The Evolution of Samsung Electronics Company

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Issues

- How could Samsung Electronics Co. (SEC) become successful in the competitive global IT industry?
  - Follower's position to leader's position (1992)
  - Leader's position to dominant position (1993-today)

- Strategies in technology, production, brand, marketing and management

- Implications to other firms

Samsung Electronics Co. (SEC)

- An annual sales of $134 (109) billion with a profit of $13.6 ($7.6) billion in 2010 (2009), 8-13% of ROI
- Founded in 1969
- Exporter (OEM) of consumer appliance goods (1970s)
- Semiconductors (1983)
- Announcement of ‘New Samsung Management’ (1993)
- Global IT MNC today (four main businesses)
  - Digital Media & Home Appliances, 37%
  - Telecommunication, 23%
  - LCD/LEDs, 17%
  - Semiconductors, 20%

Evolution of SEC

Stage	Key Events	Strategic Characteristics
Export Firm (1969-1982)	-Established (1969) -Start B/W TV and other appliance products production (1970-76) -Start export (1971)	-OEM export -Home appliance goods -Advanced countries -Expansion (volume and price) -Low end segments
International Firm (1983-1998)	-Diversification into semiconductors (1983) -The first 64 Mega DRAM maker (1992) -Diversification into cellular phone (1994)	-Diversification (business, product) -Start own brand marketing -Technology leader
Global Firm (1999-2011)	-$10 billion sales in semiconductor (2000) -Global top 3 cellular phone maker (2003) - $ 50 billion export (2008) - $109 billion sales (2009) --$134 billion sales (2010)	-Market leader (digital convergence for new product development) - High end segments -Semiconductors, LCD/LED, IT (c phone), and Digital media

Fortune Global 500 in Electronics & Computers (Korea & Japan only)

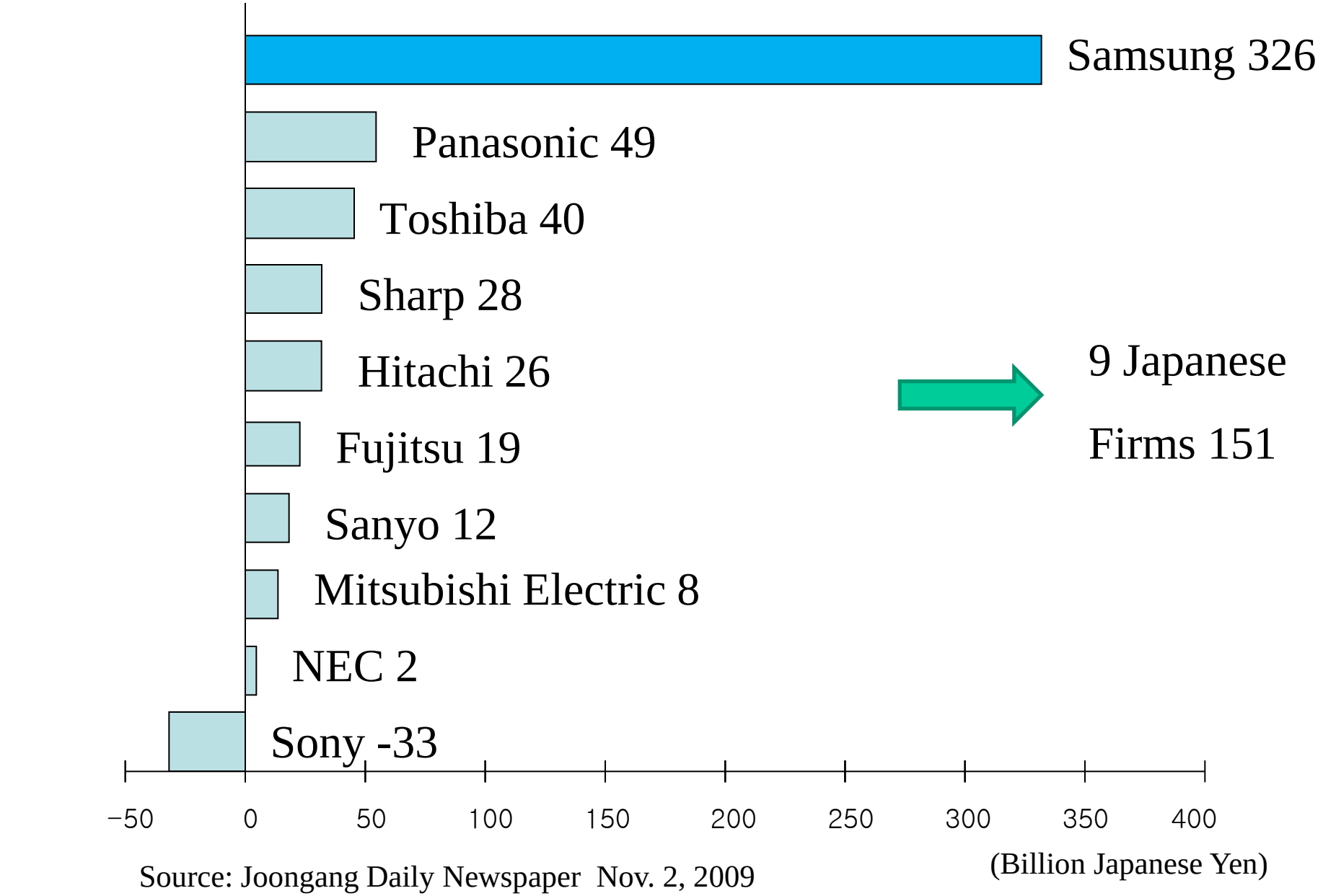
(US$ billion)

Rank (2010)	Company	Sales 2010(2009)	Profit 2010 (2009)
22	Samsung E.	133.7(108.9)	13.6(7.6)
40	Hitachi Works	108.7(96.6)	2.7(-1.2)
50	Panasonic	101.4(79.9)	0.8(-1.1)
73	Sony	83.8(77.7)	-3.0(-0.4)
89	Toshiba	74.7(68.7)	1.6(-0.2)
158	Fujitsu	52.8(50.4)	0.6(1.0)
171	LG E.	48.2(78.9)	1.0(1.2)
203	Mitsubishi E.	42.5(36.1)	1.4(0.3)
204	Canon	42.2(34.3)	2.8(1.4)
241	NEC	36.3(38.6)	-0.1(0.1)
253	Sharp	35.2(29.7)	0.2(0.0)
409	Sumitomo E.	23.7(19.8)	0.8(0.3)
429	Ricoh	22.6(21.7)	0.2(0.3)

Source: Fortune, July 26, 2011

Operating Profit Comparison between Samsung and Japanese Firms

(July-September 2009)



Source: Joongang Daily Newspaper Nov. 2, 2009

SEC vs. Sony (Economist, Nov. 17, 2009)

- Market orientation / Japanese consumers
- Japanese market oriented new product development
- Inflexible business practice (organizational culture)
- Japan number one symptom (no bench marking)
- Technology development vs. commercialization (production and marketing)
- Product adaptation(improvement) vs. new product development

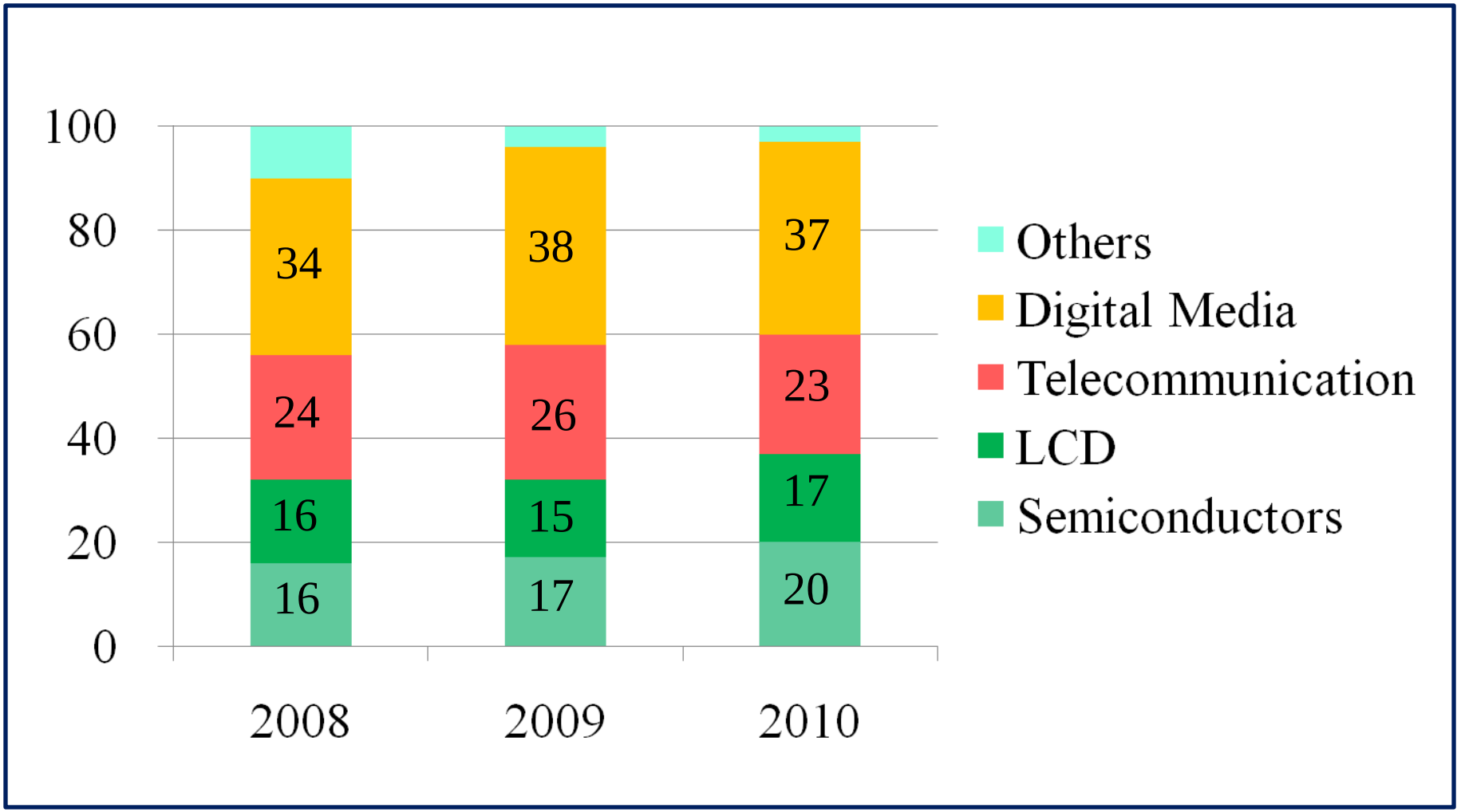
- SEC (1969) vs. Sony (1946):
  . Market Value (1989), Sales (2004), Brand Value & Credit Rating (2005), TV Sales (2006), Patent (2007)

A Brief Profile of SEC

(US $ billion)

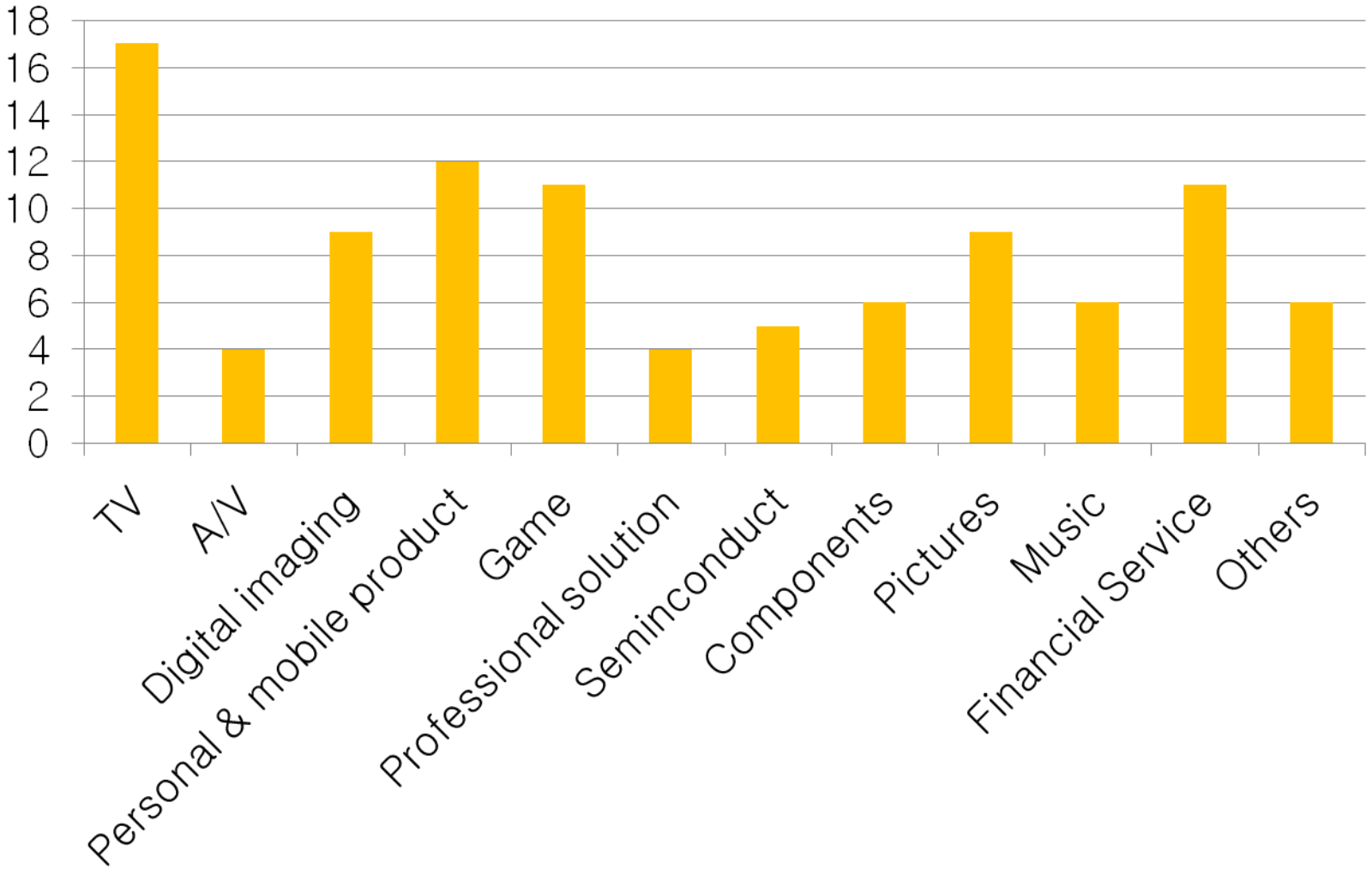
	2001	2005	2010
Financial Times World Top 500 Ranking (Market Value)	225th	46th	Market,51th Sales,31th (2009)
Interbrand Ranking	42th	20th	19th
BusinessWeek Most Innovative Co. Ranking	-	-	16th (26th, 2008)
Sales	25.9	57.4	133.7
Net Profit	3.7	7.0	13.6
R & D	3.4	5.4 (9.2%)	9.1
Marketing Expenses	-	1.9 (3.2%)	4.7 (2008)

Sales of SEC by Product Division (%)



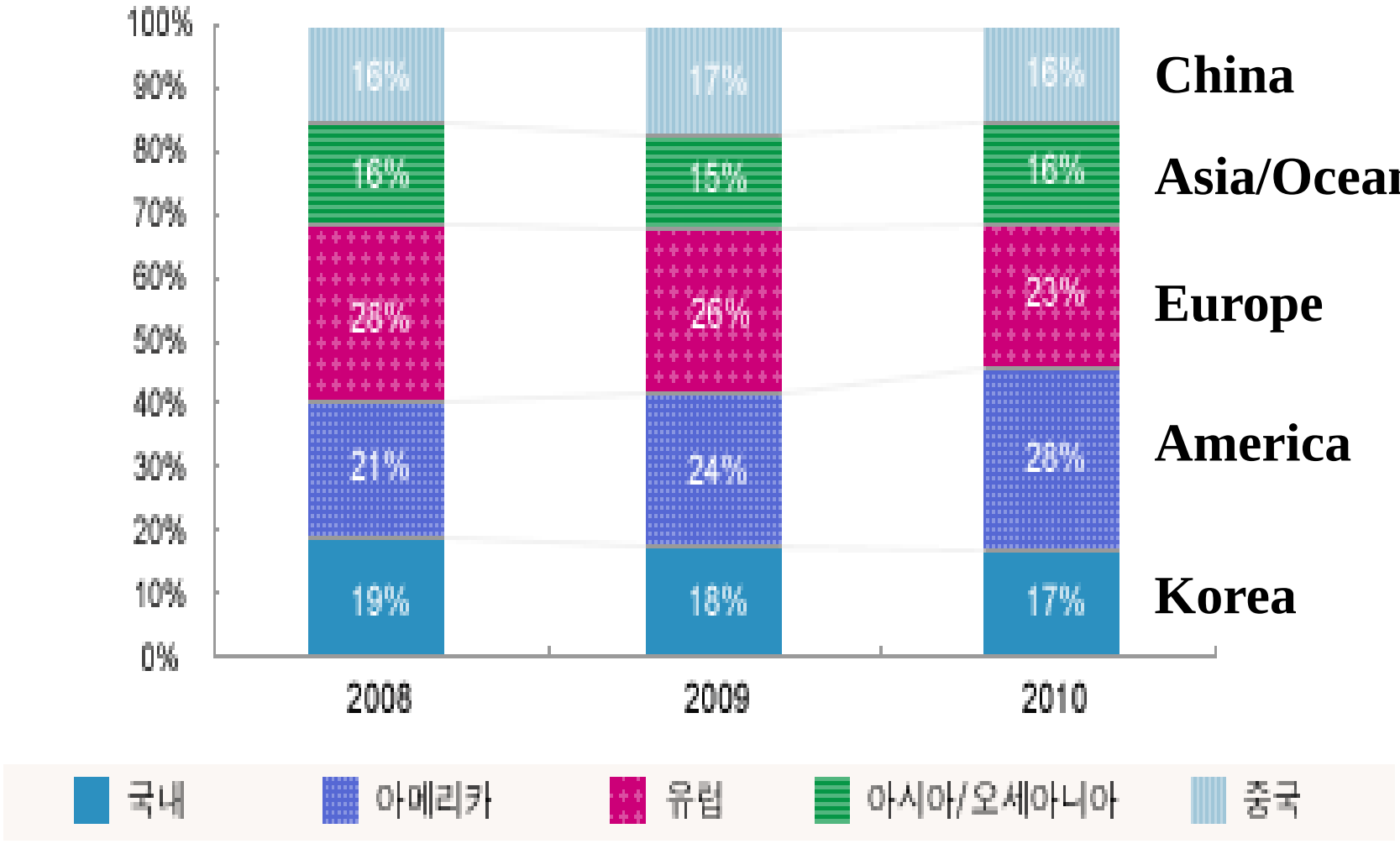
Source: 2010 Company Annual Report

Sales of Sony by Product Division (2010, %)



Source: 2010 Company Annual Report

Sales of SEC by Region (%)



Source: http://www.samsung.com/sec/aboutsamsung/ir/financialinfo/highlight/highligh_2006_1.html

Technology Strategy: A Critical Issue

- How had SEC acquired the technological capabilities so fast?
  - Semiconductors (1983-1992)
  - Various IT areas (1993-today)

- Technology learning process
- R & D strategy

Definitions

Technological Capabilities:

- The ability to assimilate, use, and change existing technologies

- Helps a firm to develop new technologies, products, and processes

Technological Learning:

- A dynamic process of acquiring technological capabilities

- A function of the firm's prior knowledge and intensity of effort

A Prior Knowledge

- Existing knowledge (tacit as well as explicit)
- Explicit knowledge
  . Codified and transmittable in formal manuals
- Tacit knowledge
  . Deeply rooted in the human mind and body that is hard to codify and communicate
  . Can be acquired through imitation, practice, training

An Intensity of Effort

. Amount of time and energy devoted by the members in the firm to create knowledge

Technology Learning (until 1992)

- Technology follower

- CKD production and licensing for appliances in 1970s

- Aggressive tech. catch-up strategy in 1980s
  - Licensing of initial chip-making tech. from Micron Technologies (explicit knowledge)
  - Internal competition of tech. development (tacit knowledge)
  - both internal R & D and external licensing

Technology Learning (after 1993)

- Technology leader
- Expansion of internal R & D with Global alliances (Cross-licensing with Sony, Toshiba,…)
- Close working relations with suppliers
- M & A of US technology firms
- Diversification of tech. learning (US, Japan, Russian, European,…)
- Risk taking behavior in capital investment

  (Investment in LCD industry in 1995-1998)

R & D Strategy

- First-to-market strategy with many world firsts (102-inch plasma TV, cell phone with 7-mega pixel photos)
- Aggressive R & D spending (9.5% of revenue in 2008)
- R & D personnel (18% employees)
  - In telecommunication division, 50%
- 17 global R & D centers (40,000)
- Chief Patent Officer

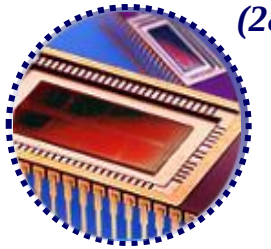
Samsung - Globalization in R&D

Results:

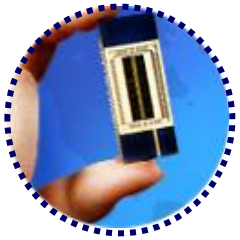
Samsung – 1st in World Market Share (2008)

Flash Memory (40.0%)

SRAM (28.0%)

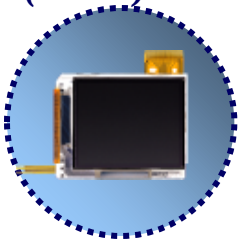


DRAM (28.0%)



FPTV (17.2%)

TFT-LCD (23.1%)



Monitor (14.7%)

Production Strategy

- Over 50% of Sales invested in 1980s. 39.8% (1987-92) of capital expenditure/revenue (20.5% industry Avg.)
- Continuous massive capital investment ($23 billion in 2010, $ 12 billion in 2008, funding source ?)
- Joint LCD factory with Sony
- Samsung's Low Inventory in Manufacturing (SLIM)
  - SLIM allowed SEC to reduce DRAM manufacturing time from 80 days to 30 in 1990s
- Less production time in rapid price declining environment

Samsung - Globalization in Manufacturing

7 Regions 36 Locations

Production Strategy(continued)

- Flexible global production system
- Synchronizing R & D and Production (Parallel problem solving)
- Tight global sourcing system (3 day global production planning cycle since 2007)
- Internal sourcing

Results:

- A risk taking approach but
- Economies of scale with high quality
- Usually the first company to commercialize new products (90% MS of 3D TV in 2010, LED TV market leader in 2009, Galaxy S smart phone may be an exception)
- Reliable production and delivery

Brand Strategy

- Focusing on ‘One Brand,’ or ‘Master Brand’ (global branding strategy) since 1996

- Up to middle 1990s, low-end consumer electronics products with many less known brands (Wiseview, Tantus, Yepp…)

- Group Brand Management Committee

- Why new change?
  - iconic IT maker with upscale image,
    quality, design, and innovation (BMW)

- Communication, design, and global marketing

Global Communication Strategy

- Launched a global advertising campaign
  - '*The World Inspires Us*' slogan in 28 languages in 1996
  - Continued spending in global advertising ($1 bil in the late 1990s)
  - Top-notch mobile phones and digital TVs
- Increase 'awareness' as an initial goal
- Less traditional TV advertising but more link the Samsung name to music, and movies
  - Hollywood filmmakers (Matrix, The Fantastic Four)
- Closer relations with channels (Best Buy, Circuit City)

- Non mass media communication (sports marketing)

  - 2004 Athens Olympic, 2008 Beijing Olympic, 2010 World Cup Soccer (Wireless Com. equipment provider (14,000 mobile phone, the wireless internet system)
  - Samsung Running Festivals (Russia, China, Iran…)
  - Official sponsors of other popular sports (AFC Asian Cup 2007, LPGA Tour, Cricket, Tennis, Motor Race…)
  - Sponsorship of Chelsea Soccer team (since 2004-2013)

- Consequently brand value increased almost three times

Design Strategy

- A key success factor in IT consumer goods
- Design rather than function and performance
- Balance between standard and local designs
- Set up regional design centers (Tokyo, London, Frankfurt, LA, San Francisco, Shanghai)
- Internal competition (SEC and Samsung SDI)
- Integrate design function into a newly established ‘Samsung Electronics Design Center’ in Korea
- Chief Design Officer, Design Committee under Chairman
- Multisensory approach (look, color, sound, feeling of quality to provide customers “function & lifestyle”

Global Marketing

- Mr. Eric Kim in charge of global marketing in 1999
- Simplify 55 advertising agencies
- Focus on high end channels (Best Buy, Circuit City over WalMart, Target)
- Focus on flagship products (flat-screen TV or cell phones)
- High end positioning in home appliances, telecommunication, digital media and semiconductors with the "*Samsung DigitAll, everyone's invited*" (2000-2004), "*Imagine*" (2005-) slogan
- Tight channel control (rapid and simultaneous market expansion in target countries)
- Focus, build, and innovate

Product Innovation (Improving product portfolio)

- One of the leaders in the digital-convergence revolution

- World leaders in semiconductors, mobile communication, and information appliances (diversification)

- DRAM (28.0%) -> Flash Memory (40.0%) -> TFT LCD (23.1%) …

A New Technology Product

- World's 1st 40nm 32Gb Nand Flash

- Next generation semiconductor solutions
  - Smaller Form-Factor, Bigger Capacity, Higher Performance

Applying Nand Flash to PCs
→ Hard Disc-less PC

Holds Global Navigation Map

* **CTF**(Charge Trap Flash): This new architecture greatly decreases inter-cell noise by replacing the normal floating gate technology

Globalization Strategy

- Mr. Lee, Kun Hee's initiative in 1995
- Five regional divisions (China, Europe, Asia, Japan, and the Americas):
- Strong push for localization
  - Regional production complexes (mini Samsung)
  - HRM (bachelor's dispatch program, and Korean MBA program)

- China:
  - Tianjin complex (SEC, SDI, and S. Corning to make TV, monitors and VCR)
  - Suzhou complex (Ref, W/M, A/C, and semiconductors)

- Europe:
  - Brentford, UK, Germany, Portugal, Spain, Hungary…
  - Wynyard complex (monitors, microwave ovens, training center)
  - Samsung Hungary since 1989 at Jaszfenyszaru, near Badapest

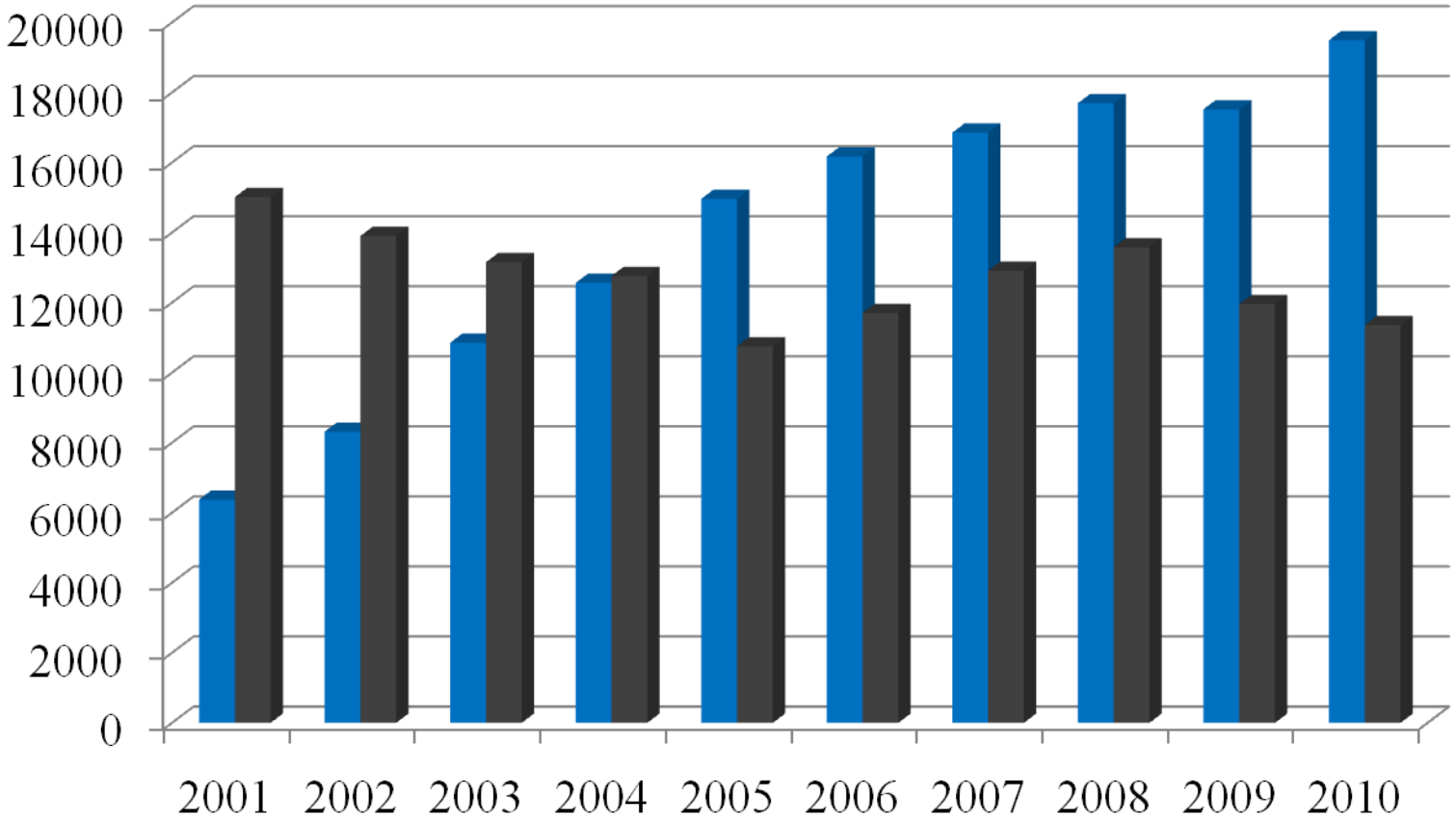
- Asia:
  - Regional head office in Singapore and Seremban complex
  - Procurement office in Singapore

- Japan

- The Americas
  - Semiconductor plant in Austin, TX and Tijuana complex, Mexico
  - Manaus complex, Brazil (Monitor, microwave oven)

Global Brand Value

(2001-2010 in US$ millions)



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
SAMSUNG	6,370	8,310	10,850	12,560	14,960	16,170	16,850	17,690	17,518	19,491
SONY	15,010	13,900	13,150	12,760	10,750	11,700	12,910	13,580	11,953	11,356

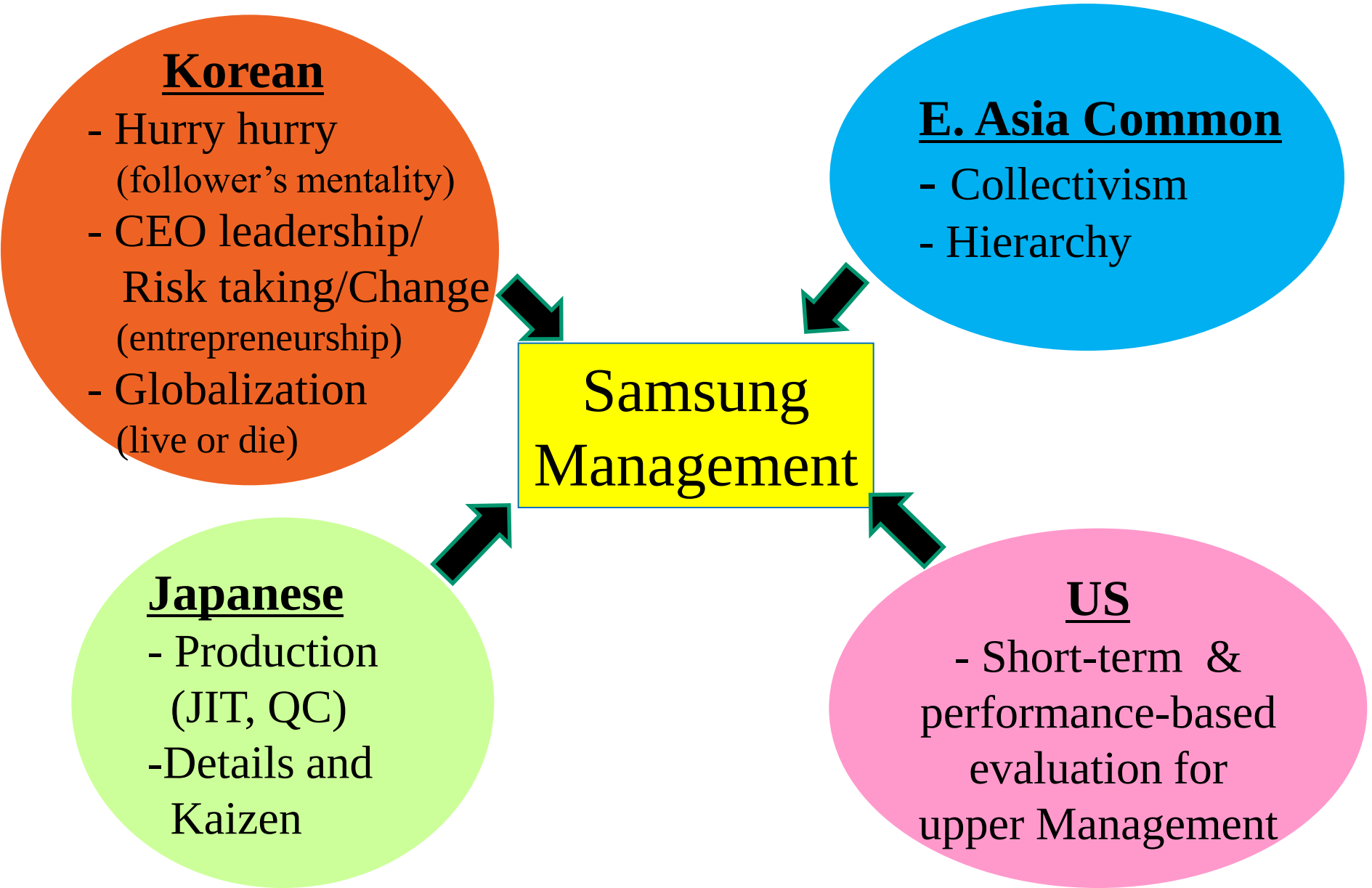
Source: Interbrand

Major Success Factors

- Leadership (chaos makers)
- A sense of crisis
- On-going improvement with market focused innovation
- Quick decision making
- Gradual and phased implementation
- Consistent effort for innovation
- R & D and Brand (intensive, integrative and compressed strategy)
- Culture of Samsung

  - An eclectic type due to continuous learning and benchmarking

Culture & Management Style of SEC



Managerial Implications

Overall Strategy

- Focus strategy during the initial entry stage as a late comer
- Low margin or even loss during the initial stage
- Volume building (?)
- Benchmarking of competitors
- Consistency in implementation of the strategy

Technology Strategy

- Multiple modes of technology transfer
  . Formal mechanism: Licensing
  . Informal mechanism: Literature, observation tours, sample products, R & D personnel transfer

- Formal licenses may transfer only explicit knowledge, but it is the internal R & D that enables a firm to assimilate transferred knowledge

- A leapfrog is a result of continuous efforts in creatively combining tacit and explicit knowledge

- Crisis creation to intensify R & D efforts in catching-up

- Top management commitment is critical

Other Strategic or Management Characteristics

- Empowerment from Owner (Mr. Lee, Kun-Hee)

- Fast and early consensus-based decision making (Group President Committee): Early investment in new business(factory)

- Change decisions frequently if necessary (adaptability)

- Strong manpower base (3,600 Ph.Ds)

- Traits of Samsung employees

Updates on SEC

- Mr. Yoon, JongYong (CEO of SEC from 1996 to2008), named the 2nd high performing CEO by Harvard Business Review (2010)

- Market Capitalization Change : $127 billion

- Mr. Yoon's view: Market Environmental Change:
  . From Analogue to Digital in 2000
  . Sources of Competitive Advantage &Value Added Activities

Differing Success Requirements

	Analog (before 2000) Period	**Digital (after 2000) Period**
Sources of Competitive Advantage	-Technology capabilities -Experience -Intensity of efforts	-New product development -Creativity -Speed
Production type	-Individual part assembly (3,000 parts for a TV)	-System on chips
High Value Added Activities	-Sourcing -Production	-Marketing -Brand power