

# Sourcing and Developing Fintech Solutions: Risks and Opportunities

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*Excerpts from*





# Innovation and Business Success requires Creativity & Discipline

*Creativity*

*Discipline*



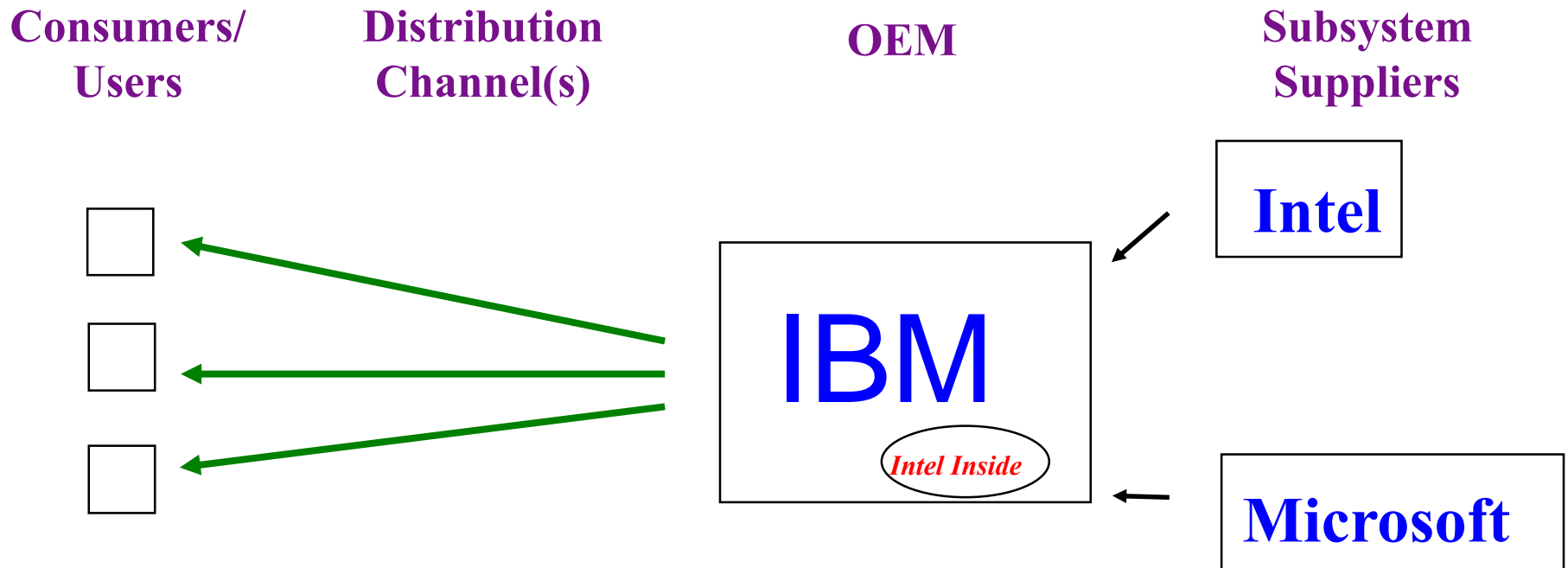
# **Lessons for Fintech Sourcing:**

**Technology case study on  
Computers & Consumer  
Electronics**

**A Forty Year Retrospective**

# The Strategic Impact of Value Chain Design: *(Who let Intel Inside?)*

1980: IBM designs a product, a process, & a value chain



**The Outcome:**

**A phenomenally successful product design**  
**A disastrous value chain design (for IBM)**

# LESSONS FROM A FRUIT FLY: *THE PERSONAL COMPUTER*

1. BEWARE OF *INTEL INSIDE*.  
(Regardless of your industry)
2. TACTICAL MAKE/BUY:  
IT MAY BE *CHEAPER* OR *FASTER*  
TO *OUTSOURCE* VERSUS *INSOURCE*.
3. *STRATEGIC SOURCING*:  
*VALUE CHAIN DESIGN* CAN DETERMINE  
THE FATE OF *COMPANIES* AND *INDUSTRIES*,  
AND OF *PROFIT* AND *POWER*.
4. THE LOCUS OF *VALUE CHAIN CONTROL*  
CAN SHIFT IN *UNPREDICTABLE* WAYS.

# VALUE CHAIN DESIGN:

## Three Components

### 1. Insourcing/OutSourcing

*(The Make/Buy or Vertical Integration Decision)*

### 2. Partner Selection

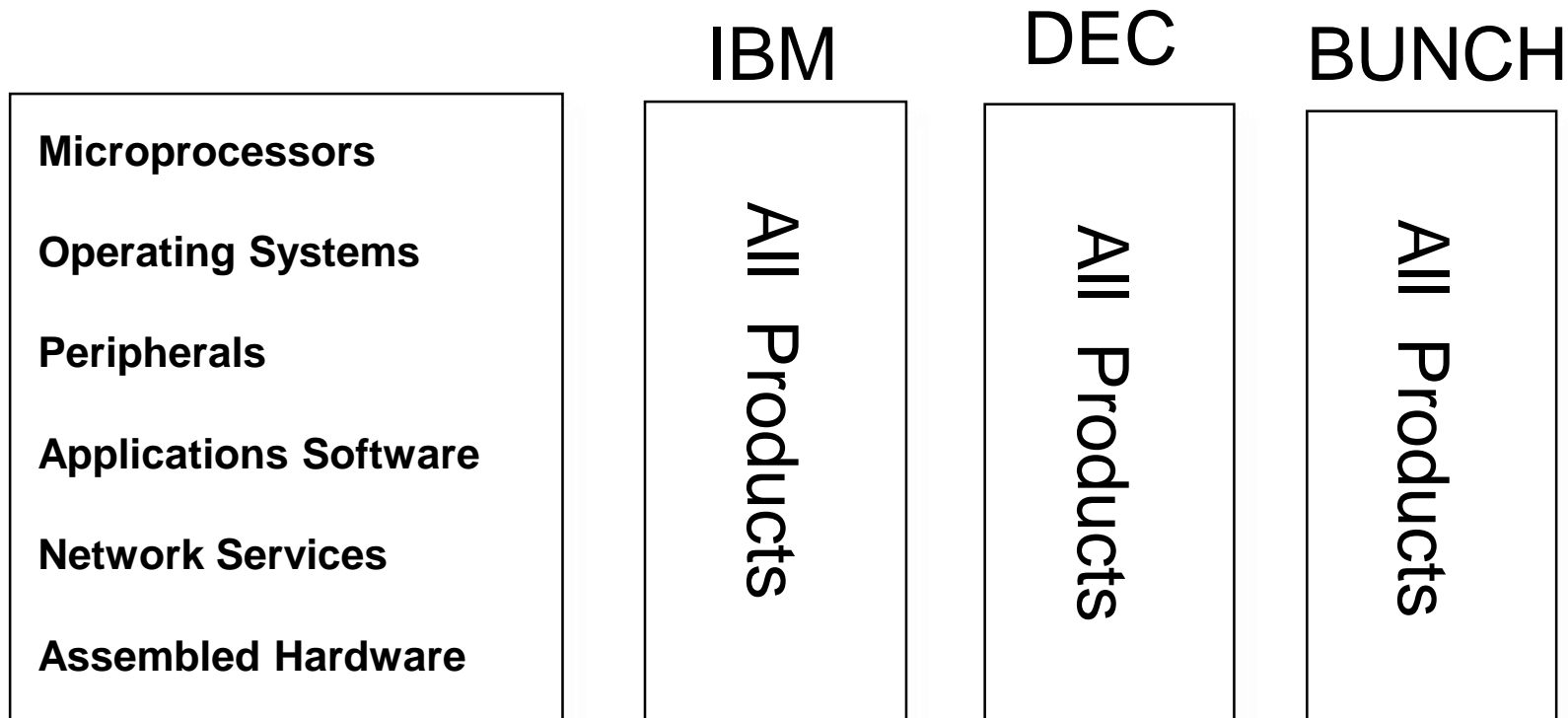
*(Choice of suppliers and partners for the chain)*

### 3. The Contractual Relationship

*(Arm's length, joint venture, long-term contract, strategic alliance, equity participation, etc.)*

# Vertical Industry Structure with *Integral* Product/System Architecture

## Computer Industry Structure, 1975-85



(A. Grove, Intel; and Farrell, Hunter & Saloner, Stanford)



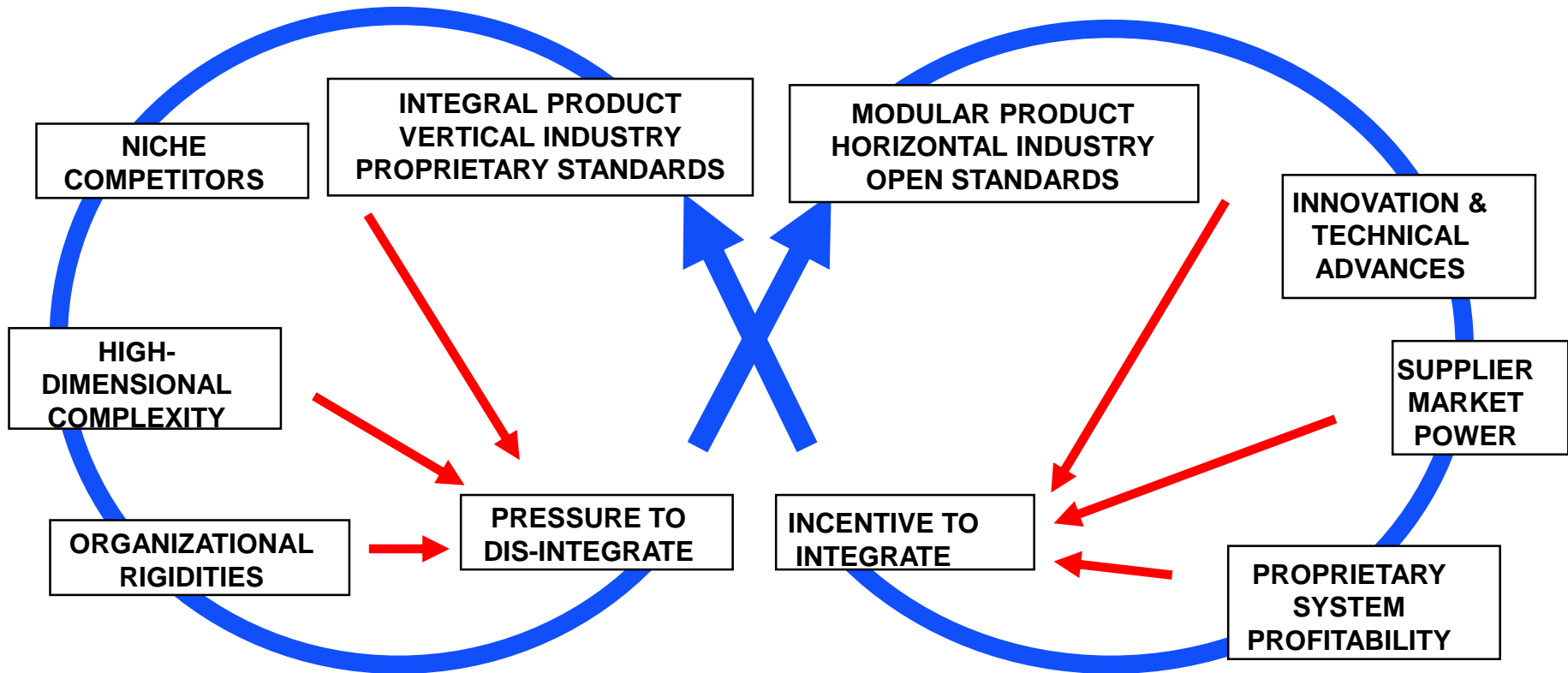
# Horizontal Industry Structure with *Modular* Product/System Architecture

## Computer Industry Structure, 1985-95

<b>Microprocessors</b>	Intel	Moto	AMD	etc
<b>Operating Systems</b>	Microsoft	Mac	Unix	
<b>Peripherals</b>	HP	Epson	Seagate	etc etc
<b>Applications Software</b>	Microsoft	Lotus	Novell	etc
<b>Network Services</b>	AOL/Netscape	Microsoft	EDS	etc
<b>Assembled Hardware</b>	HP	Compaq	IBM	Dell etc

(A. Grove, Intel; and Farrell, Hunter & Saloner, Stanford)

# THE DYNAMICS OF PRODUCT ARCHITECTURE, STANDARDS, AND VALUE CHAIN STRUCTURE: *“THE DOUBLE HELIX”*



**Examples: IBM, Autos, Embraer/Boeing, Nokia, Small Firms**

Fine & Whitney, “Is the Make/Buy Decision Process a Core

Competence?”

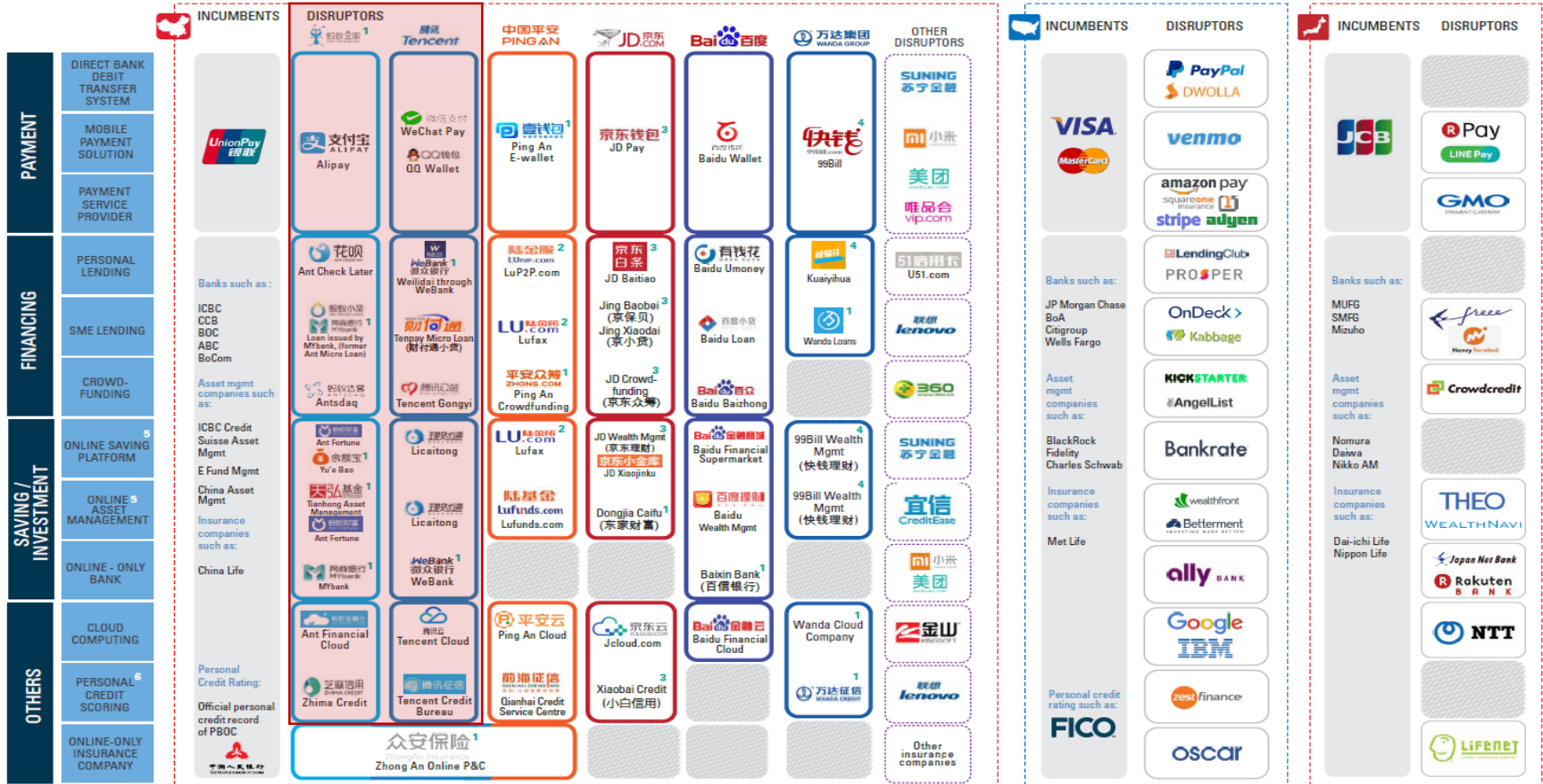
# UNBUNDLING WELLS FARGO



Source: CB Insights

Source: Prof. Lee Yen Teik, ASB

# UNBUNDLING IN ASIA AND THE US



NOTE: 1. Not wholly owned. 2. Wholly owned by Lufax Holding. 3. Wholly owned by JD Finance. 4. Wholly owned by 99Bill.com. 5. At current stage, most of the online saving/asset management platforms in China are distributors instead of asset managers, except for Tianhong Asset Management, who has a mutual fund license. 6. Zhima Credit, Tencent Credit and Qianhai Credit, along with 5 other companies, were selected by PBOC as pilot companies. Please refer to the Appendix for further details.

Source: Company data, compiled by Goldman Sachs Global Investment Research

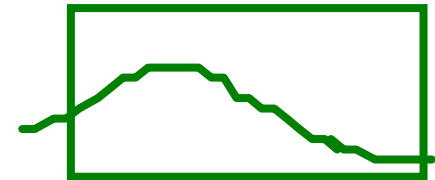
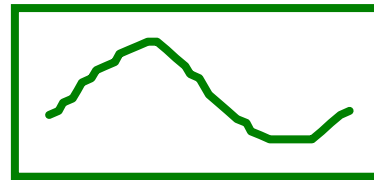
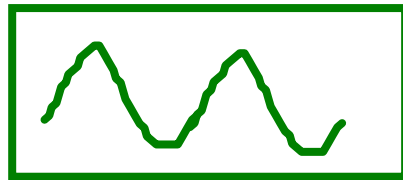
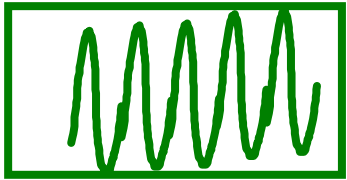
## TECHFINS WITH BROAD ECOSYSTEMS

## VERTICAL DISRUPTORS

Source: Prof. Lee Yen Teik, ASB

# What Drives Clockspeeds?

**technology/innovation push, customer pull,  
system complexity, regulation, branding**



**Consumer**

**Handset or PC  
Applications**

**Handset or PC  
Platforms**

**Communications  
Equipment  
and Networks**

**Semiconductor  
Components**

**Semiconductor  
Manufacturing  
Equipment**

# ALL COMPETITIVE ADVANTAGE IS TEMPORARY

## *Autos:*

**Ford** in 1920, **GM** in 1955, **Toyota** in 2000

## *Computing:*

**IBM** in 1970, **Wintel** in 1990, **Apple** in 2010

## *World Dominion:*

**Greece** in 500 BC, **Rome** in 100AD, **G.B.** in 1800

## *Sports:*

**Red Sox** in 2007, **Celtics** in 2008, **Yankees** in 2009

*The faster the clockspeed, the shorter the reign*

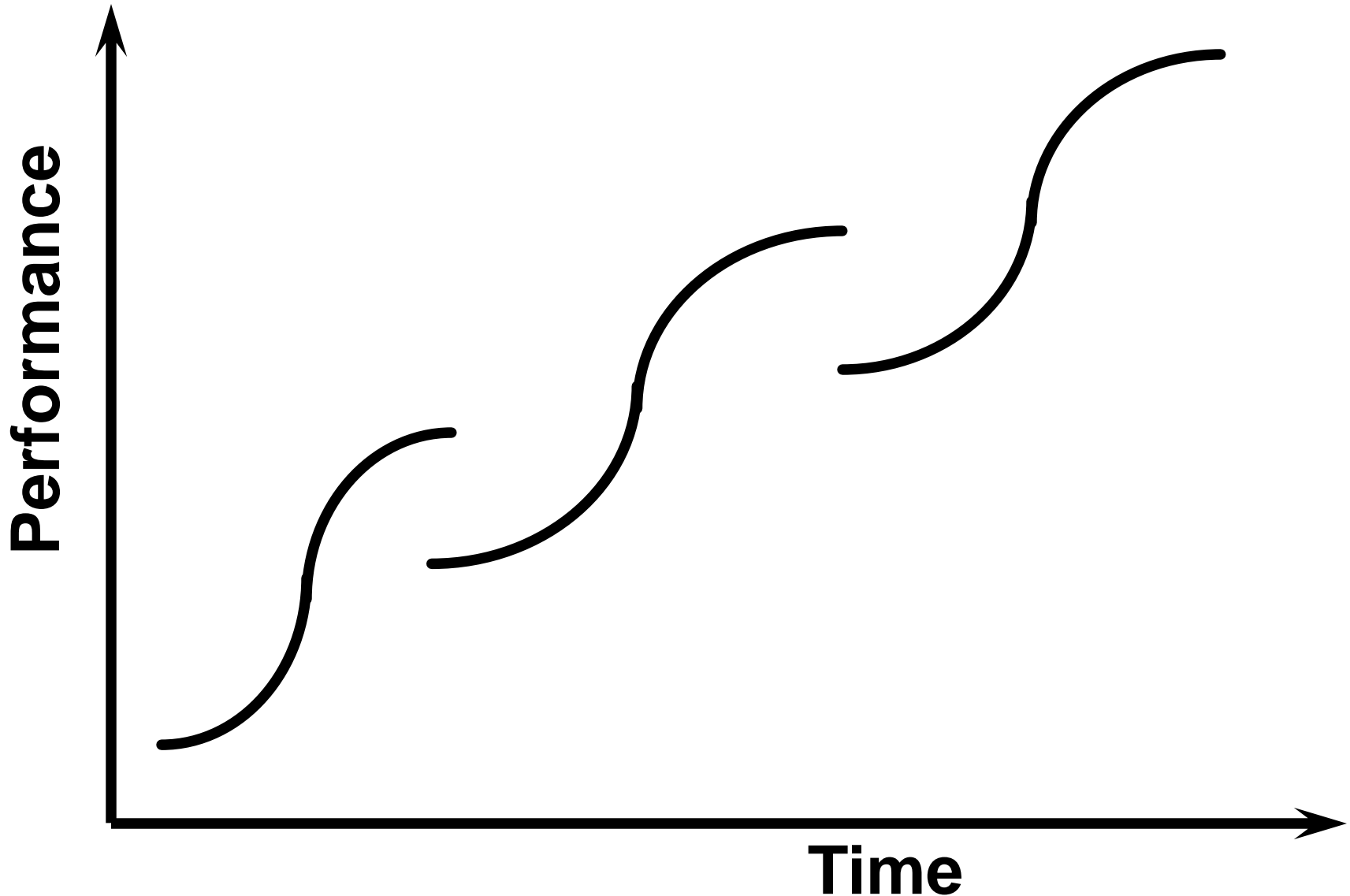


# “Gear Model” to support Roadmapping of Value Chain Dynamics (VCD)



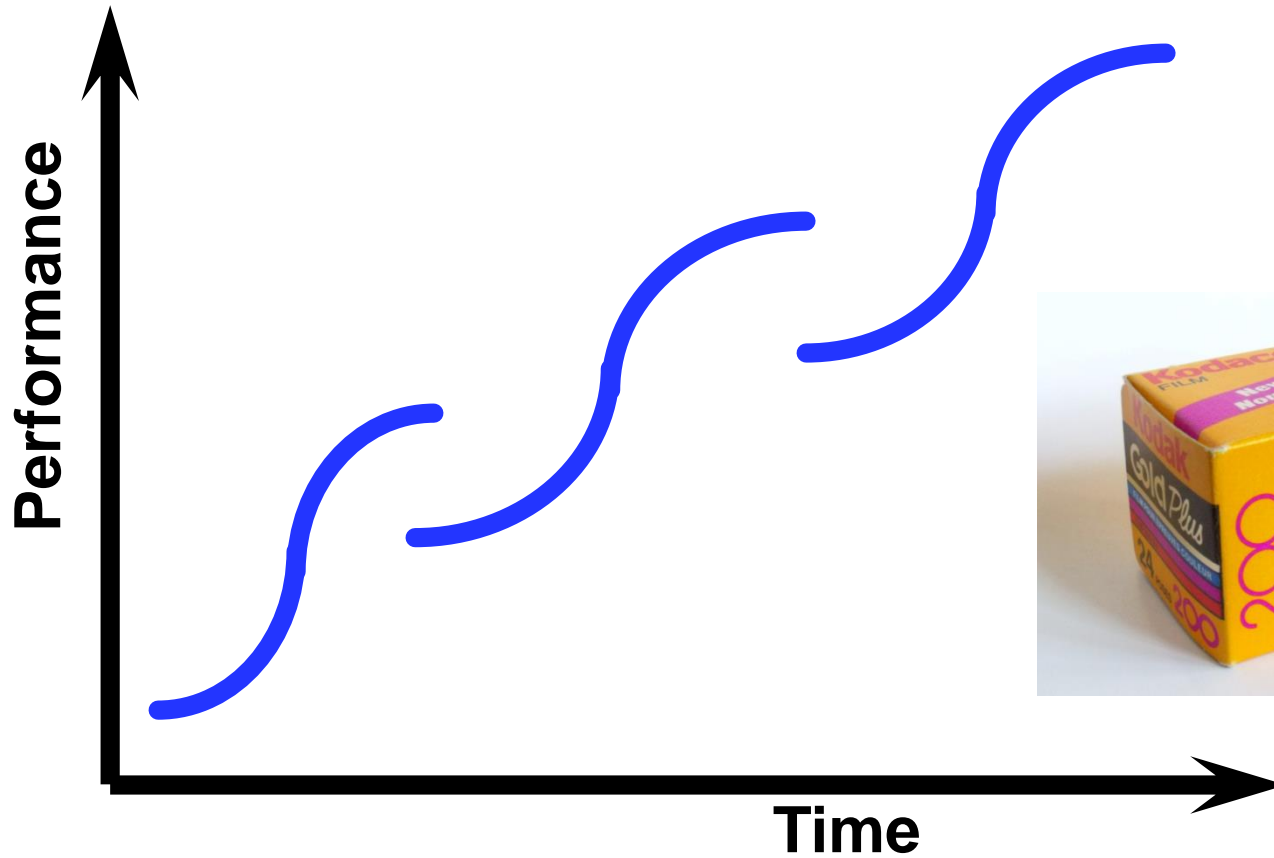
# Innovation Dynamics can be

**RADICAL** (*disruptive*) or **INCREMENTAL** (*sustaining*)





# ALL COMPETITIVE ADVANTAGE IS TEMPORARY



# Technology and Industry Disruptions

## Industry Disruption

## No Industry Disruption

**Digital music**

- Weak Incumbent Network Effect
- Strong Entrant Network Effect
- Consumer highly price sensitive and willing to risk adopting innovative service with low quality and compatibility

- Incumbents can affect switching behavior
- Incumbents innovate while maintaining quality
- Incumbents control complementary assets
- Entrants struggle to offer quality due to lack of functional control or market power

**Electric vehicles**

**Technology or Process Disruption**

Quadrant Not Relevant

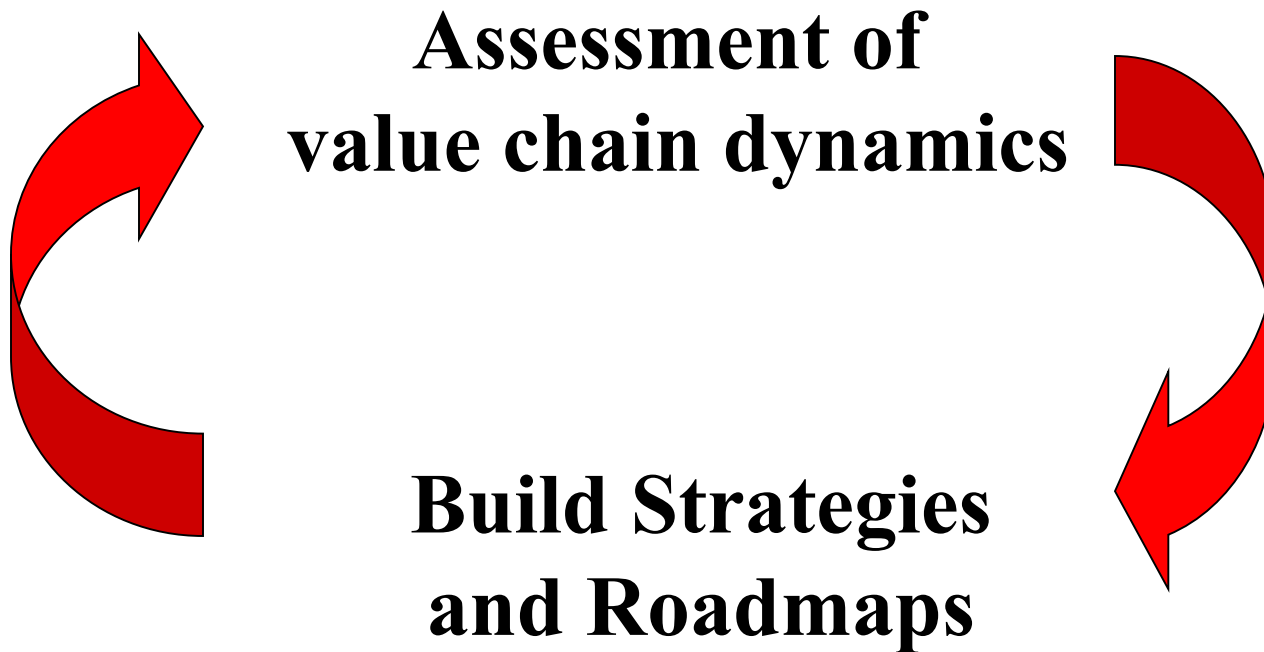
- Strong Incumbent Network Effect
- Consumers value quality and compatibility over innovation and low price

**Linux vs. Windows**

**No Technology or Process Disruption**

# All Conclusions are *Temporary*

Clockspeeds are increasing almost everywhere  
Value Chains are changing rapidly



# BACKUP SLIDES

**What is the biggest challenge in rolling out fintech related initiatives in Asia? Do you believe that legacy FSI will triumph or will the challenger firms become more dominant, and if so why?**

Individual Trust

Government alignment

Competitive platforms

**What in your mind the key contributing factor to the successful adoption of technology in the financial services industry, from both a practitioner as well as a regulatory angle? Is China a leader in this space?**

Platform scale

Data availability

Innovation

Consumer experience

**How do you think we can overcome this perceived fear factor, us legacy FSI folks seem to have when dealing with technology ? How do we take this leap of faith?**

Disrupt yourself or wait for others to disrupt you  
Invest in software capabilities  
Invest in customer intimacy  
S curves require leaps of faith

**If you had to future forecast the FSI landscape in 10 years, how prevalent will the incursion of all things digital be? How vast will be the change in industry landscape?**

Some say that forecasting is for fools

Digital seems destined to dominate as long as we have electricity

To survive you must either be super efficient, super service oriented, government protected, or trafficking in trust.