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▮ 주요 경력

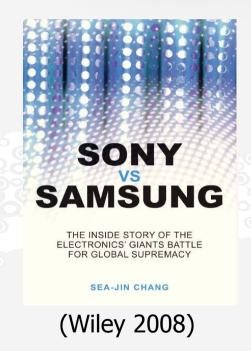
- 뉴욕대학교 스턴경영대학 조교수
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주요 저서 및 논문

- Multinational Firms in China, Oxford University Press, 2013
- SONY vs. Samsung, Wiley, 2008
- Business Groups in Asia, Oxford University Press, 2006
- Financial Crisis and Transformation of Korean Business Groups, Cambridge University Press, 2003

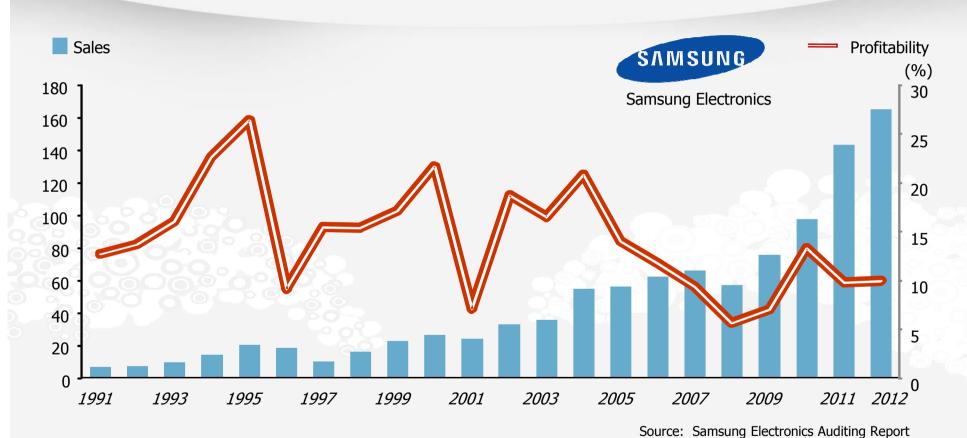
My prior work on Samsung





(billion\$) SAMSUNG SONY

Samsung: A story of "Bad to Great!"



Mysteries on Samsung..... How?

- Samsung was an obscure OEM parts supplier from Asia up until the late 90s. Now, it has become an industry leader, known by its high quality and technological leadership. How come?
 - An executive at Itochu once commented, "Samsung's technology is in fact *inferior* or at best similar to the levels of most Japanese counterparts... How come its output level is higher than those of Japanese?"
- Typically, multinationals that are doing well in developed country markets are not so in emerging markets, and vice versa. How can Samsung do well in both developed country markets and emerging markets?

Samsung is doing well in both developed and emerging markets

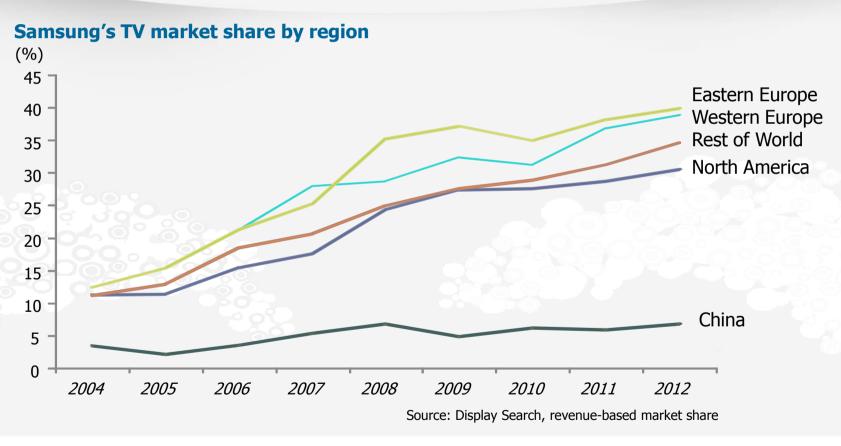


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- 5. Tales of Three Emerging Markets India, China, Brazil
- 6. Future Challenges of Samsung Electronics

Focus of this presentation

Focus of the next presentation



Samsung's New Management



"New Management" – corporate revitalization program that turned employees' attention from quantity to quality, from low cost to differentiation, and from wage advantage to technology and brand



Huge gap in reality at that time

- When Chairman Lee initiated "New Management, Samsung was an obscure manufacturer of VCRs and microwave ovens
 - "Loss Leader" at Mass Merchant
 - Samsung was an unknown brand and its products were sold at 20-30% discount compared to SONY or Panasonic.
- Huge gap between reality and mission in New Management. How to fill this gap?





Samsung went step by step...., and Focus, Focus

- Samsung was a no-name brand up until 1990s. GMO (Global Marketing Organization) was set up to establish a consistent marketing strategy at the corporate level
- Create a "Je-kap-badgi (get the right price) index" and manage the pricing strategy
 - GMO created an index and tracked price vis-à-vis comparable products of competitors (SONY was often a benchmark)
- Deliberate strategic marketing programs to concentrate its resources on the select products, markets, and channels (with highest ROI)
 - Avoid discount stores and focus on power buyers
 - Focus advertising budgets on mobile phones and on sport marketing
 - Allocated strategic marketing resources in 10 emerging markets

Digital Revolution

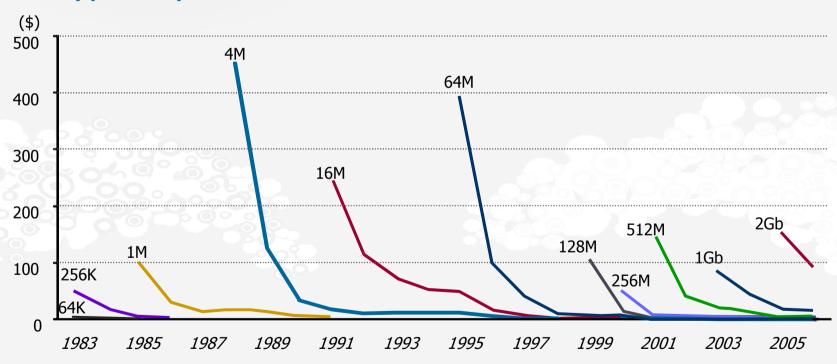
 "Digital technology... [presents] ...the greatest opportunity for those manufacturers who did not have a top market share in the analog world

If they make the correct changes in strategy, they possibly could leap-frog well-entrenched industry leaders."

- Steve F. Smith, Editor-In-Chief, TWICE Magazine

Samsung's DNA: DRAM Experience

How to survive in DRAM industry?
The only possibility is to be the first on the market

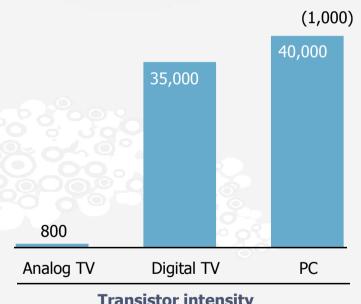


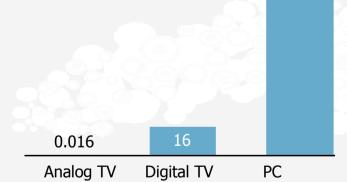
Speed as a key source of competitive advantages

- Speed is the key to all perishable commodities from sashimi to mobile phone. Even expensive fish becomes cheap in a day or two. For both sashimi shop and the digital industry, inventory is detrimental and speed is everything -- Mr. Yun, ex-CEO, Samsung Electronics
 - Samsung accepts "commoditization" and respond to it with "speed" and "cost advantages"
- Chairman Lee emphasizes the importance of understanding the industry key success factor, known as "concept of up(業)"

Digital TVs become more like PCs and behave like PCs

Who makes money in the PC business? MS and Intel





Transistor intensity

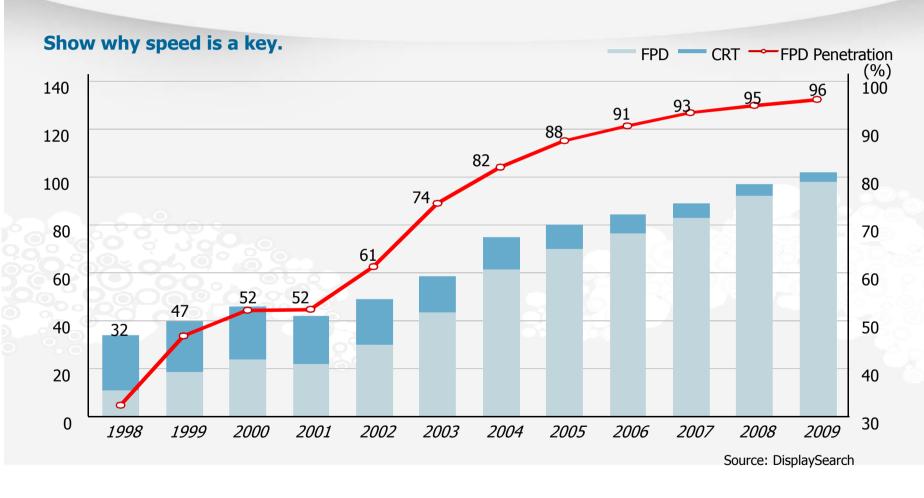
Software size

Source: Diamond Weekly, 2005/2/12, p.43

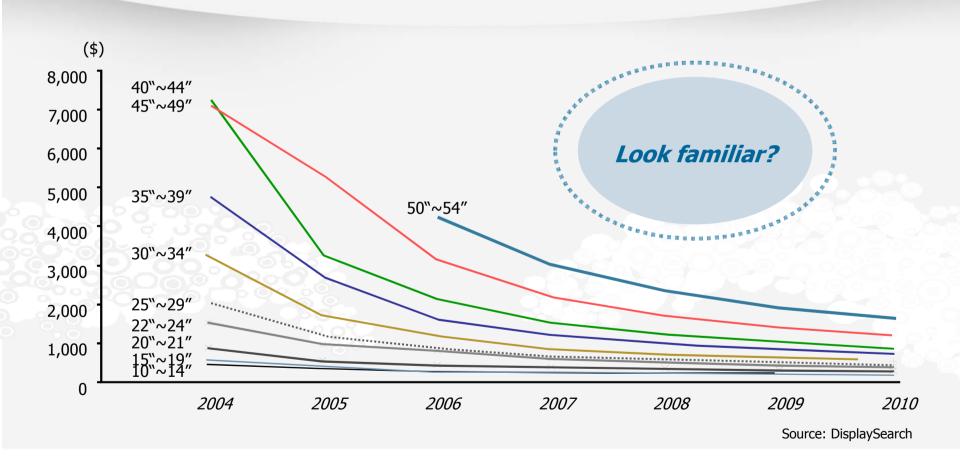
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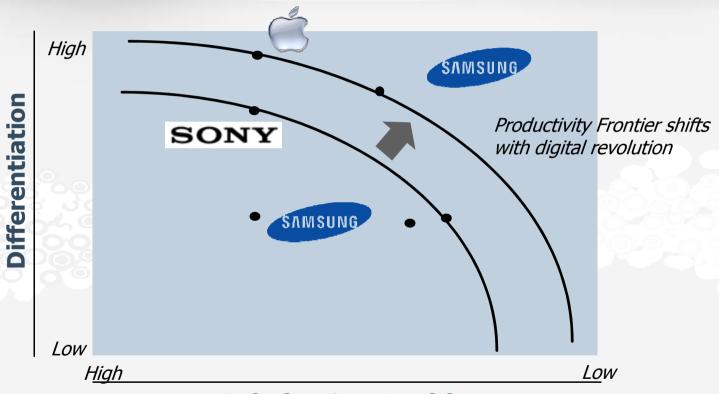
Transition from CRTs and FPDs



Price drops in LCD TV

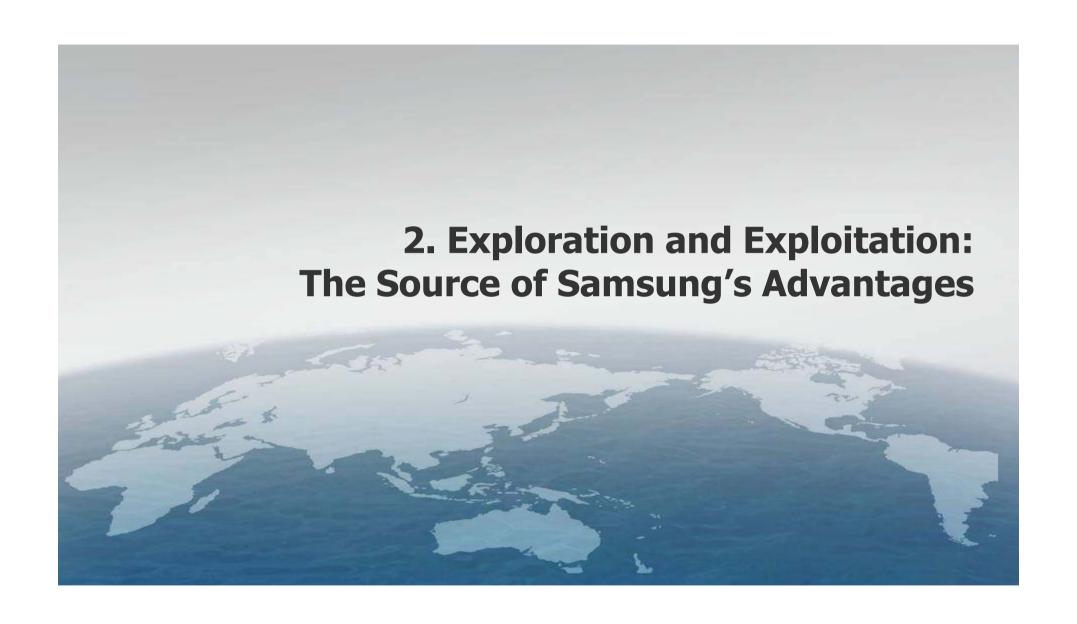


New Management let Samsung benefit most from digital revolution



Relative Cost Position

Source: Chang (2008)



What makes Samsung so speedy?

Of course, people at Samsung work very hard

- Completed the construction of Giheung Fab in 6 months when industry norm was 2 years.
- But, Samsung pays people well. PS/PI provides strong incentives to employees.

They also work smart

- Concurrent engineering: Without waiting other groups to complete their jobs, groups simultaneously work and exchange information to shorten development time.
- Strong process technologies: increase yields in an astonishing speed.
- Knowledge sharing across units and businesses.
- And, something more... technology and new product development strategy

Technology and new product development strategy

Building upon the success of DRAMs

- Battle with time (speed)
- Huge upfront investment
- Fast product development
- Focus on process technology

Focus on technology with clear trajectories

- Moore's law, Hwang's law, new mobile phone with new features
- Have a high ROI for given R&D investment
- A good balance between exploration (experimentation) and exploitation

Exploration and exploitation

ORGANIZATION SCIENCE Vol. 2, No. 1, February 1991 Printed in U.S.A.

EXPLORATION AND EXPLOITATION IN ORGANIZATIONAL LEARNING*

JAMES G. MARCH

Graduate School of Business, Stanford University, Stanford, California 94305

Capability Evolution

Exploration Processes

More experimental; performance measure is the hit rate; may bet on portfolio Examples: 3M with the discretionary time for employees; P&G – "if you fail, fail fast and cheap"

Exploitation Processes

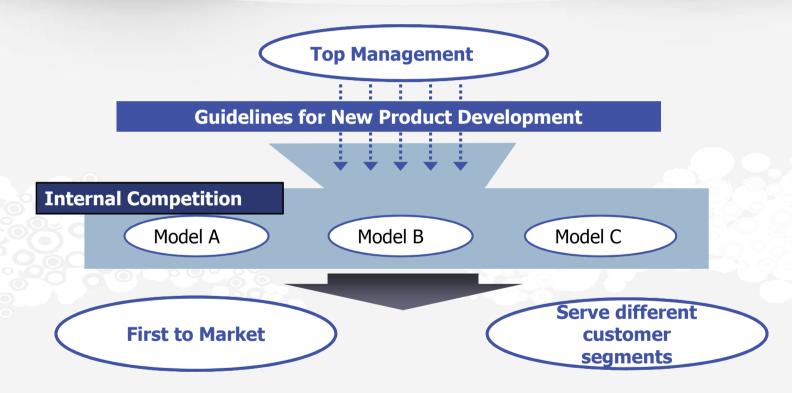
Efficiency seeking; return based measure, very focused on key assets/capabilities

Role of tradeoffs: How to balance the two processes?

'Samsung style' exploration

- How can Samsung achieve speed when there is a technological uncertainty or market uncertainty?
- Samsung usually plays multiple bets, called "parallel development." Once a choice exhibits superior performance, Samsung quickly grabs the opportunity by aggressive investment
 - C-MOS vs. N-MOS and stack vs. trench in DRAM design
 - DDR vs. Rambus
 - LCD vs. Plasma
 - CDMA vs. GSM
 - More than 40 new phones a quarter
 - Bada vs. Android vs. Window
 - Developed country markets vs. emerging markets (focus of the next presentation)

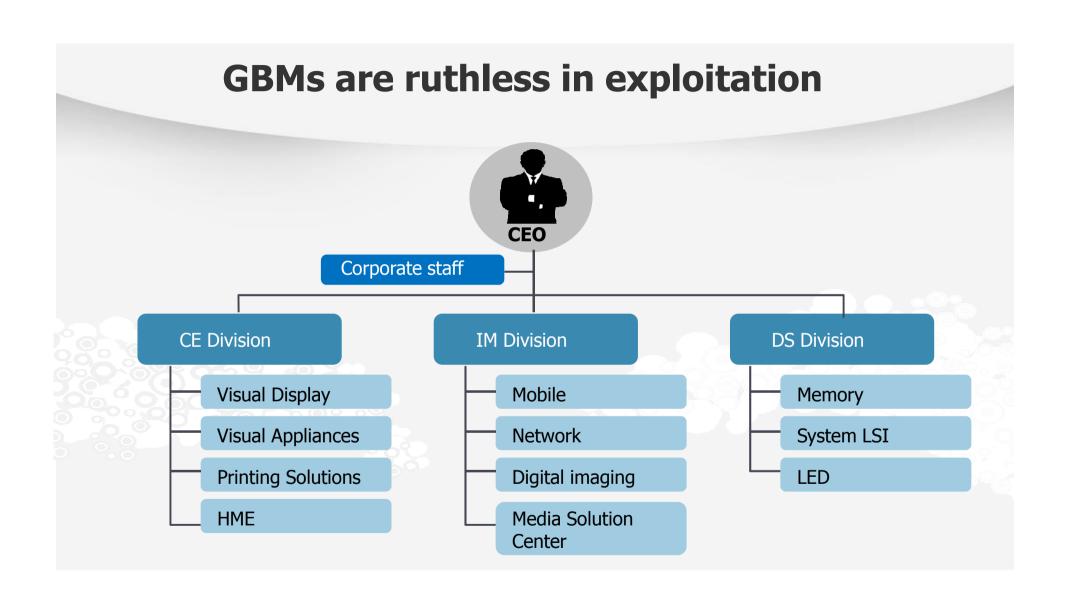
Exploration and internal competition among development units



In 2003, Samsung introduced 150 new models, while Motorola did 40

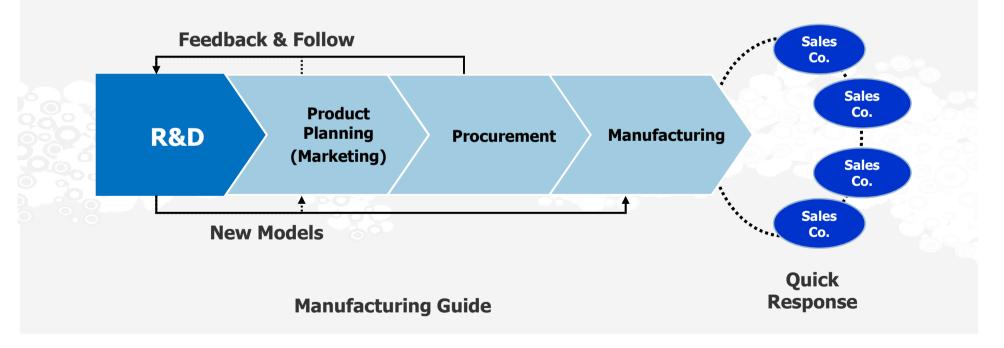
Competitiveness Comparison from Morgan Stanley Report

Company	Design and Product Skills	Design Cycle	Cost Competitiveness	Business Model
Samsung	 Handset R&D team~2,000 are design professionals. Complete range of GSM, GPRS and CDMA design capabilities. Use Qualcomm and TI chipsets. 	 Design cycle 3-6 mo. Has capacity to launch 8-10 new platforms each quarter. Launched more than 40 new platforms last year. 	Does not outsource production in China limited today due to quota but can increase rapidly, reaching 10 min in 2003 and 20 min eventually.	Mostly own brand business, and very small proportion of joint branded products for carriers.
LG	 Handset R&D team~1,450.35 are design professionals. Uses Qualcomm and TI chipsets. 	• Is able to design domestic products in 4-6 mo. For export models it takes 9-12 mo. Has capacity to launch 7-8 new platforms each quarter. Launched 53 new platforms last year.	manufactures in Korea.	 Mostly own brand business, and very small proportion of joint branded products for carriers.
Nokia	 Global R&D team~20,000. More than half work on software. Co-developed chipset with STM and TI. Also manufacture own chipset. Capable of GSM, GPRS, TDMA, CDMA. 	Design cycle 12-18 months. Heavy involvement in upstream components vs. off-the-shelf approach. 4-5 platforms a year	Best scale globally. Supposed to be cost competitive. Does not outsource much. Manufactures globally try to limit the number of models to be cost competitive. Production sites in China	Worldwide distribution network. Own brand focus on integration and in-house technology to maintain margin
Panasonic	 700-800 engineers. ~300 are in design, ~200 in semiconductor and ~200 in software Capable of designing PDC, TDMA, GSM and GPRS phones 	domestic phones and 6-8 month for export phones	year. Main partner quanta(GD- 55)	Partner with NEC in R&D Joint brand with carrier(Vodafone) Own brand in distribution



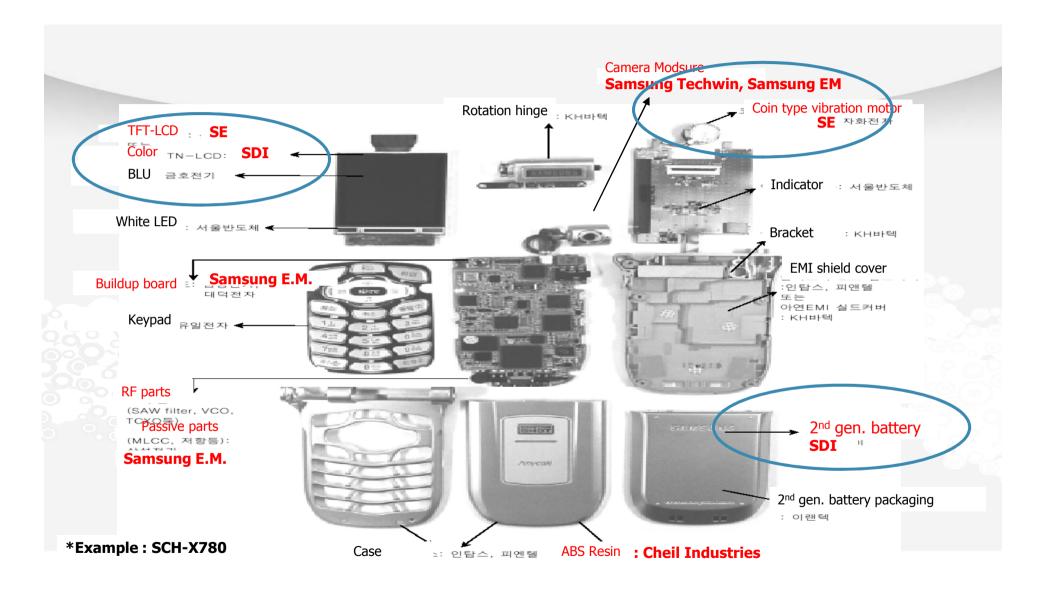
GBMs are efficient machines

Competitive Parts Supplies: Samsung has a strong ERP system

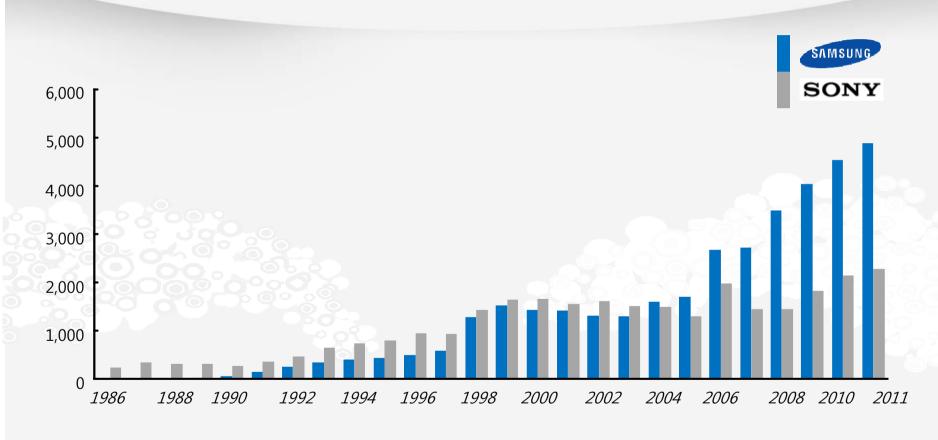


Strong internal and external suppliers

- Samsung is vertically integrated in key components such as memories, processors, modem chips, LCDs, which ensures speedy supplies
 - New Management emphasizes "synergies" among GBMs
- There are numerous external vendors. Their KPIs are quality + speed
 + loyalty
 - Only 10 days needed to complete prototype working sample
 - Only 3 days of CAD layout
 - Key suppliers are co-located in Gumi area.
 - Suppliers perform their own R&Ds, complementing R&D of Samsung
- Worldwide Supply Chain Management ensures a short lead-time and a maximum flexibility



Samsung' U.S. patents skyrocketed



Execution oriented culture also helped

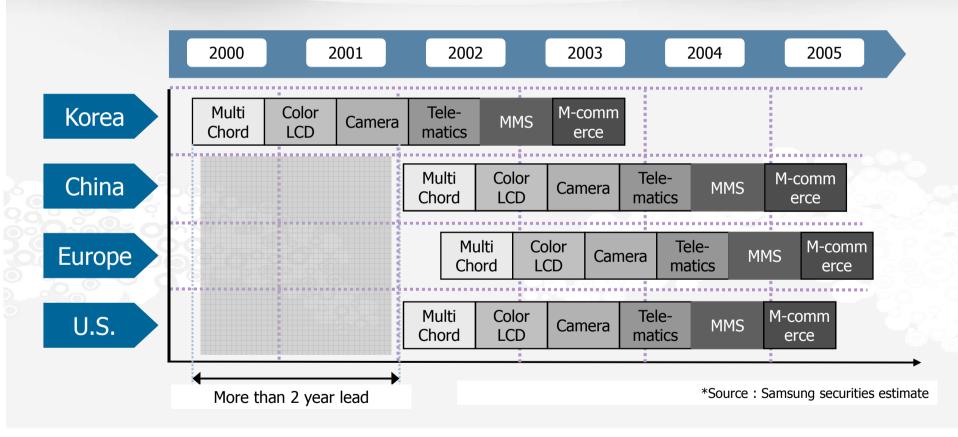
- Samsung has strong execution-oriented culture, based on strong discipline, loyalty, ethics, and "can-do spirit"
 - Very effective in achieving speed
- The presence of owner-manager helps quick and decisive decision making
 - The group-level staff organization support Chairman Lee.
 - Operational decisions are delegated to professional managers
- Chairman Lee warns against complacency.
 - "Only paranoid can survive.... " Andy Grove of Intel



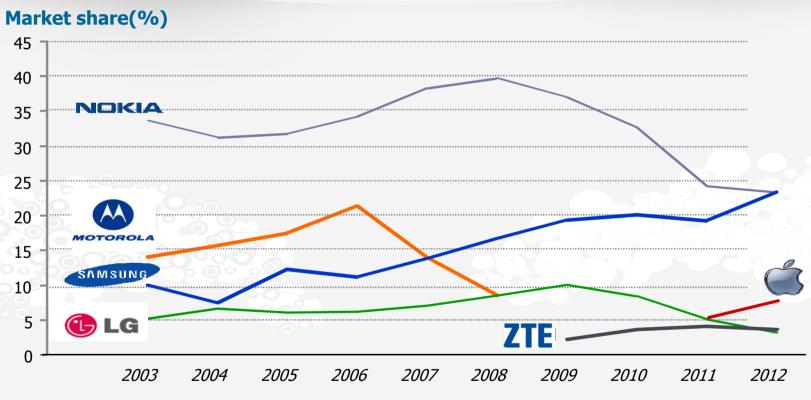
Samsung initially focused on mobile phone



Samsung (and Korea) was leading the mobile phone industry at that time



Global mobile phone market shares



Source: IDC, based on annual top 5 market shares

Then, it consolidated its success in TV



- Samsung introduced the Bordeaux TV, elegantly designed, wine glass style with swivel stand in 2007 and had a huge success
- Samsung started to lead not only in technology but also in design

Samsung keeps leading the premium segment by being the first in market

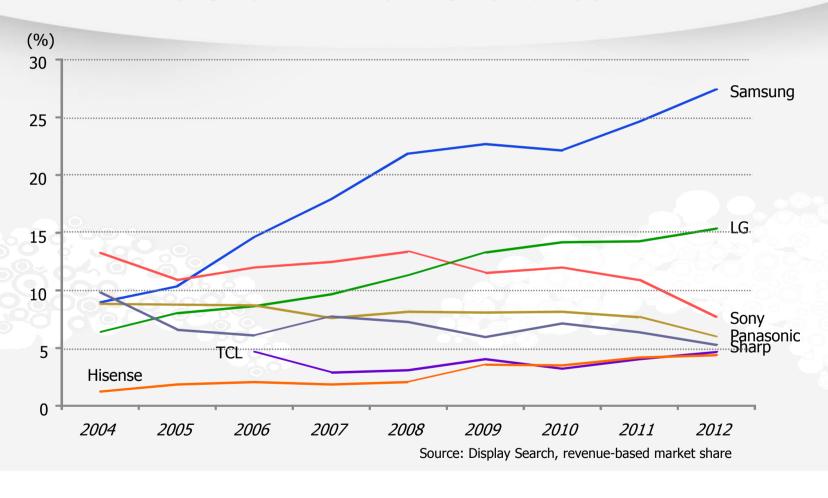


3D TV



Smart TV

Global TV market shares



Samsung was the only serious contender of Apple's iPhone







Samsung's first Android phone, I7500, in April 2009

Samsung responded to iPad with Galaxy Tab in 6 months



Apple released the 10" iPad on April 2010. 8" iPad mini was marketed on October 2012.

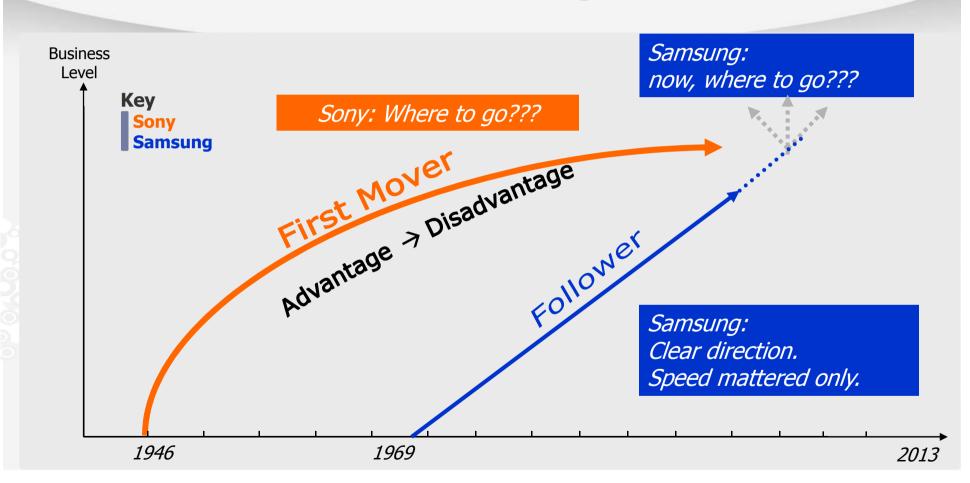


Samsung came up with the 7" Galaxy Tab on September 2010

Apple iPhone 5 vs. Samsung Galaxy S4: And the Winner Is...

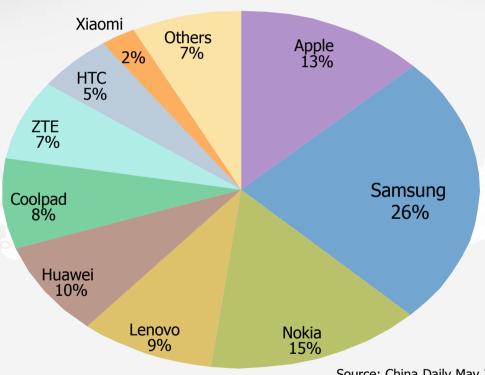
May 17, 2013 02:44 PM EDT by Mark Spoonauer, LAPTOP Editor in Chief 대추천 394 in Share < 5 Tweet 35 SAMSUNG Life companion

Where is Samsung now?



Emerging competitors from China



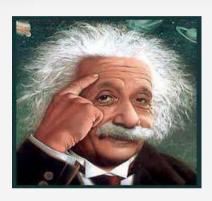


Source: China Daily May 27, 2013

Creativity is a key for the future. Maybe more external exploration?

Highly Educated People

- Samsung attracts top talents in Korea
- 12% people have Ph.D. or M.S. degree



Recruiting Hi-potential employees

Recruit top manages and engineers (S-class employees)

"One genius can feed 10,000 others..." Chairman, Lee, 2002

Tap foreign talents

- Samsung tries to recruit more foreign talents and give more responsibilities to foreign subsidiaries.
- Samsung may need more overseas M&As.