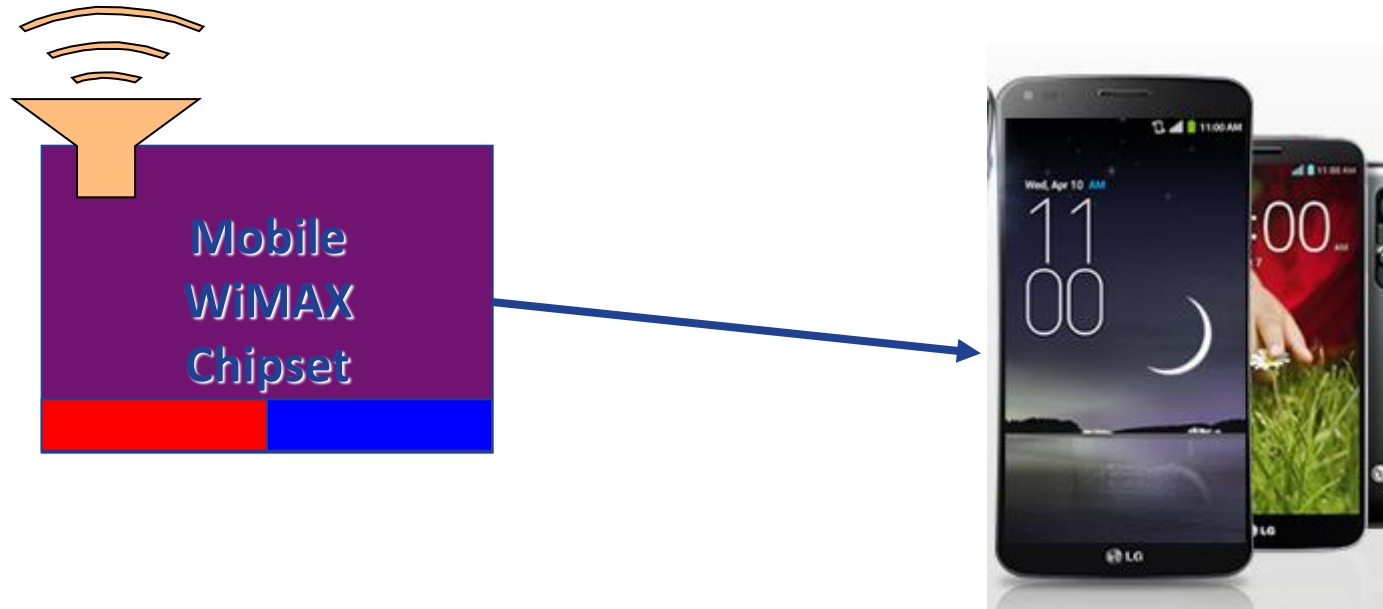
Beyond Korea to APAC & China

51 cities with over 1M population each located within 3.5 hour



	China		Hong Kong
	Japan		Thailand
	Korea		Taiwan
	Singapore		Philippines
	Indonesia		Malaysia
	Australia / New Zealand		

Example 1: Mobile WiMAX Chipset



■ Conventional approach

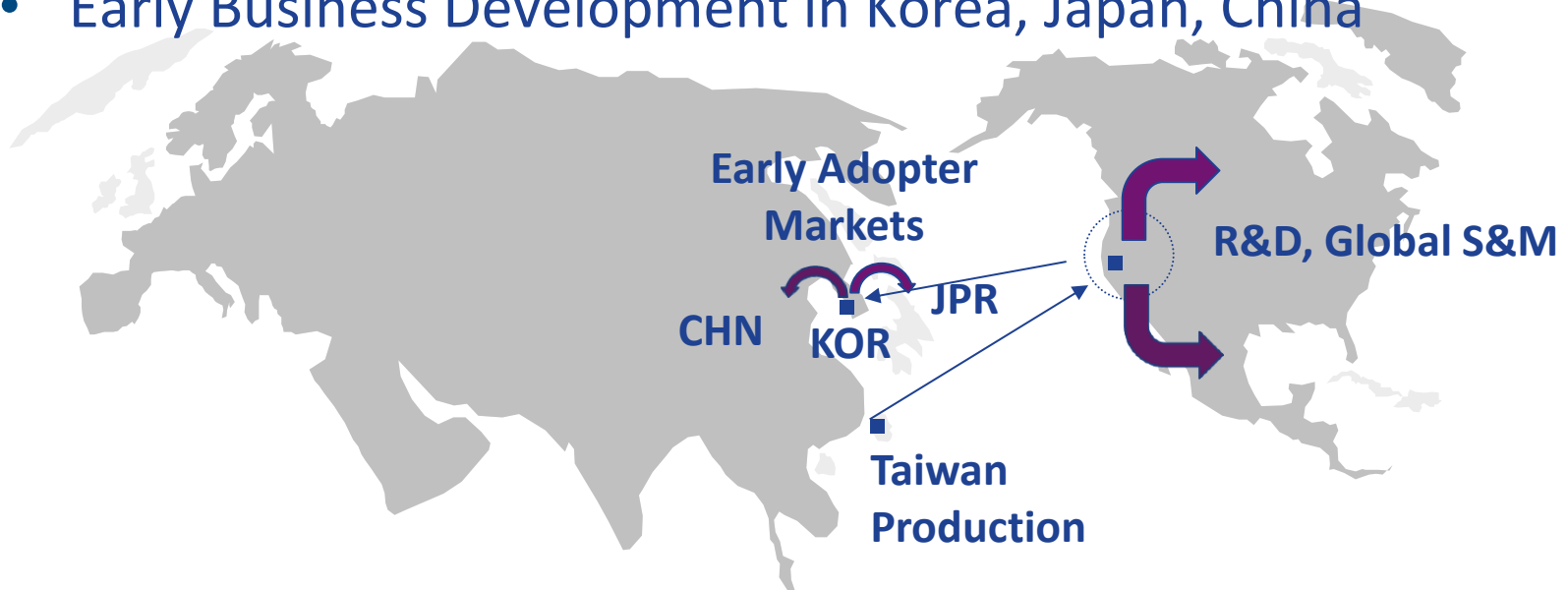
- Multi-chip (large form factor)
- Multi-chip cost
- High power consumption

➔ **Problem!**

Growth Model with APAC Partners

Fabless semiconductor

- R&D and Global Sales & Marketing in US
- Chip fabrication in Taiwan
- Module and System in Japan and Korea
- Early Business Development in Korea, Japan, China

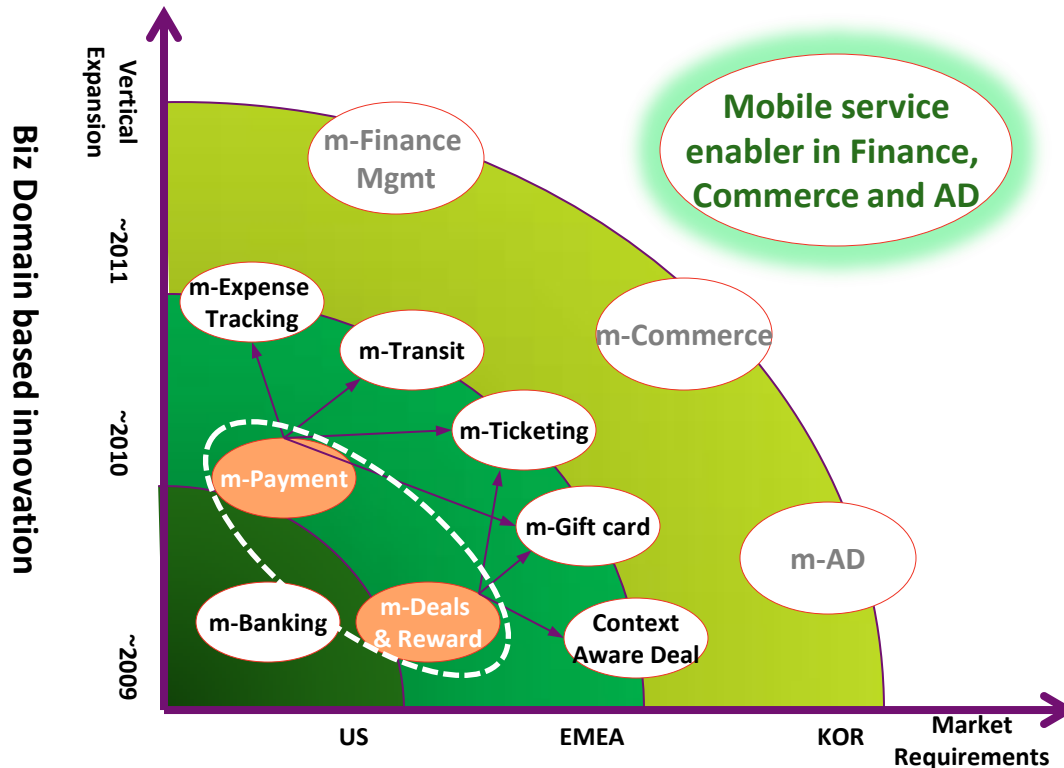


Example 2: Mobile SW

Aimed at **differentiated technology platform** (Mobile Middleware) to seamlessly offer component package modules critical to addressing the holistic consumer finance experience



Growth Strategy



- Utilized KOREA as “m-banking platform development and a reference site”
- Strengthened the platform through additional customer engagements in APAC regions
- Reference implementations serve as “silver-bullet” for US market penetration
- Expansion to global market
- Repeat the cycle for additional value-added service modules

Example 3: Robotics

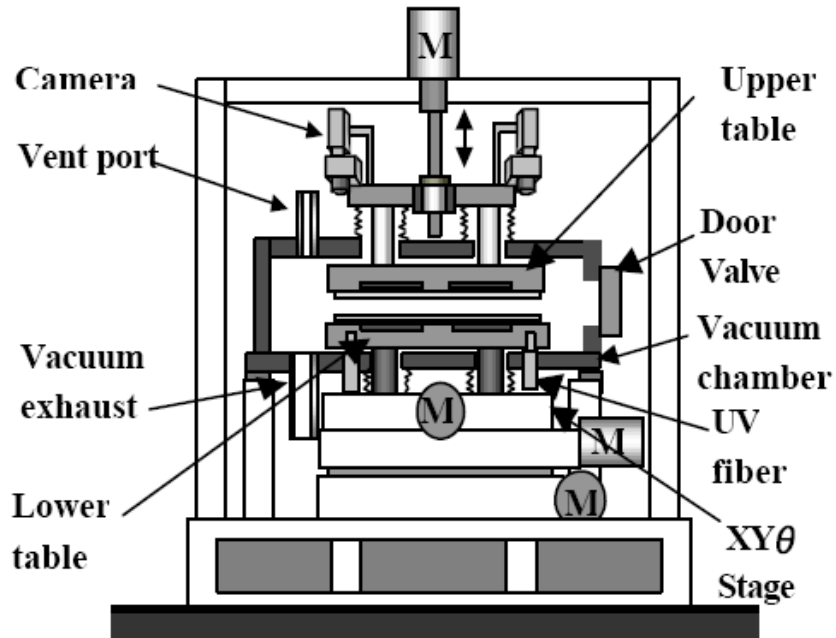


StickyBot

Gecko chuck Demonstration

Chuck Demo

Business IDEA from LCD Manufacturer



Schematics of ODF Chamber

(Upper & Lower tables are current ESC modules)

ODF (one drop filling) -Faster Liquid crystal filling process

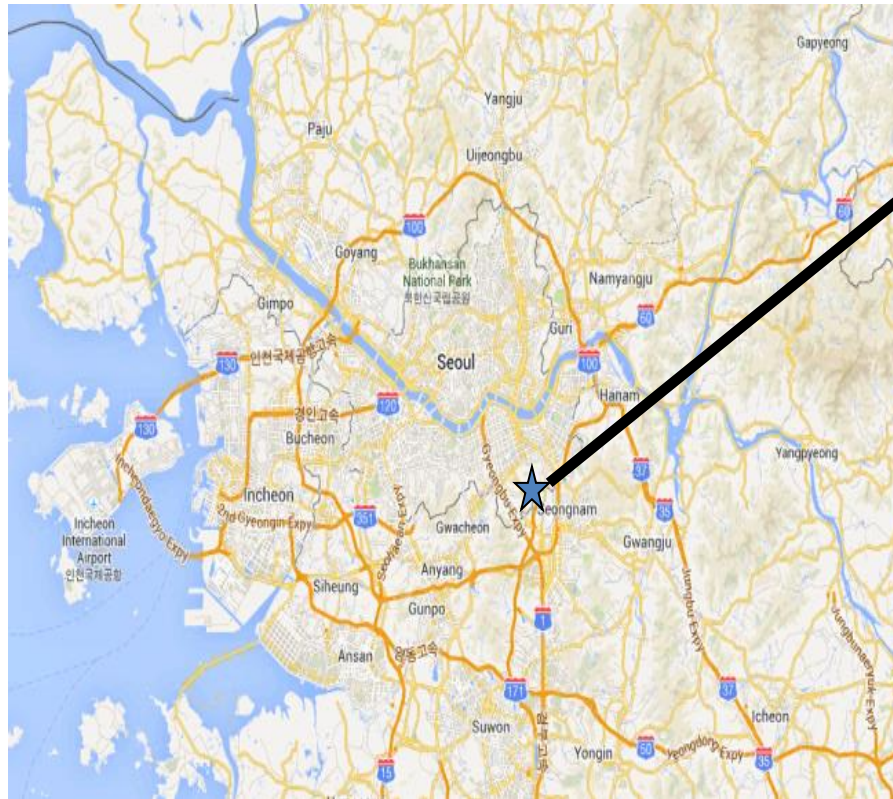
ESC (Electro Static Chuck) is a current module in ODF Chamber

- Used in holding TFT and C/F panel under vacuum

Customers want Gecko Chuck

- Low cost
- No Electro Static Force

Pangyo Techno Valley



AhnLab **SOLiD**
TECHNOLOGIES





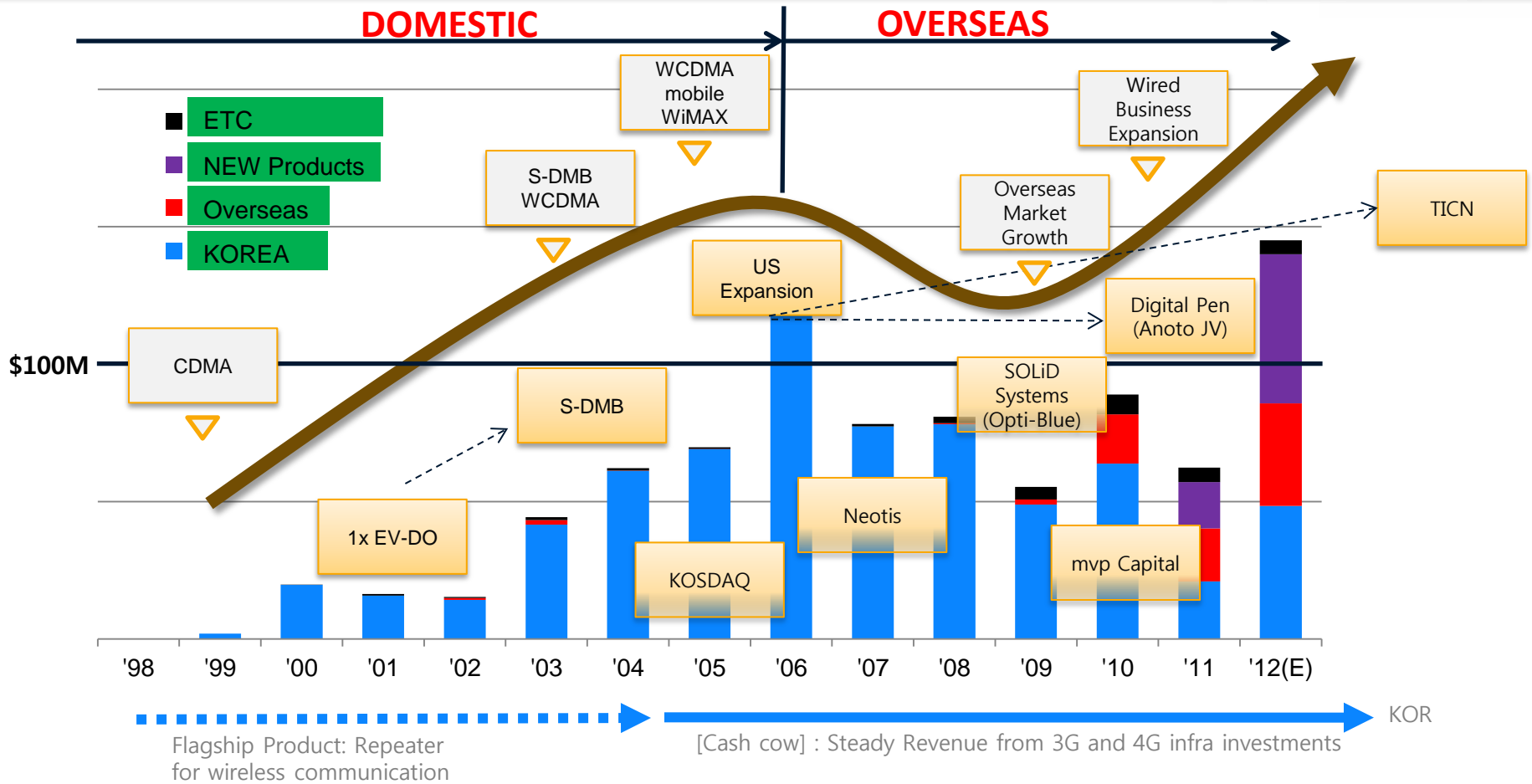
► Example of Korean Startup Life-cycle

- Founding members of engineering Ph.Ds.
- Value proposition of technology differentiation (R&D focus)
- Successful IPO to KOSDAQ within 6 years
- Expansion to global markets with technology foundation
 - More than 62,000 install-bases and 70+ patents
 - ~60 engineers with almost half holding advanced degrees
- NASDAQ?

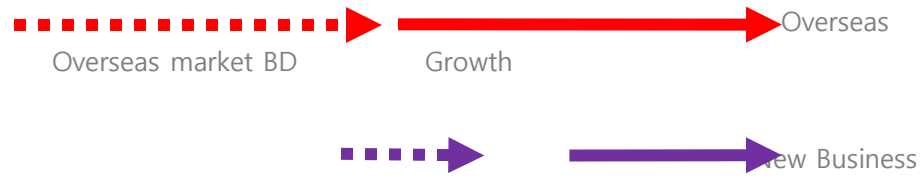


Company	SOLiD (050890)
CEOs	Dr. Joon Chung and Dr. SH Lee
Incorporation	Nov. 5, 1998
# of Employees	154 (as of Nov., 2012)
Address	10th Floor, SOLiD Space 220 Pangyoyeok-ro Bundang-gu Seongnam-si, Gyeonggi-do, Korea
Financials	Revenue of \$160M and OP of \$20M in 2013

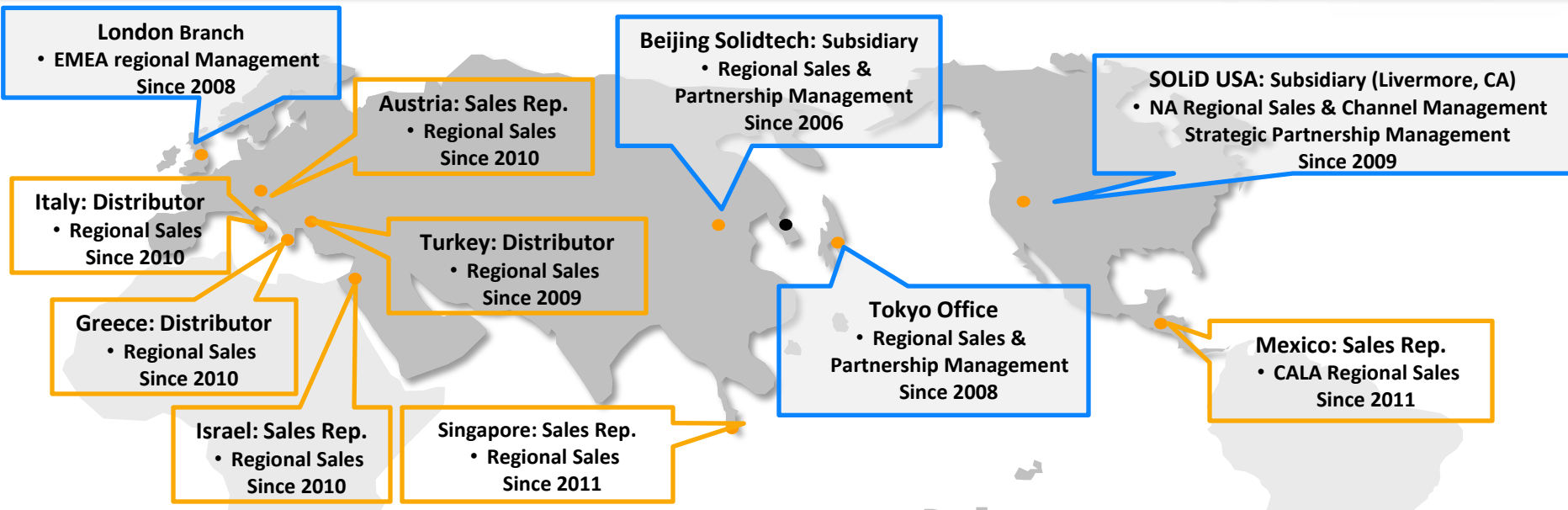
14 years of SOLiD



- ▶ Innovations in early days
 - Digital Repeaters
 - Adaptive Digital Pre-distortion Amplifier
 - In-building Hybrid Fiber Coax Repeater



Worldwide Presence



JAPAN	USA	EU	CHINA & Others
<ul style="list-style-type: none"> • Very Low Power ICS deployment since 2010 • High Power LTE ICS repeater by KDDI – First commercial shipping in December, 2011. 	<ul style="list-style-type: none"> • Approved Vendor for 3/4G DAS for VzW & Sprint • Providing Fiber DAS to Enterprise market (more than 100 sites so far) • Commercial launching of Hi-Power DAS for NY Subway 	<ul style="list-style-type: none"> • Very Low Power ICS commercial shipping since March, 2008 • High Power ICS commercial shipping since August, 2010 	<ul style="list-style-type: none"> • Partnership with Key System Vendors for ICS module • High Power ICS with SOLiD ICS module has been in service since 2009
• USD 32M	• USD 35M	• USD 4.5M	• USD 2M

• Sales('10 ~ '12)



Leading Solution, LS

Thank You