# Ch11. 하이테크 상품의 시간기반 전략

# The Law of Leadership

### Being first is better than being better.

- Heineken first import beer
- Miller Lite first light beer
- Harvard first university
- Time first weekly news magazine
- Playboy first porn magazine
- Jeep first 4-wheel drive
- IBM first mainframe computer
- SUN first workstation
- Chrysler first minivan
- Xerox first paper copier



## First-Mover Advantages

### Pioneer advantages

- Market share rewards
- High profit margin
- Earlier experience



- Three sources of "pioneering advantage" (Lieberman & Montgomery 1988)
  - Technological Leadership
  - Preemption
  - Buyer switching costs



### **Being First Does Not Guarantee Success!**

		Pioneer	Leader
$\checkmark$	VCR	Ampex (1956)	RCA - Sony
$\checkmark$	Microwave	Raytheon (1946)	<b>GE/Samsung</b>
$\checkmark$	Fax	Xerox (1964)	Sharp
$\checkmark$	PDA	Amstrad (1993)	Palm
$\checkmark$	Camera	Daguerrotype (1839)	Kodak
$\checkmark$	Copier	3M Thermofax (1950)	Xerox
$\checkmark$	PC	Apple (1976)	Compaq/Dell

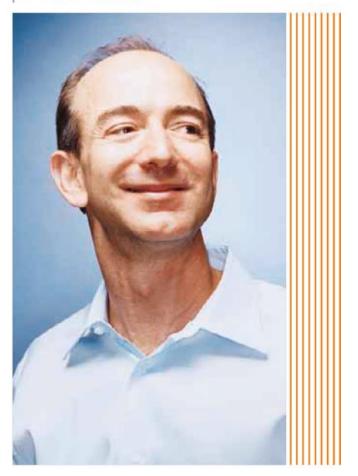
First-mover advantage should be paired with competitive advantage.

# First-Mover Disadvantages

### Late-mover (2<sup>nd</sup> mover) advantages

- Free-rider effects
- Resolution of tech/market uncertainty
- Shift in technology or customer needs
- Incumbent inertia or "producer lock-in"
- Entry timing dilemma
  - When should you enter?

#### "THERE ARE STRONG REWARDS FOR BEING A PIONEER."



- "Close following" is a valid strategy. But it just happens not to be who we are. Pioneering is in our corporate DNA, so we'd rather go down those blind alleys ourselves.
- In my opinion, there are strong rewards for being a pioneer. Plus, me-too strategies don't work very well on the Internet.





### The Half-Truth of First-Mover Advantage

by Fernando Suarez and Gianvito Lanzolla

First-mover advantage is more than a myth but far less than a sure thing. Here's how to tell when it's likely to occur – and when it's not. C OME MANAGEMENT CONCEPTS have Such intuitive appeal that their validity is almost taken for granted. First-mover advantage is one such concept. Although the fate of its mostconvinced adherents, the dot-coms, offers a califionary lesson, managers' faith that first-mover status brings important competitive advantages, even when network effects are not available to accelerate and entrench it, remains undiminished. Business executives from every kind of company maintain, almost without exception, that early entry into a new industry or product category gives any firm an almost insuperable head start.

But for every academic study proving that first-mover advantages exist, there is a study proving they do not. While some well-known first movers, such as Gillette in safety rators and Sony in personal stereos, have enjoyed considerable success, others, such as Xerox in fax machines and eToys in Internet retailing, have failed. We have found that the differences in outcome are not random- that first-mover status can confer advantages, but it does not do so categorically. Much depends on the circumstances in which it is sought.

One possible explanation for Sony's success is that its strong brand name, substantial financial resources, and excellent marketing skills allowed it to make the most of its first-mover status. ButXerox, too, had a great brand name, deep pockets, and many valuable skills. And Sony, despite its brand and marketing muscle, could not translate being the first mover in home VCRs into any-thing approaching its success with the Walkman. Yes, a firm's resources – and luck – are important, but certain other factors and conditions can be decisive as well.

구분	시장 변화 속도	기술 변화 속도	선도진입자 우위		핵심역량
			단기	장기	
잔잔한 바다 (Calm Waters)	느림	느림	가능성 낮음	가능성 매우 높음	브랜드 인지도
시장 리드 (Market Leads)	빠름	느림	가능성 매우 높음	가능성 높음	대규모 마케팅, 유 통, 생산 능력
기술 리드 (Technology Leads)	느림	빠름	가능성 매우 낮음	가능성 낮음	R&D, 신상품 개발 능력, 자금력
거친 바다 (Rough Waters)	빠름	빠름	가능성 높음	가능성 매우 낮음	대규모 마케팅, 유 통, 생산, R&D, 신상 품 개발 능력 (동시 에 모든 역량 필요)

# Fast Follower 전략

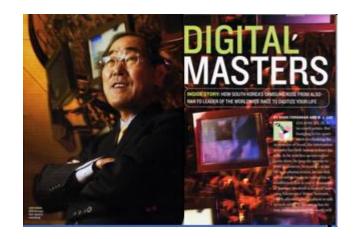
#### Microsoft

"Were we the first mover in PC word processing? No. ...As long as there is still room for fundamental innovation, there is still an opportunity." (Palm case)

#### Samsung

"Samsung waits for others to develop winning technology, then it improves on it, and pumps out a greater variety of finished products faster than anyone else."

- Newsweek (2004. 10. 11)



## Fast-to-Market Strategy

### "Time-to-market" is Key!

- Can get ahead and "stay ahead"
- Nearer in time to the eventual market -> better at forecasts with shorter TTM
- Can use newer (more advanced) technology with shorter development cycle

### Fast-mover strategy

- Respond quickly to market changes
- Be the first to upgrade products
- Introduce continuous innovation
- Reduce cycle time

#### NET ADS: FLIGHT TO QUALITY (P. 54) | HANK GREENBERG'S WAR (P. 78

The McGraw Hill Companies

# BusinessWeek

MARCH 27, 2006

#### www.businessweek.com



**EVALUATE:** Speed-to-market is now the ultimate competitive weapon. Lessons from the companies that are racing ahead BY STEVE HAMM (P.69)

#### **COVER STORY**

weeks. Aided by design firm IDEO Inc., Jackson Enterprises brought together people from all parts of the business for a weeklong off-site brainstorming session, a first for the company, that shook up managers. In December, 2004, the whole group decamped to Palo Alto, a two-hour drive from headquarters in wine country, for the series of mind-expanding exercises. IDEO did all sorts of things to bring fresh points of view into the discussions, including inviting Stanford students with no background in wine to sit in. One of the key lessons for Lee was rapid prototyping, quickly patching together rough models of wine concepts so the group could see how they looked.

The team emerged from the marathon with 10 crazy ideas, and then settled on two of the less crazy ones. One, named by corporate attorney Tiffanie Di Liberty, was Wine Block, the first wine-in-a-box ever for Jackson. These are elegant, 1.5-liter cubes modeled on perfume packaging. The second was Dog House. These bottles have twist-off tops and a drawing of a dopey dog on the label. The price is \$6.99, half that of a typical Kendall-Jackson bottle. Another departure: To get the wine ready for delivery in April, 2005, they operated a mobile bot-

#### XM SATELLITE

#### From Handshake to Stores In Just Nine Months

t's hard to imagine a rivalry more intense than that of XM Satellite Radio Holdings and Sirius Satellite Radio Inc., the two satellite radio upstarts. Sirius, of course, paid shock jock Howard Stern \$500 million to sign on. Both companies offer hardware discounts and free trials. And both, via hookups with electronics outfits, are racing to be first out with the latest gizmos.

In the white-hot world of digital convergence, where services are increasingly packaged with hardware, partnerships are essential to being first to market with the best blend of services and products. "From now on this will be the normal way of doing business in consumer electronics," predicts Dan Murphy, senior vice-president for sales and marketing at XM.

He should know: XM's alliance with Samsung Electronics Co. to produce the first portable satellite radio combined with a digital music player shows how this sort of thing can be done. In April, XM and Samsung plan to release their co-branded Helix, going from handshake to store shelves in just nine months. That compares with the 12 to 18 months it typically takes to bring new consumer electronics to market. Analysts praise the Helix effort. "You look for markets that are already hot and bring them

together," says Michael P. Greeson, chief executive officer at tech consultant Diffusion Group Inc.

How did XM do it? A combination of foresight and a good eye for allies. The journey started in early 2005, when the company spotted the opportunity to meld satellite radio with a music player. Even before it found a hardware partner, XM started designing the building blocks for the machine—including chips, an antenna, and a tiny circuit board. Last May it approached Samsung and discovered that the Korean electronics signt had fixed on the same idea.

Once they signed a deal, the race was on to bring the new device to market. The two companies created a virtual productdevelopment learn jointly headed by one manager from each company. Samsung engineers focused on industrial design and manufacturing, while XM focused on the

#### THE LESSON

#### Partnerships are essential in the world of

digital convergence, where services are increasingly packaged with hardware.

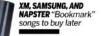
tling plant installed in the back of a semi in the parking lot.

The results have a hearty bouquet. Jackson expected to sell about 10,000 cases of each. Instead, both broke the 100,000case barrier. The company has an even bolder new venture in the works, which is hush-hush for now.

HAND OFF TASKS TO SPECIALISTS: Outsourcing companies don't just do things more cheaply anymore; they can do them better and faster. Take the cell-phone business. What's in vogue changes as rapidly as clothing fashions, so companies must introduce a steady stream of new designs. Problem is, it typically takes 12 to 18 months to develop a phone from scratch. That's why cell-phone companies, both leaders and also-rans, are tap-

ping outfits such as Cellon Inc. in San Jose, Calif., to design some or all of their models. Cellon doesn't wait for customers to call before it starts engineering. It

it starts engineering. It has a half dozen basic





antenna, the user interface, and delivering one-of-a-kind features. Consumers will be able to 'bookmark' a song they're listening to on the radio and later buy it on the Napster Inc. Web site with just a few clicks of their computer mouse.

This collaboration marks a sea change at Samsung. The company used to be a go-italone outfit. No more. Now it's on the lookout for more partners. "We have to find other companies that are leaders in their fields who can move as quickly as we can," says Peter Weedfald, a senior vice-president at Samsung Electronics America Inc.

Will XM and Samsung win this race? It has barely begun. But without alliances to speed products to market, they'd have a hard time competing in this new world.

#### **PLAYBOOK: BEST-PRACTICE IDEAS**

# Survival of the Fleetest

Companies on the cutting edge are trying new techniques to help them break their old product-development habits. Here's how they do it:

### Find new ways to spot hits



Focus groups and market research aren't enough. So companies are trying new methods to

bridge the gap between what technology has come up with and what consumers will want to buy.

**Example:** Retailer Best Buy has cultivated venture capitalists to find out what startups have in the works.

### Launch with agile teams



**COVER STORY** 

Large companies should begin new initiatives with small teams and build "fences"

#### around them—so they won't get tangled in red tape. Entrepreneurial outfits are agile by nature.

**Example:** Restaurant franchiser Raving Brands gets new concepts going with a half-dozen people.

#### Break your unwritten rules



It's the invisible ties that often slow down innovation. And breaking through those bonds is tough.

Try brainstorming off-site or with outsiders who are able to provoke fresh thinking.

**Example:** Jackson Enterprises, facing a glut of wine, came up with two new wine concepts: Both were hits.

### Outsource tasks to specialists



outsourcers don't just do things more cheaply; they do them better ing standard

Design and

manufacturing

and faster. Using standard technologies and components, they cut development time in half.

**Example:** Cell-phone designer Cellon tweaks standard designs for individual clients.

#### When you have it right, repeat



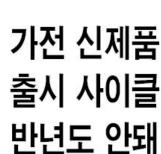
Once a new product or business has succeeded in the market, don't reinvent the wheel. Look

for ways to use the same technology or business model again and again in additional markets.

**Example:** Virgin launched a mobile service in Britain, then used the template in three more countries.

How smart companies are creating new products-and whole new businesses-almost overnight BY STEVE HAMM







2005년 2월 '로미용밀리노



선점해야 하기 때문이다.

했다

2005년 6월 'LN51BD'

삼성천자는 지난해 2월 LCD TV 신

체품 '로마&밀라노'를 전세계에 출시

했다. TV로는 다소 파격적인 '오각형'

디자인을 토입한 이 제품이 2005년

'대표주지'라고 강조했다. 그러나 불과

4개월 뒤 '대표주지'는 '사각형'으로

비뀌었다. 신제품 "LN51BD'시리즈가

전격 출시됐기 때문이다. 그리고 3개

월 뒤 9월에는 명암비 5000대1를 구

현한 'LN61BD' 시리즈가 새로 출시

됐다. 삼성전지는 이달 말 '보르토'라

는 LCD TV 신제품을 또 선보인다. 1 년 새 무려 4종의 LCD TV 시리즈가

불과 2~3년 전만 해도 1년에 한 번씩 발표되

던 가전 신제품 출시 사이클이 급속도로 짧아지고

있다. 소비자 취향이 수시로 바뀌고, 기술개발 속

토토 빨라지면서 라이프 사이클이 6개월도 안 되

는 제품이 속출하고 있다. 시장에 내놓고 뒤돌아

서면 '퇴물'이 되는 현실 때문에 대기업 디자인젠

터에서 1~2년 뒤 제품 디자인을 미리 만들어 놓

○첨단 기전 3개월이면 '퇴출'=라이프 사이클

이 짧은 분야는 경쟁이 치열한 최첨단 디지털가전

에 집중돼 있다. 앞선 성능과 디자인으로 시장을

제중명 순사임 주요기능

2006년 3월

DVB Wa

┃ 디지털큐브 PMP 신제품 발표 현황 아이스테이선V43

발표되는 셈이다.

고 준비할 정도다.

2005년 12월

UNINGE

DMB방송 시청이 가능한 PMP를 내놓았다. 다음 달에는 PMP, 내비게이터, DMB 등이 모두 가능 한 제품도 선보인다. 6월 말에는 무선인터넷, 여 름에는 휴대인터넷(와이브로) 등이 가능한 신제품 도 출시할 계획이다.

2006년 3월 '보르도'

> 삼성전자 LCD TV 신제품 발표 현황

◇가격급락 저지 효과도 한몫=가전업계의 신 제품 출시 간격이 짧아진 것은 디지털가전의 가격 급락에 대한 하나의 대응책이기도 하다. 디자인과 성능을 개선해 기존 제품보다 가격을 올려 팔 수 있기 때문이다.

급변하는 소비자 취향·기술 트렌드 맞춰 앞선 성능과 디자인으로 시장 선점 경쟁

LCD 모니터도 마찬가지다. LG전자는 LCD 모 니터 시리즈를 무려 5종이나 출시하고, 세부 모델 을 매달 1종씩 발표했다.

LCD와 PDP 등 디스플레이와 휴대가전이 대

표적이다. 시장선점 경쟁이 불불은 LCD TV의 경우 삼성전자가 1년 새 '간관주자'를 4번이나 갈

아치우는 동안 LG전자도 지난해 2월 엑스캔버스

신제품을 출시한 뒤 3개월 뒤 '타임머신'이라는

새 제품으로 응수했다. LG전자는 올해에는 아예

시리즈 3종(LB, LC, LX)을 한꺼번에 내놓기도

김기선 과씨뱅크 사장은 "지난해 초만 해도 LCD 모니터 신제품 출시 주기가 6개월 가격이었 지만 최근에는 대기업은 2개월, 중소기업은 3개 월으로 절반 정도 짧아졌다"고 말했다. 컨버전스가 급진전되는 휴대가전에서도 자고

나면 '퇴물'이 속출한다. 디지털큐브는 지난해 12월 PMP에 내비게이션 요구할 정도"라고 말했다.

아이스테이션DME니비(가성) 아이스테이션인터넷(가쇵) 아이스테이선의 이브리가 쇵 2006년 4월 2006년 6월 2008년 04배 니비케이터 DMB 방송 무선인티넷 와이브루

비티씨정보통신 관계자는 "모니터 가격이 빠르게 떨어 지면서 유통업체들 이 마진 확보를 위 해 가격이 다소 비 싼 신제품 출시를

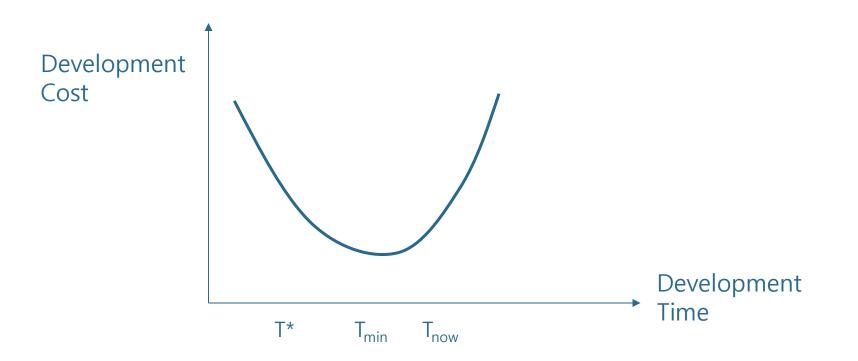
LG전자 디자인경영센터 김태봉 책임연구원은 "하루가 다르게 쏟아지는 신제품 때문에 출시 몇 개월 전에 시작하면 디자인 작업이 1, 2년가량 앞 당겨지는 추세"라며 "미래 소비자 취향이나 기술 트렌드 변화에 디자이너들이 오감을 집중하고 있 다"고 밝혔다.

기능을 넣은 신제품을 발표하고, 3개월 만에 아이스테이션V43DMB

장지영기자@전자신문 jyajang@etnews.co.kr

## Speed-to-Market, Quality, and Cost

- The tradeoff: "Good, fast, cheap...Pick any two."
- Development time vs. Cost



# Speed vs. Quality Tradeoff

### Scenario 1: "Catch the competition"

- Fast development with low performance levels is optimal when:
- Fast development with high performance levels is optimal when:

### Scenario 2: "Beat the competition"

- Being first to market with a product that has a high performance level is optimal when:
- Being first to market with a product that has a low performance level is never optimal.

### Real-Time Marketing (Regis McKenna, HBR 1995)

### • Time-to-acceptance is key.

- Dialog can help prepare products "ready" to be accepted, thus reducing time-to-acceptance.
- "The dialog is the brand."
  - Build brand through relationship marketing.
  - IT enables "real-time" one-to-one dialog. (cf. broadcast advertising)
- Dialog begins with "access": Build interactive links to the marketplace.
- Make customers partners in product design to (1) make them loyal and (2) speed a product's acceptance.: Philips, Sony

# **Time Pacing**

### Definition

- Time pacing means transition "according to the calendar." cf. Event pacing
- Transition
  - Transitions are rarely practiced and often forgotten.
  - Transitions need to be "choreographed".
- Rhythm
  - Staying in a rhythm requires discipline and concentration.
  - Need to be adjusted to different conditions.
  - Synchronization with the marketplace.
  - Specific metrics on time and speed required.

# **Time Pacing in Action**

### Intel

- Moore's law: Chip power doubles every 18 mos.
- Build a new manufacturing facility ("fab") every 9 mos.

### Netscape

• The inventor of the pace known as "Internet time"

### **3**M

• 30% of sales must come from products less than 4 yrs old.

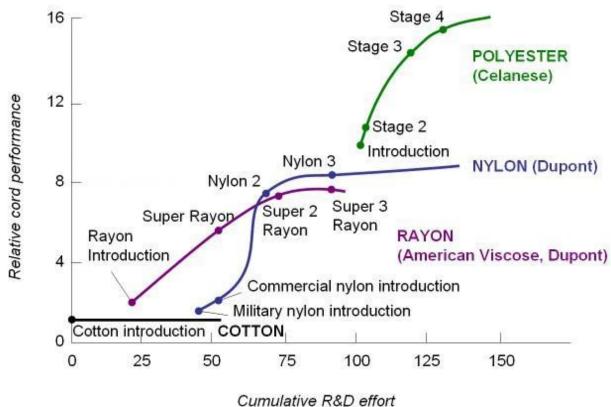
### Gillette

- Raises prices at a pace set to match price increases in a basket of market goods
- 40% of sales every 5 years must come from entirely new products.

# Jumping the Technology S-Curve

Performance

**R&D** or Time



(millions of constant \$)

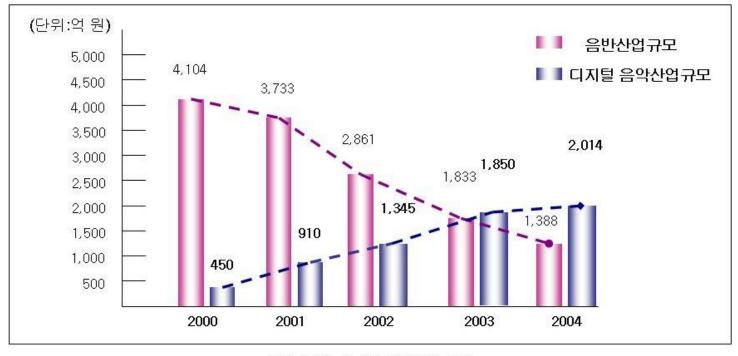
# **Explore or Exploit?**

The emergence of a new technology offers a strategic challenge:

- Should a firm allocate resources to explore the new technology? If so, how much?
- Adopting a new technology: Exploration
  - Opportunity cost and time to market
- Ignoring a new technology: Exploitation
  - The competitor which adopted a new technology may threaten the company later
  - Cannot catch up if learning takes time (Lockout)
- Adaptive Rationality: Adaptive Decision Rule
  - Examples: Venture Capitalists, Sharp, Intel's decision

### Explore or Die?

#### 음악산업 규모 = 음반산업 규모 + 디지털 음악산업 규모 (3,352억원) = (1,338억 원) + (2,014억 원) 2004년 기준



[자료: 한국소프트웨어진흥원]

# Why Miss the Timing?

### Premature eradication

- Old technologies never give up without a fight.
- S curves might help.

### • Missed substitutions

- Business risk or uncertainty about its acceptability to the market
- Pleasing the current base of customers
- Monitoring the wrong competitors
- Organizational inertia

# **Strategies for Innovators**

- **1.** Pay attention to the S-curves of new technologies.
- 2. Become comfortable with the idea of continually rendering your own products obsolete. ("upgrading")
- 3. Keep from allowing your current customers to dictate future technology strategy.
- 4. Include in any competitive analyses not only existing mainstream competitors but also emerging companies or companies active in related fields.
- 5. Reduce market acceptance time by making it look as much like the previous product as possible. Simplicity plays a key role in lowering barriers.
- 6. Gather courage to take the risk and make the jump to the new s-curve, providing you look before you leap.