



Connecting.TW

放大台灣經濟

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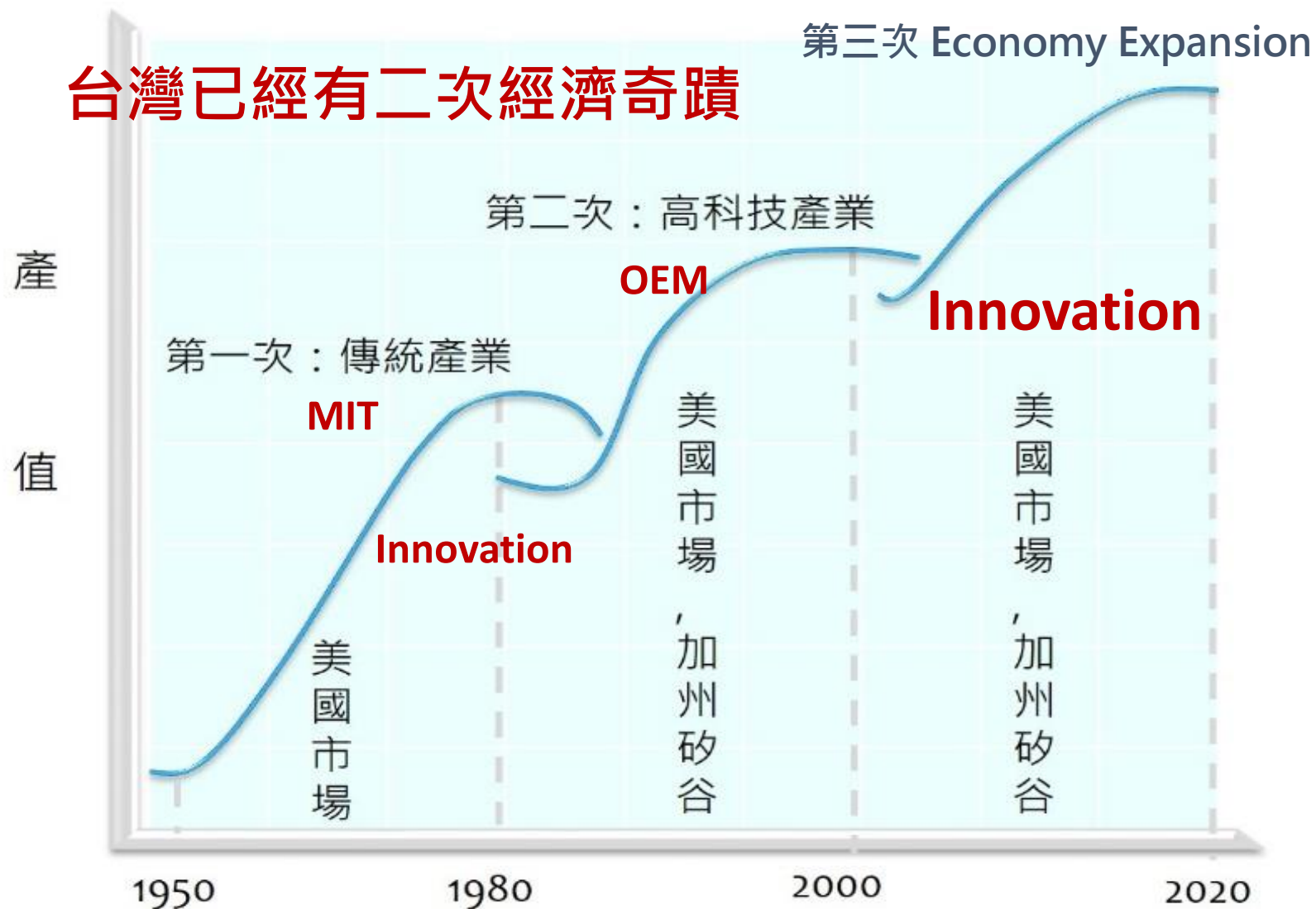
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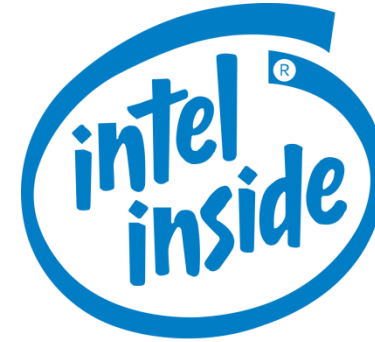
Secrets of Innovations – Continuing Experimentation

May 5, 2018

放大台灣 – 東進美國, 打大聯盟



What Do You See in Their Core Competency?



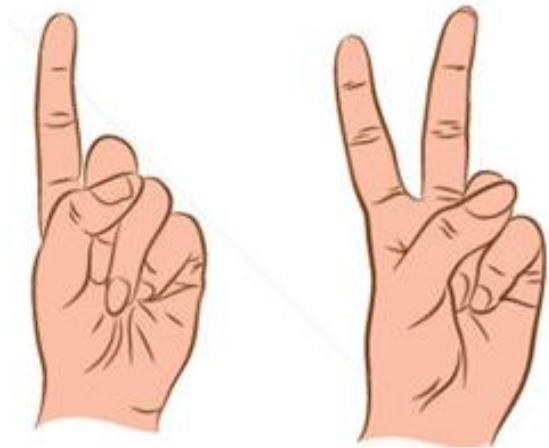
Core Competency

Recap

#1 or #2 Rule

Make Money

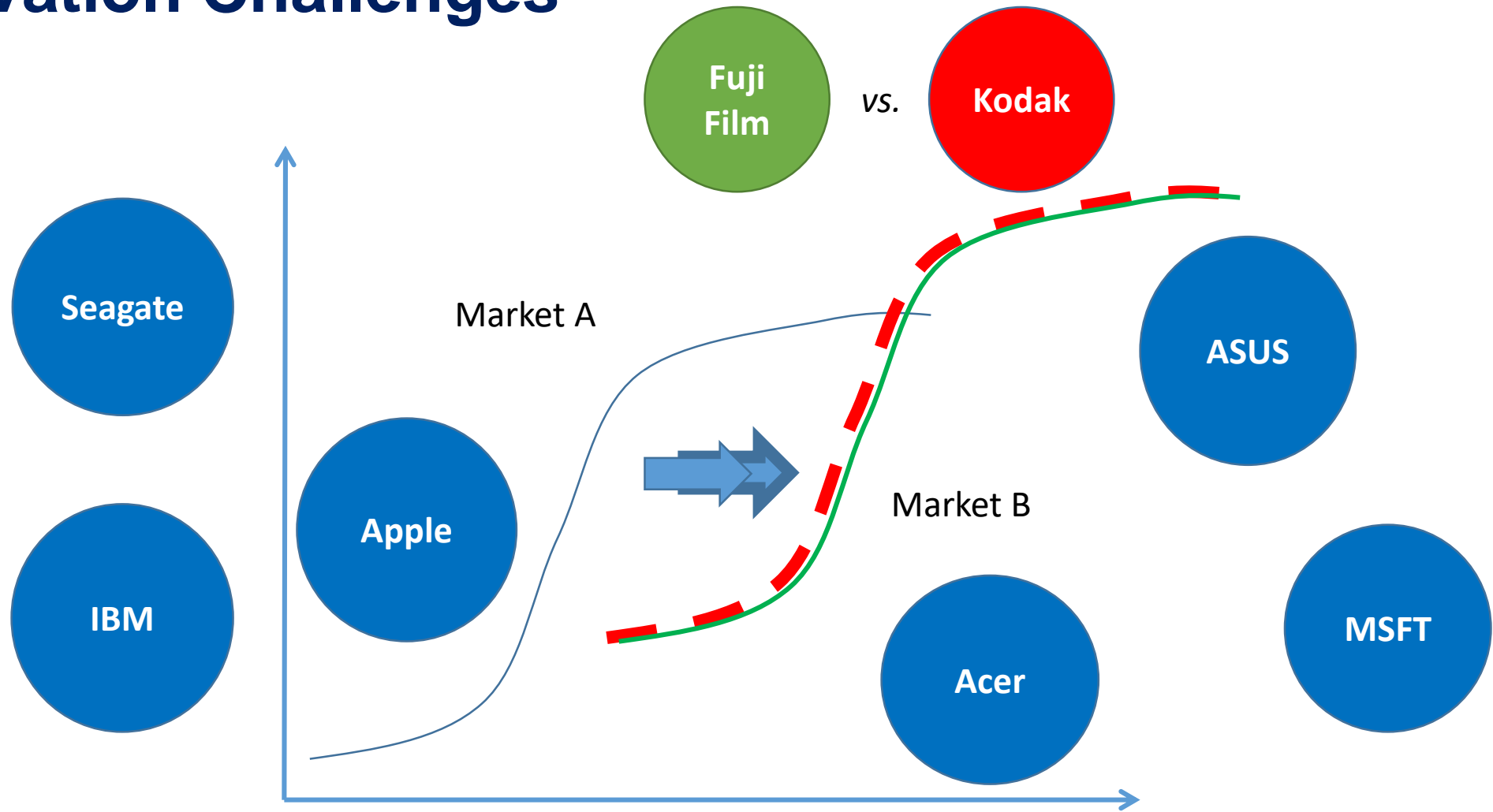
Passion



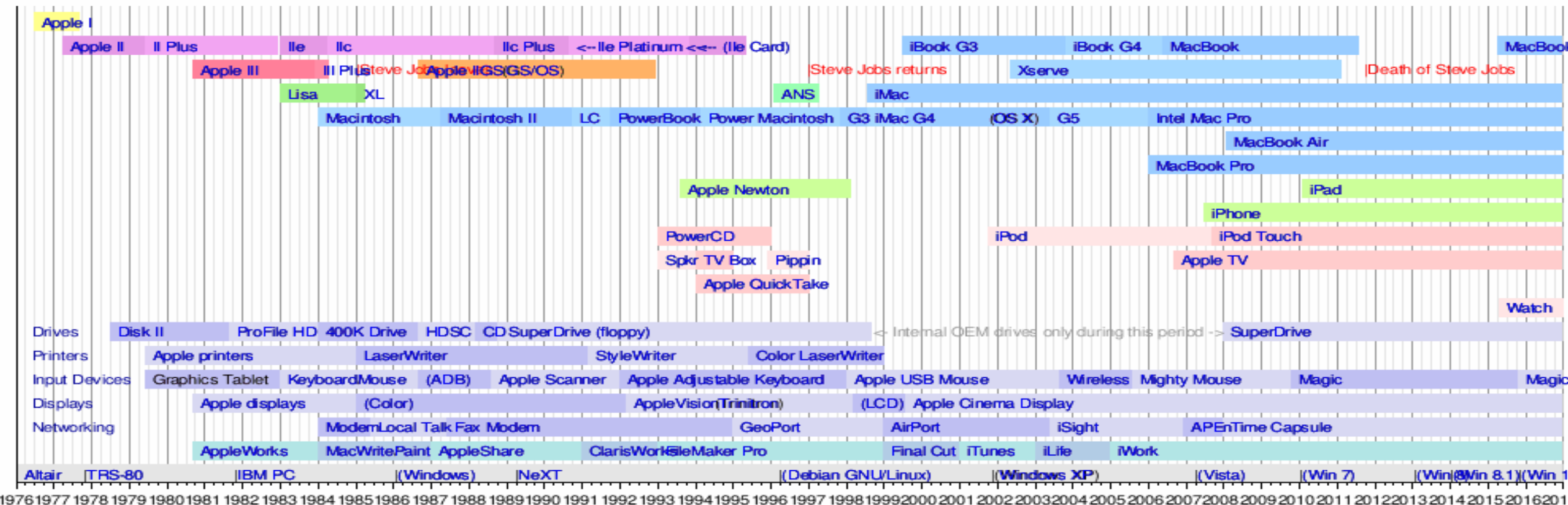
Five Secrets of Innovation

- Disruptive Products – Create new market to upset old market
 - Apple PC > iPod > iPad > iPhone
- Core Competency – Number One or Two in the World
 - Fuji Film vs. Kodak
- Continuing Experimentation
- Secrecy, Paranoid, Protection (SPP)
- World-class Team

Innovation Challenges



Timeline of Apple Products



- Apple I
- Apple II
- Macintosh
- Apple III
- Lisa
- Apple IIGS
- Apple Network Server
- Phones/Tablets/PDAs
- iPod/Consumer Products
- Computer Peripherals
- Software
- Reference/Currently produced



Apple Newton



Apple Pippin

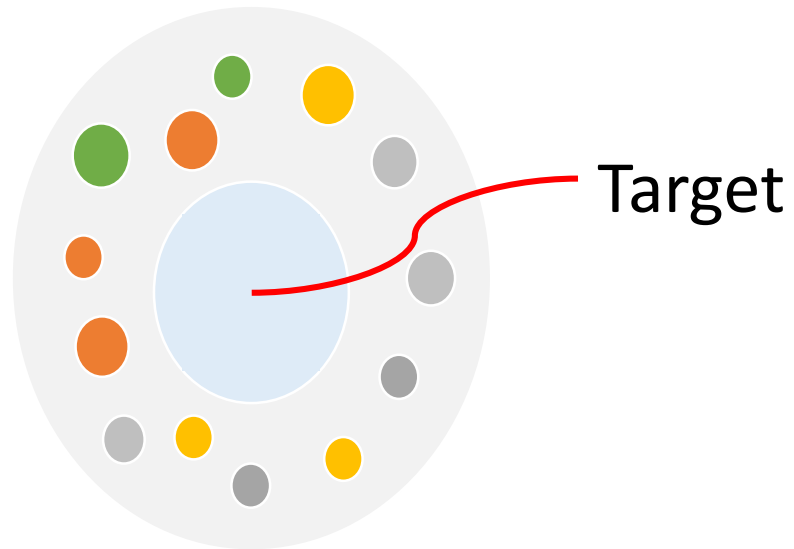


Apple Hockey Puck Mouse



Apple iPod Shuffle 3rd Generation

Continuing Experimentation Strategy



Why

1. 1% success rate
2. Unknown market
3. Difficulty in determining needs

- Machine guns – continuous firings (experimentation) to understand market and directions



- Canon – Capture market



聯發科 (Media Tek)

1997 CD-ROM晶片組

2000無線通訊基頻與射頻晶片

2003數位電視與液晶電視控制晶片

2006 Bluetooth晶片

2007數位相機晶片digital video image晶片

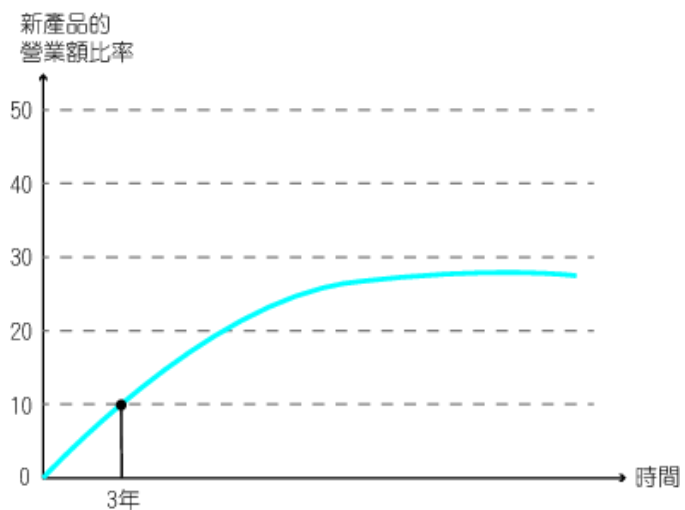
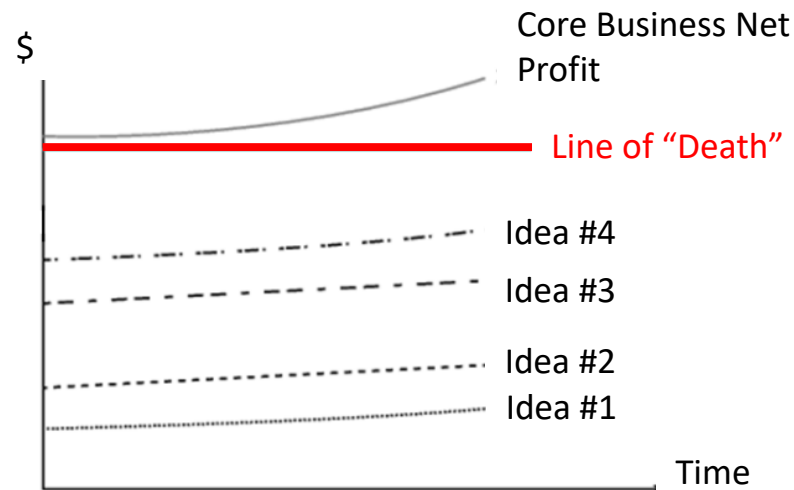
2008手機晶片

2009發展中國自主規格TD-SCDMA手機晶片。

2011Wi-Fi晶片無線DSL以及乙太網路晶片

2012-2014合併晨星半導體--數位電視晶片

2014 LinkIt IOT開發平臺



Innovation Revenue/ Total Revenue

Case Study: Develop New Market

Honda Motorcycle

Background: Honda to Expand Overseas Motorcycle Market

Let Us Expand into America!

"let's do America. After all, America is the stronghold of capitalism, and the center of the world's economy. To succeed in the U.S. is to succeed worldwide. On the other hand, if a product doesn't become a hit in America, it'll never be a hit internationally.

"To take up the challenge of the American market may be the most difficult thing to do," Fujisawa * concluded, "but it's a critical step in expanding the export of our products."

* Takeo Fujisawa co-founded Honda Motor Co. with Soichiro Honda

Question: US Market

- None of the Honda flagship motorcycles Dream 250CC, Benly 100CC, 150CC and Super Cub 50CC was selling well
- America consumers prefers “Hell’s Angels”-type luxury, highway motorcycle



You are the Honda CEO, what would you do?

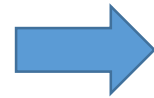
- **Withdraw? Where are the better markets?**
- **Continue looking for new markets? How to identify new markets?**
- **Redesign to meet consumer’s preference? How to compete against Harley Davidson?**



Honda Motorcycle Markets



High-powered luxury market ? (170 units/year)



College students ? (40,000 units/year)



Recreational market! (500,000 units/year)



Appendix

Continuous Experimentation

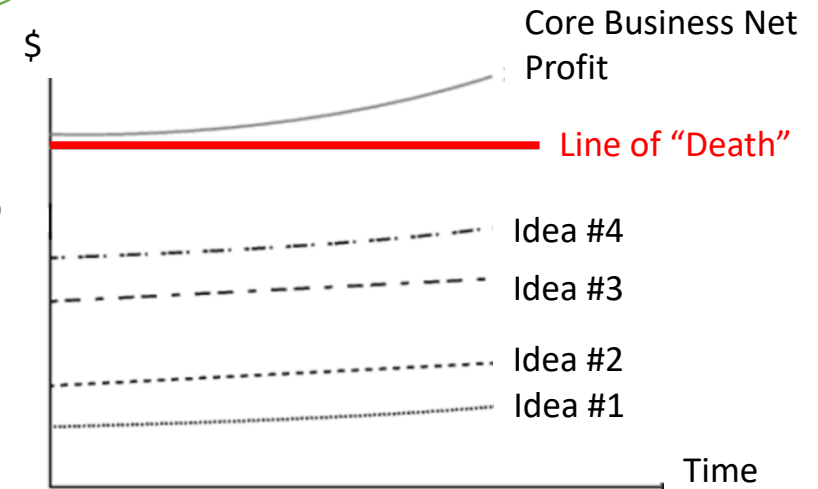
Despite all the Successes, Infamous Apple Products

- 1980 Apple III (extremely high failure rate, \$60M loss)
- 1983 Lisa (slow, \$9,995 at launch)
- 1993 Newton (battery life, hard-to-read screen)
- 1993 Macintosh TV (poor integration between computer & TV screen. Cost over \$2K. Only made 10K units)
- 1995 Macintosh Performa x200 Series (slow)
- 1996 Bandai Pippin (game console. Sold less than half of 100K units made. Ahead of its time for on-line game playing)
- 1997 20th Anniversary Mac (\$7,500)
- 1998 The "Hockey Puck" Mouse (too small and round shape)
- 2009 iPod Shuffle 3rd Generation (No physical button)

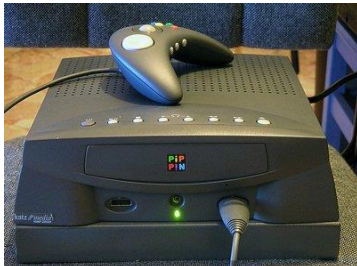
Google

1998-2000 Search Engine

- 2001 Image search
- 2003 google blogger
- 2004 Gmail, Picasa
- 2005 Google Map, Android OS, Video
- 2006 Youtube
- 2007 Sketchup
- 2008 Chrome Browser
- 2010 Nexus One Smartphone
- 2011 Motorola Mobility
- 2012 Goolge Glass
- 2013 Waze, Google Balloons



Apple Newton



Apple Pippin



Apple Hockey
Puck Mouse



Apple iPod Shuffle
3rd Generation