

The Wait is Over: New Market is Taking-Off for Optical Interconnection

~ Open Innovation is KEY for development acceleration ~

Excerpt for WEB site

Advanced Photonics, Inc.
2008.12.01 Ver 3.0

Examples in A Pi



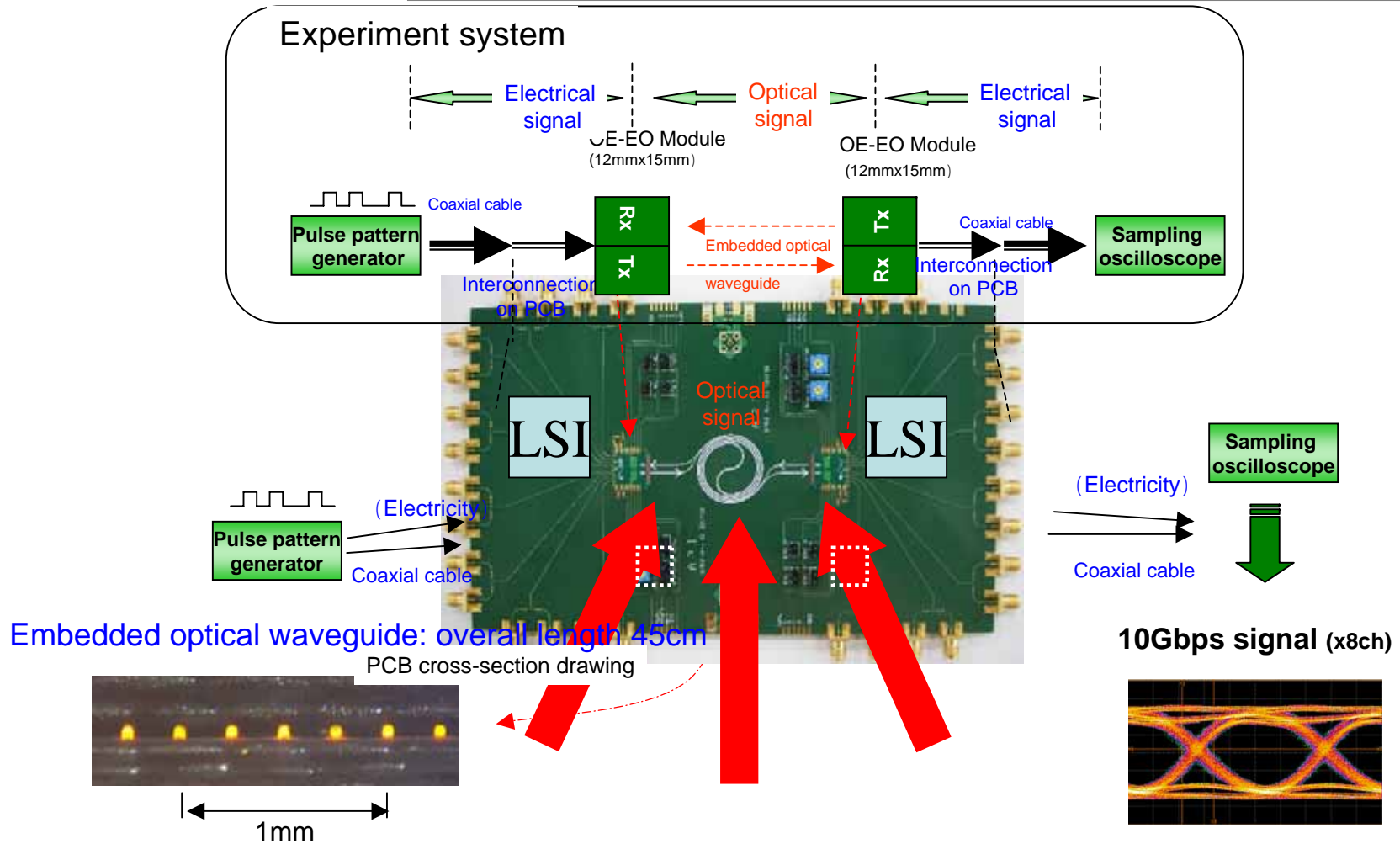
02. Company Profile

A Pi is a university spin-off
 with total design & development capabilities
 in optical interconnection

□ Name in Japanese	Sentan Photonics Kabushiki Kaisha
□ Name in English	Advanced Photonics, Inc.
□ Head-office Address	7-1-103 Haneda Asahicho, Ota-ku, Tokyo
□ Joint Research Office	Room404, 3rd Bldg., The University of Tokyo Research Center for Advanced Science and Technology, 6-1, Komaba 4-Chome, Meguro-Ku, Tokyo
□ Line of business	Developing, designing, manufacturing and selling high-speed, high-capacity optical circuit board
□ Capital	Yen 188 Million
□ Outstanding Shares	28,775 shares
□ Management	
Supreme Technology Advisor / Director	Yoshiaki Nakano (Prof. of the University of Tokyo)
President & CEO	Makoto Shigematsu
Director & C T O	Song Xueliang
Auditor	Takuro Wakabayashi (President of venture capital ASTEC)
Legal Advisor	A Z X General Law Office

03. Product on Display

On dynamic display is PCB with
embedded optical waveguide (45cm)
(covered by Nikkei Business Daily)



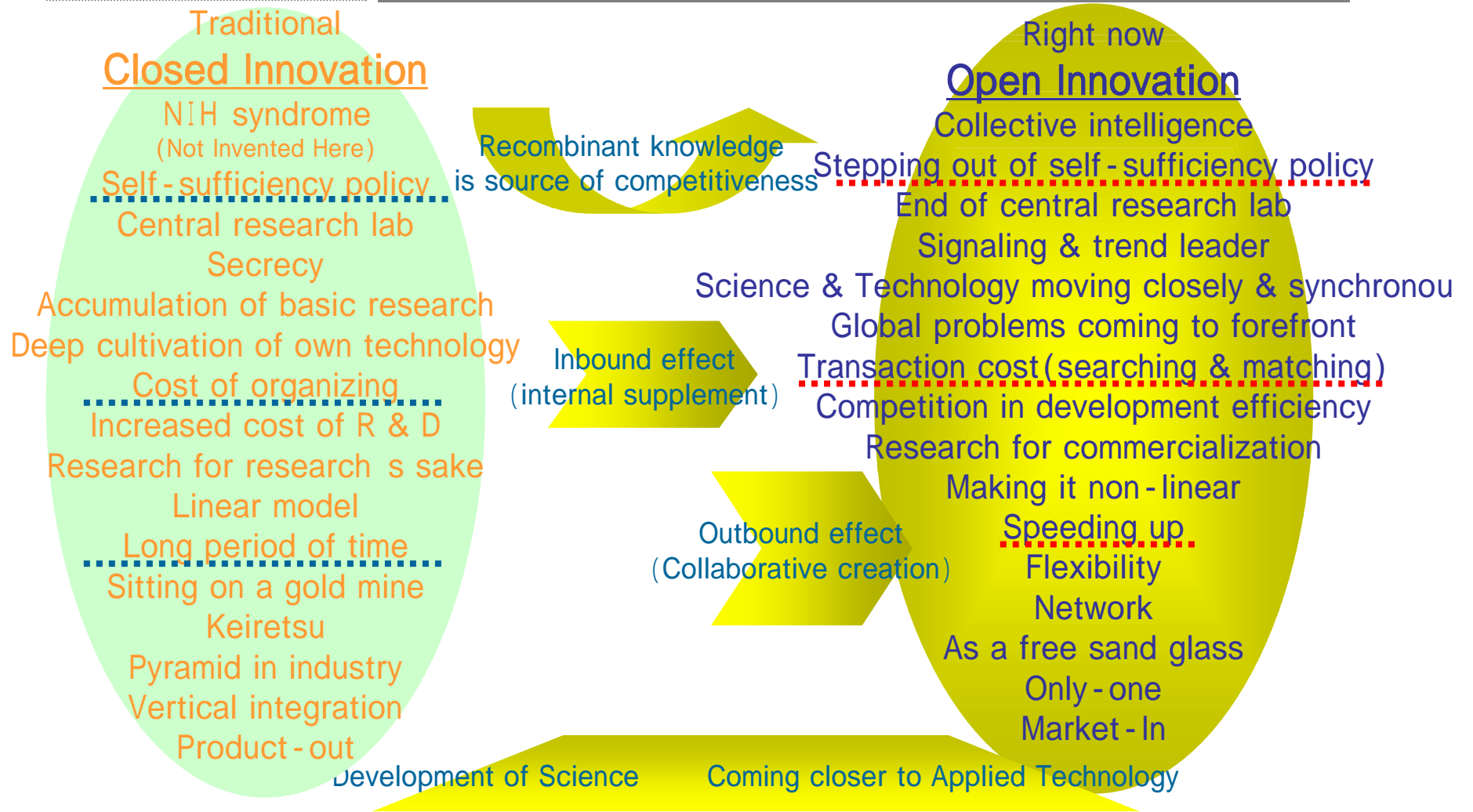
Open Innovation



01. What's Open Innovation?

Purposive inflows of "External" technology to accelerate "Internal" R&D

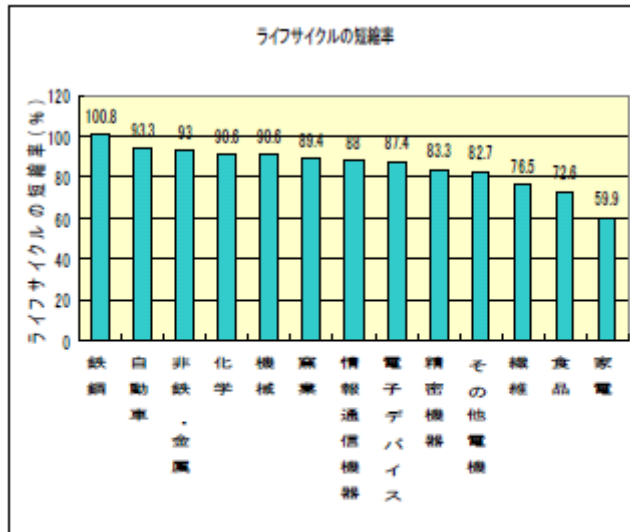
Henry Chesbrough, 2006



02. Changes in development environment

Fate of the company = Improvement in development efficiency

新製品の短命化



(資料)経済産業省他「2007年版ものづくり白書」2007年5月

(注)ライフサイクル短縮率=
 (主力製品の現在のライフサイクル年数(産業別平均値)) / (主力製品の5年前のライフサイクル年数(産業別平均値))

DRAMの各世代ごとの投資金額



Increase in development investments

(資料)半導体産業研究所 (SIRIJ) 調査

03. Change of research expenditure

Increasing share of external elements in development activities of companies

07

Share of external fund in research expenditure of business companies
企業の研究費に占める外部資金のウエート

OUT

IN

	1990年	1995年	2000年	2005年
自己負担研究費に占める 社外支出研究費の比率	8.3	11.1	11.1	13.1
社内使用研究費に占める 受入研究費の比率		3.6	5.7	9.6

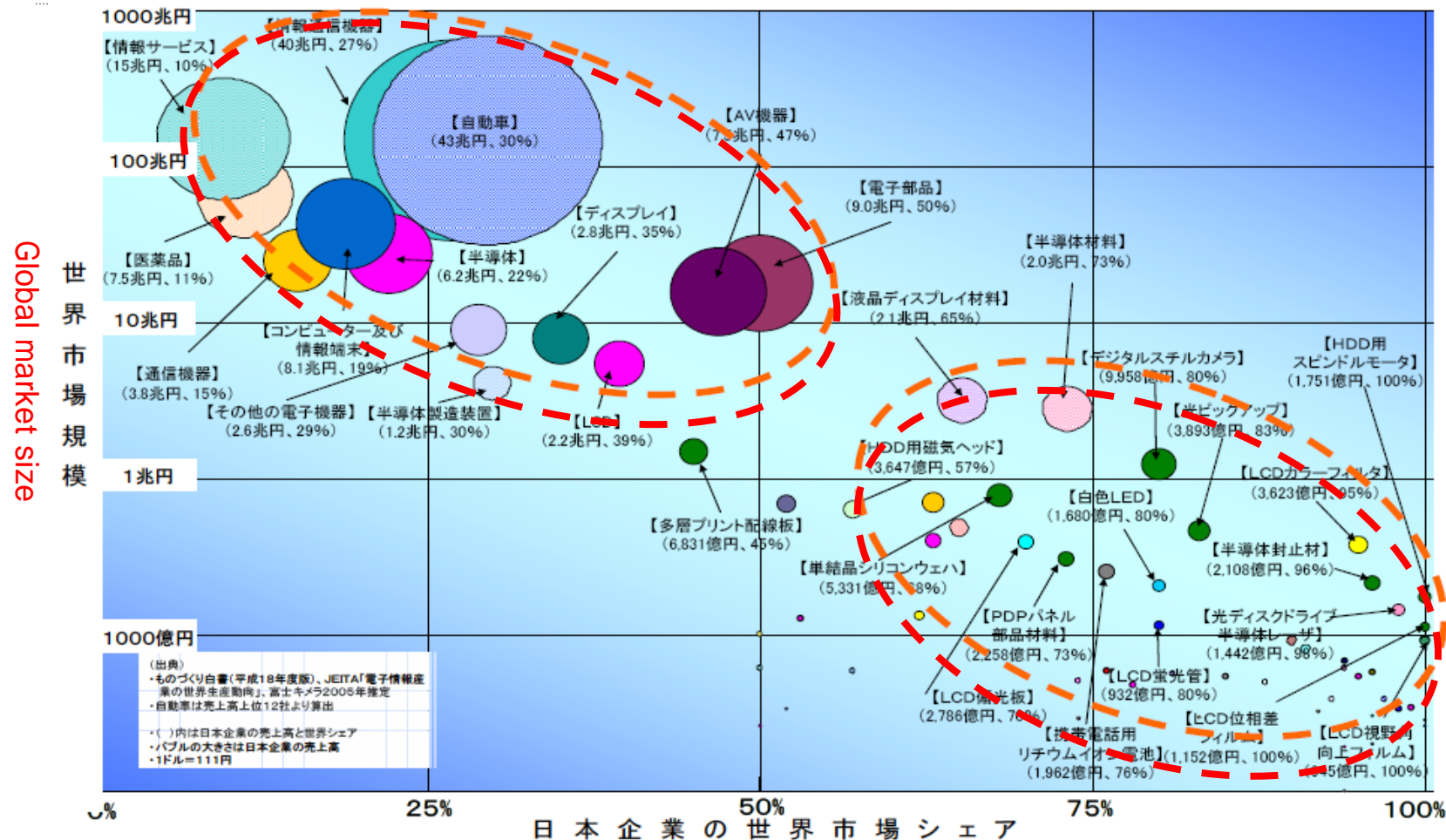
出所：総務省「科学技術研究調査報告書」より
東レ経営研究所 増田貴司氏作成

OUT : Share of paid-out research expenses in the total research expenditure

IN : Share of received fund for research in the total internal research expenditure

04. Global Share

Japan s elemental technologies boasting high share ~ Make full use in open innovation



Share of Japanese companies in Global Market

05.

K F S (Key Factor for Success) for successful open innovation

Establish relationship of mutual trust among members

Share problems, encourage free discussion

Let open innovation and closed innovation complement one another

Clarify your core technology to be guarded

Clarify division of roles in the area to be developed

Fusion of competitive core technology from both sides

Select theme with commercialization as precondition

No R&D for merely reporting s sake

Clarify time axis

Make process schedule chart, share clue to distance to goal

Value produce - talents (section)

Accept unavoidable uncertainty

"Partnership", secure fair and equitable operation

Counting one s chickens before they are hatched

Not outsourcing !

How about converting
your main products into
OPTICAL
together with us !

First, just contact us
info-api@advancedphotonics.co.jp

Advanced Photonics, Inc.