Ch8. 하이테크 제품전략

PART (1)
핵심전략비전(CSV)과
마켓플랫폼플랜(MPP)
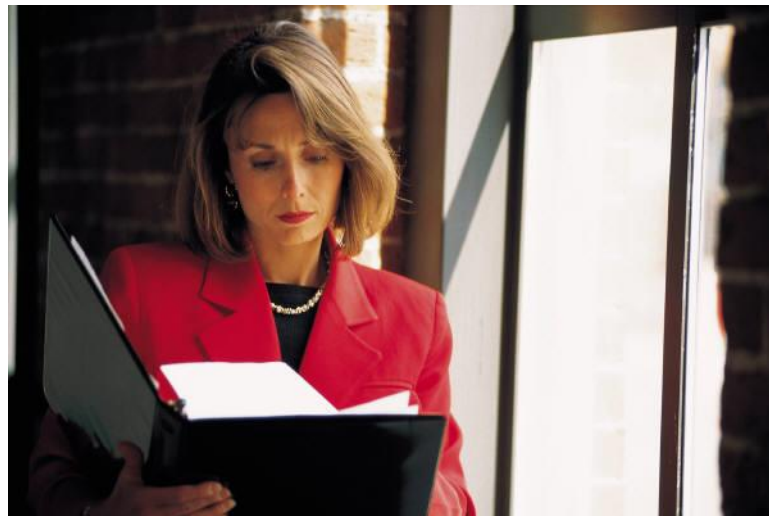
하이테크 제품전략: The MPP Framework

Core Strategic Vision

- Where are we going?
- How will we get there?
- Why will we be successful?

Market Platform Plan

- Product platform strategy
- Defining technology
- Product line strategy

Product Strategy

- Vector of differentiation
- Product upgrade
- Self Cannibalization
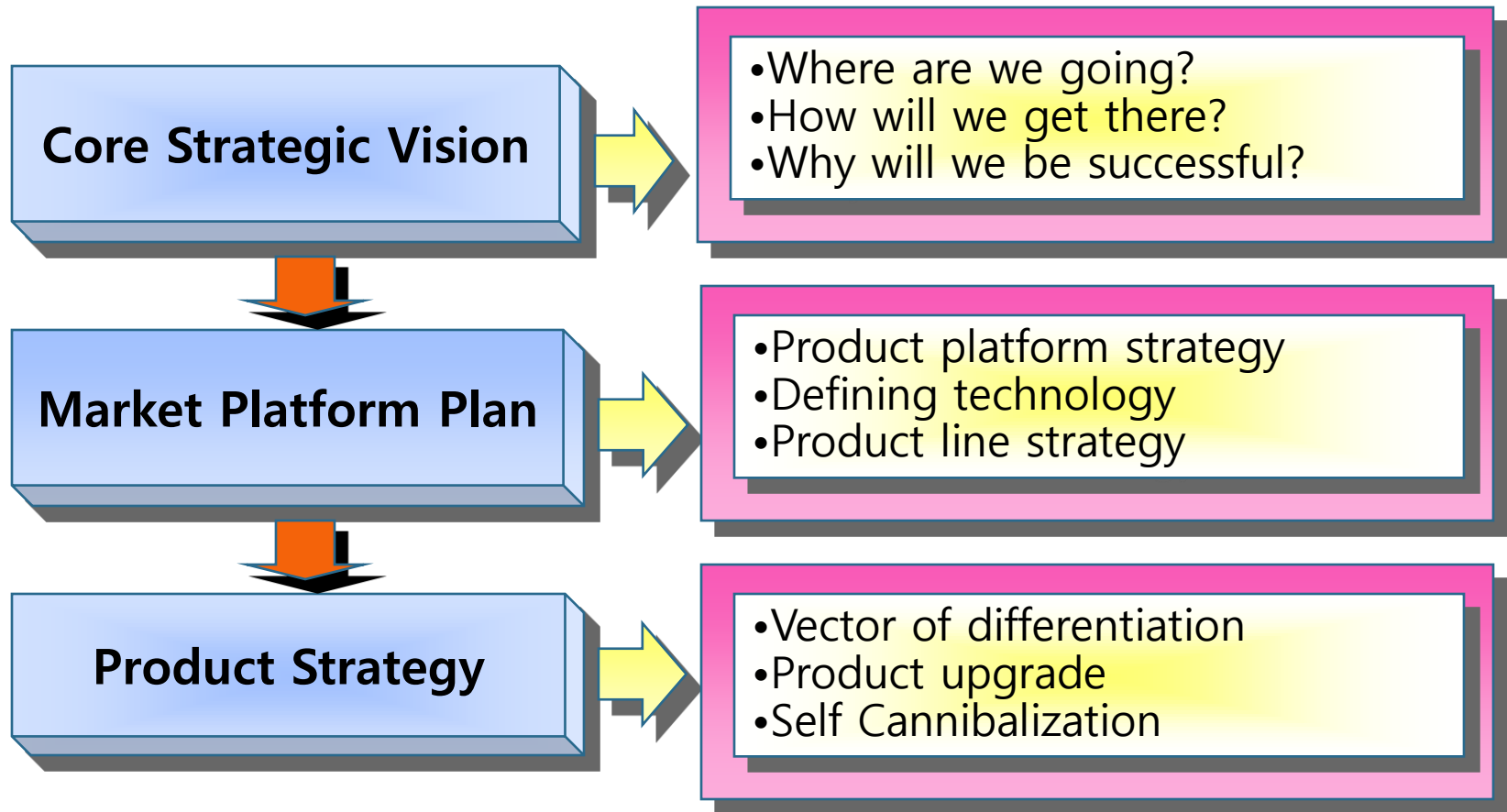
핵심전략비전: CSV

- **Product strategy is a roadmap, and it is useful only when...**

- **CSV는 Mission이나 '비전'과 다르다**
  - CSV needs adjusting and updating.
  - CSV guides strategy.

- **성공적인 CSV의 요건**
  - Focus
  - Clarity
  - Completeness: where, how, why
  - Feasibility

CSV in action: Compaq example

- **Vision statement in 1993**

    "We want to be the leading supplier of PCs and PC servers in all customer segments worldwide. We intend to accomplish this goal by leading the industry in developing new products, pricing competitively, controlling costs, supporting customers, and expanding distribution. Compaq understands the dynamics of the industry and is poised to move decisively to exploit new opportunities."

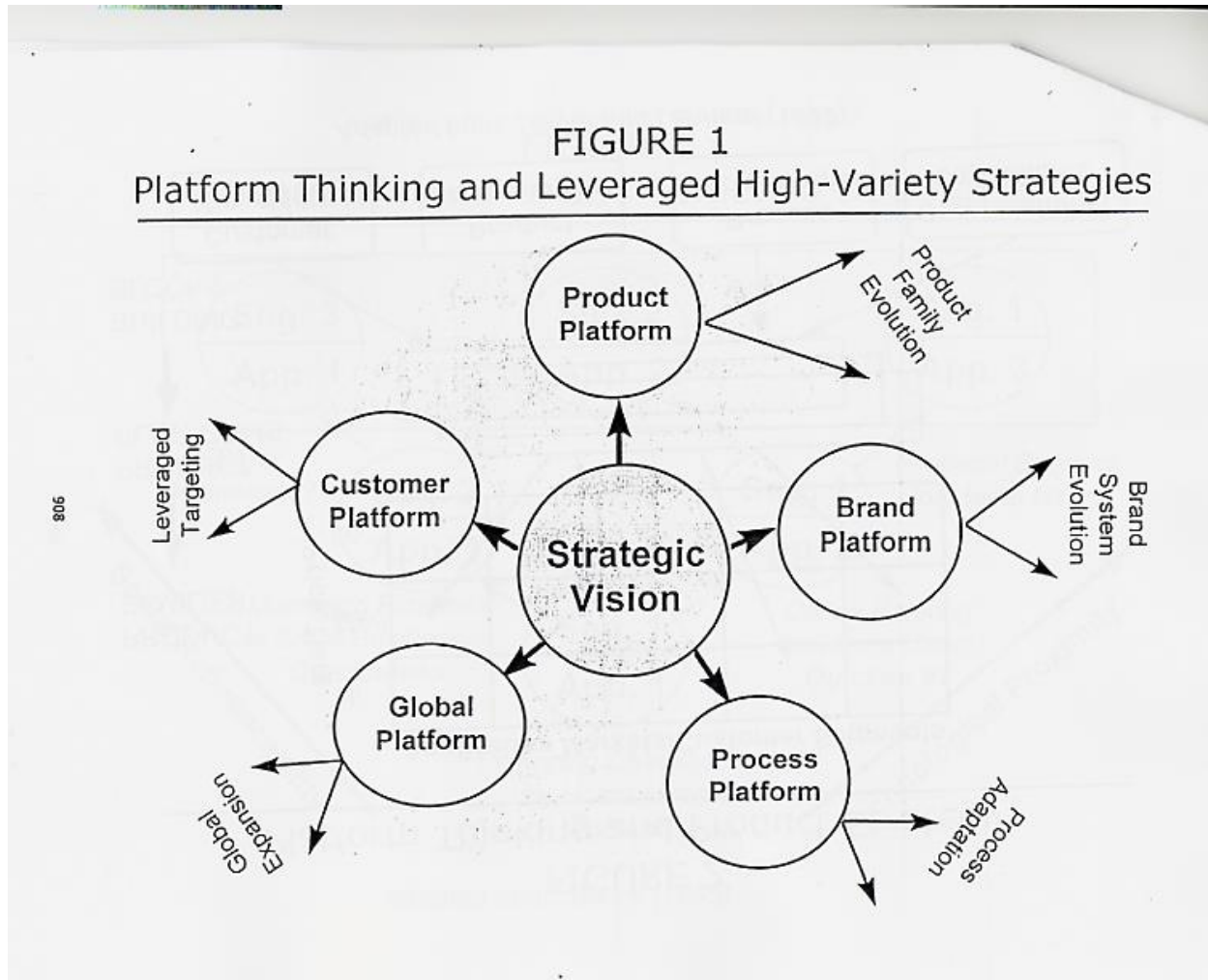- **Compaq changed its CEOs to change its vision.**

Motorola의 실수

- **"High-variety"와 "Cost-effective"를 동시에 추구하며 성장하는 방법: Platform 사고**

- **플랫폼 사고의 이점**
  - 장기적 관점과 전략적 초점
  - 일관성 있고 신속한 신제품 개발 및 출하
  - "공유"를 통한 효율달성: R&D, 제조, 마케팅
  - 기술,시장변화에 신속하게 대응

- **플랫폼 사고의 다양한 차원**

FIGURE 1
Platform Thinking and Leveraged High-Variety Strategies

출처: Sawhney (1998)

제품 플랫폼 전략

- **Product platform is a collection of common elements implemented across a range of products.**
- **제품플랫폼은 하이테크 기업 제품전략(특히 라인전략)의 기초**
  - 장기적인 제품전략의 틀이 되며, 기술개발의 로드맵 제시
  - 하다 보니 얻어진 게 아니라 의도된 플랜이어야 한다
- **많은 경우 제품의 실패는 제품플랫폼의 부재 혹은 불완전한(incomplete) 제품플랫폼 전략에 기인**
- **제품플랫폼은 업종에 따라 제품에 따라 다르다.**

An Example: Palm

Segment 3   **Palm VII**

Product Lines
with Unique
Features

Segment 2   **Palm V**   **Palm Vx**

Segment 1   **Palm III**   **Palm IIIx**   **Palm IIIc**

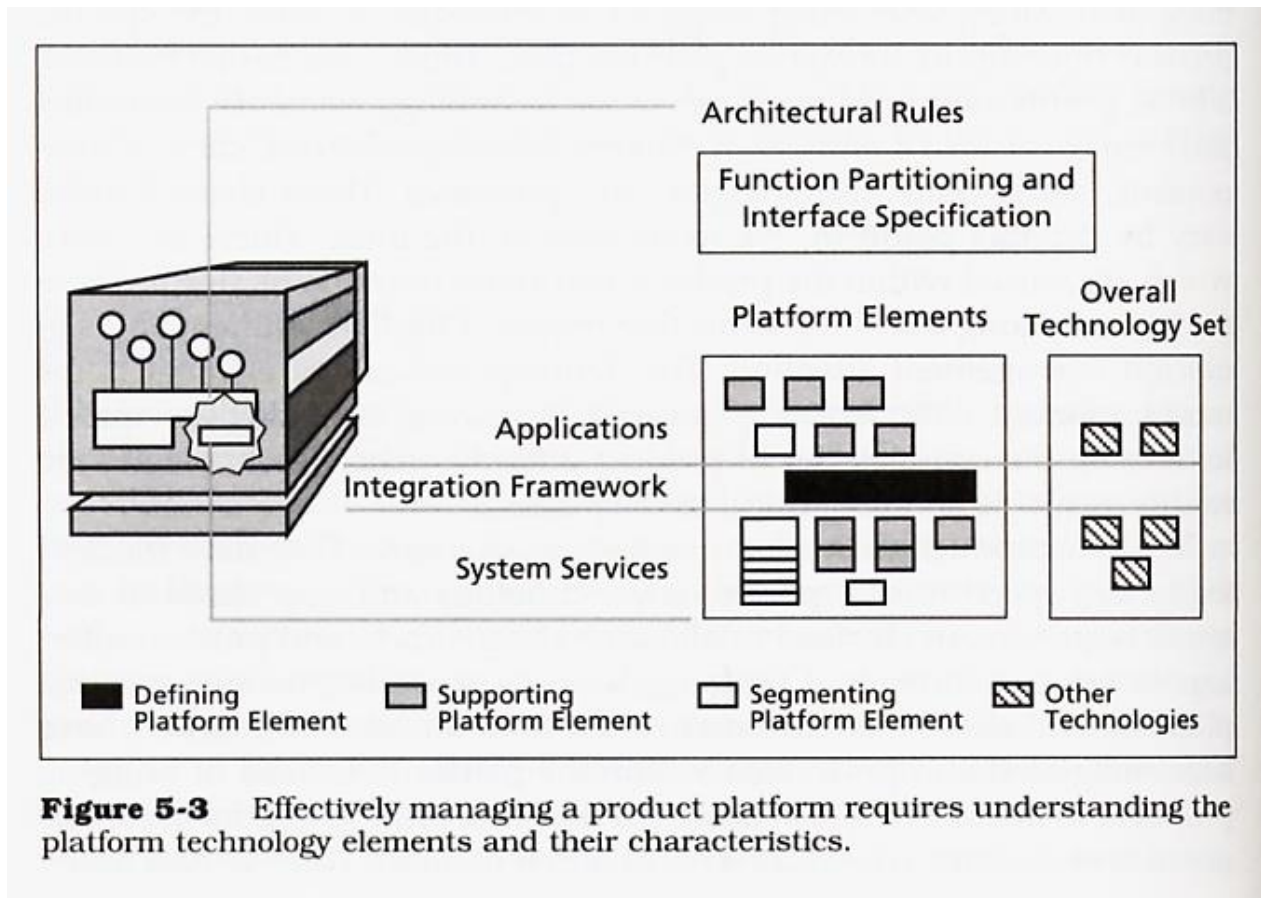**Palm OS**

Handwriting Recognition

Common
Platform
Elements

❖ A product platform consists of a number of *platform technology elements*. (PTE framework)

Figure 5-3 Effectively managing a product platform requires understanding the platform technology elements and their characteristics.
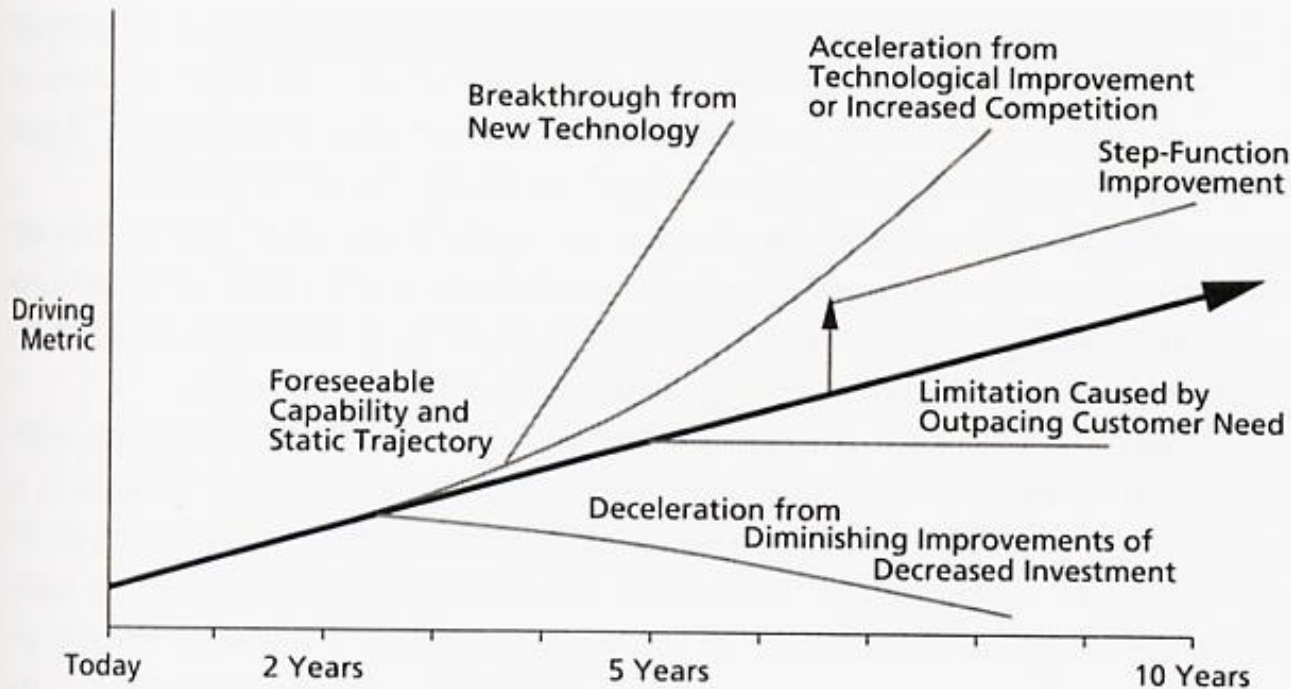
플랫폼기술요소와 결정기술

- **결정기술(defining technology)은 제품의 핵심역량을 결정하는 핵심 기술요소**
  - Intel, Sony, Canon, Samsung, FedEx, Amazon, Wal-Mart
  - 결정기술의 정의와 선택은 하이테크 기업의 가장 중요한 결정: Wang, IBM, 그리고 Apple의 실수
  - 결정기술은 경쟁우위의 원천도 되지만 성장의 한계가 되기도 함

- **지원기술(supporting technology)은 결정기술을 보완하고 성능을 향상시키는 기술요소**

- **세분화기술(segmenting technology)은 다양한 세분시장의 요구를 반영하기 위한 기술요소**

Figure 5-4 Technology trajectories can accelerate or decelerate and are dependent on many factors.

- **제품플랫폼 쇠퇴의 원인**
- **제품플랫폼 수명의 연장**
  - Exploitation
- **새로운 제품플랫폼의 개발과 성공적 이행(migration)**
  - 제품 로드맵의 활용
  - 파생상품으로 low-end의 갭을 없앤다

$

?
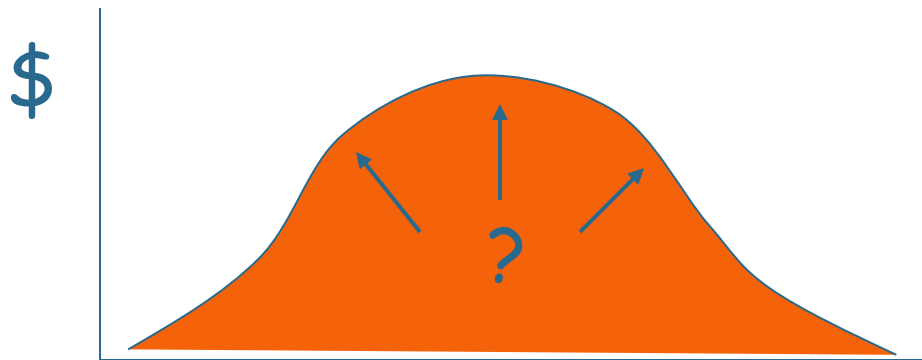
제품 라인 전략

- **A product line strategy is a *time-phased conditional* plan for *sequence* of developing products from a common product platform.**
- **Coverage**
  - 각각의 제품은 구체적인 세분시장을 겨냥하되 전체적으로 모든 주요 세분시장을 모두 커버해야 한다.
  - 그러나 product proliferation과 market confusion은 최소화
- **Dynamics**
  - 가정(assumptions)을 끊임없이 체크하라
- **Timing and Sequence**
  - 제품라인 길이의 결정
  - 자기잠식의 고려
  - 속도와 타이밍 중요

NEW APPLES IN THE ORCHARD

Apple has stuck to upmarket products in recent years, squeezing maximum profit from die-hard fans. Now it hopes to build on the iPod's success by going more mass-market in two promising growth areas: Home PCs and low-end music players. How the new Mac mini and iPod shuffle fit into the lineup:

PCs

1. POWERMAC G5 Apple's most powerful computer is aimed at corporate creative types–many of whom have moved to Windows PCs in recent years
$1,500-$3,000*

2. POWERBOOK G4 Thanks in part to the iPod "halo affect," this powerful notebook is popular among students
$1,600-$2,800

3. iMAC G5 Introduced last fall, the all-in-one flat-panel machine won raves, but it's too costly for most consumers
$1,300-$1,900

4. iBOOK G4 The rugged notebook is targeted at budget-conscious schools and consumers
$1,000-$1,500

5. eMAC This budget-price all-in-one machine is the choice for many schools
$800-$1,000

6. MAC MINI With its new low-priced contender, Apple hopes to lure unhappy Windows PC owners
$500-$600**

MUSIC PLAYERS

1. iPOD PHOTO Designed to store images as well as tunes, sales have lagged other iPods since its debut in October
$500

2. iPOD Apple's best-selling product hooks music fans who want a device to hold their entire music collections
$300-$400

3. iPOD MINI Capable of storing 1,000 songs, its lower price and smaller size have made it popular with the gym set
$250

4. iPOD SHUFFLE A simple, inexpensive device for folks who need to carry around only a dozen or so CDs' worth of music
$100-$150

*Without a display. **Without a display, keyboard, or mouse

MAINSTREAM
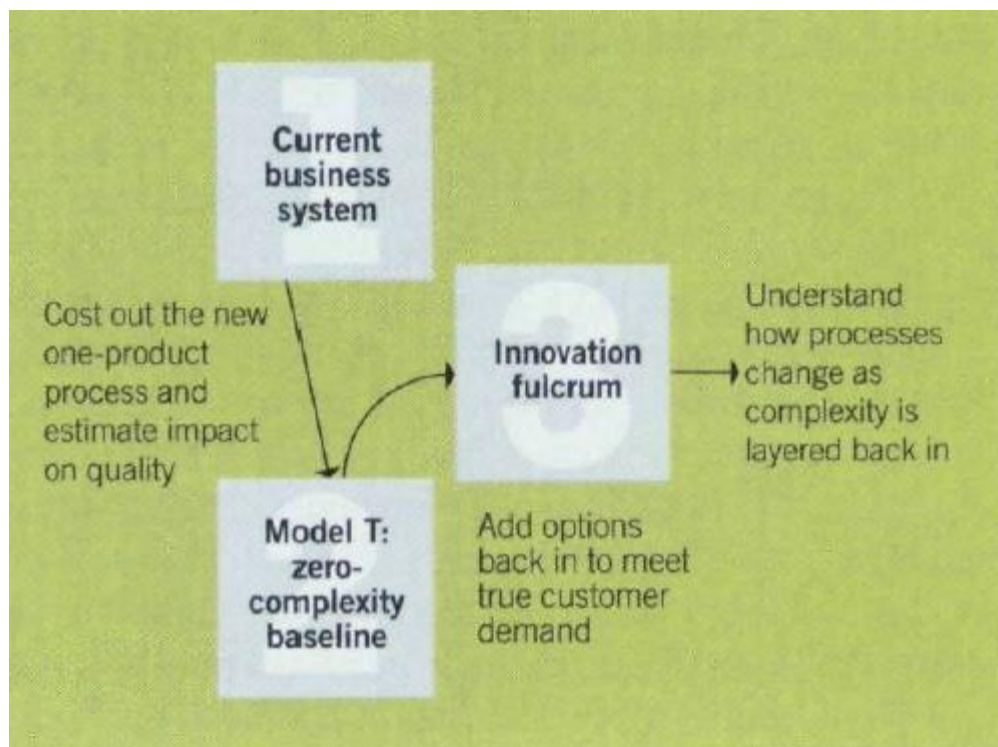Jobs at the Mini's introduction

To get at the roots of profit-destroying complexity, companies need to identify their innovation fulcrum, the point at which the level of product innovation maximizes both revenues and profits. **by Mark Gottfredson and Keith Aspinall**

Innovation
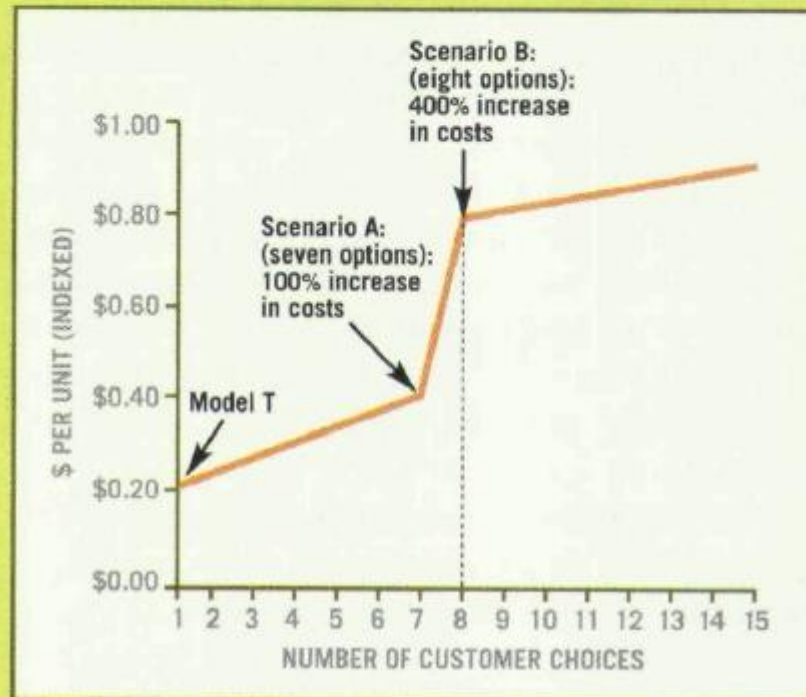## WHAT IS TOO MUCH OF A GOOD THING? (VS)
Complexity

W ALK INTO THE IN-N-OUT BURGER restaurant on Fisherman's Wharf in San Francisco, and one of the first things that may strike you is the number four. Four colors: red, white, yellow, and gray; four cash registers with four friendly faces behind them; and just four items on the menu. You can buy burgers, fries, shakes, and sodas. All the ingredients are delivered fresh to the store, where they're prepared in the open kitchen behind the cashiers. You'll see a few folks eating at the restaurant's tables or tucking into their food outdoors on patio benches, but most customers come in with

Cost out the new one-product process and estimate impact on quality

Current business system

Innovation fulcrum

Understand how processes change as complexity is layered back in

Model T: zero-complexity baseline

Add options back in to meet true customer demand

Adding Variety, Carefully

When an industrial supplier saw that offering one additional option caused a huge leap in costs, it determined that its innovation fulcrum, the complexity level at which it would maximize both profits and revenues, rested at seven options.

Scenario B: (eight options): 400% increase in costs

Scenario A: (seven options): 100% increase in costs

Model T

$ PER UNIT (INDEXED)

$1.00
$0.80
$0.60
$0.40
$0.20
$0.00

NUMBER OF CUSTOMER CHOICES
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

PART (2)
개별제품전략

범용화의 위험

- **Unit One Costs**
  - Pro CD 이야기
  - The cost of producing the first unit is very high relative to the costs of reproduction.

- **표준화, 모듈화는 범용화를 촉진한다**
  - Digital TV의 범용화
    "The flat-TV market, like the PC market, is moving to standard technologies, best price, and more commoditization." BW 2005/4/4
  - 범용화를 막는 길은 포지셔닝과 차별화뿐

1. 차별화는 제품의 전략적 위치 즉 Positioning을 결정한다
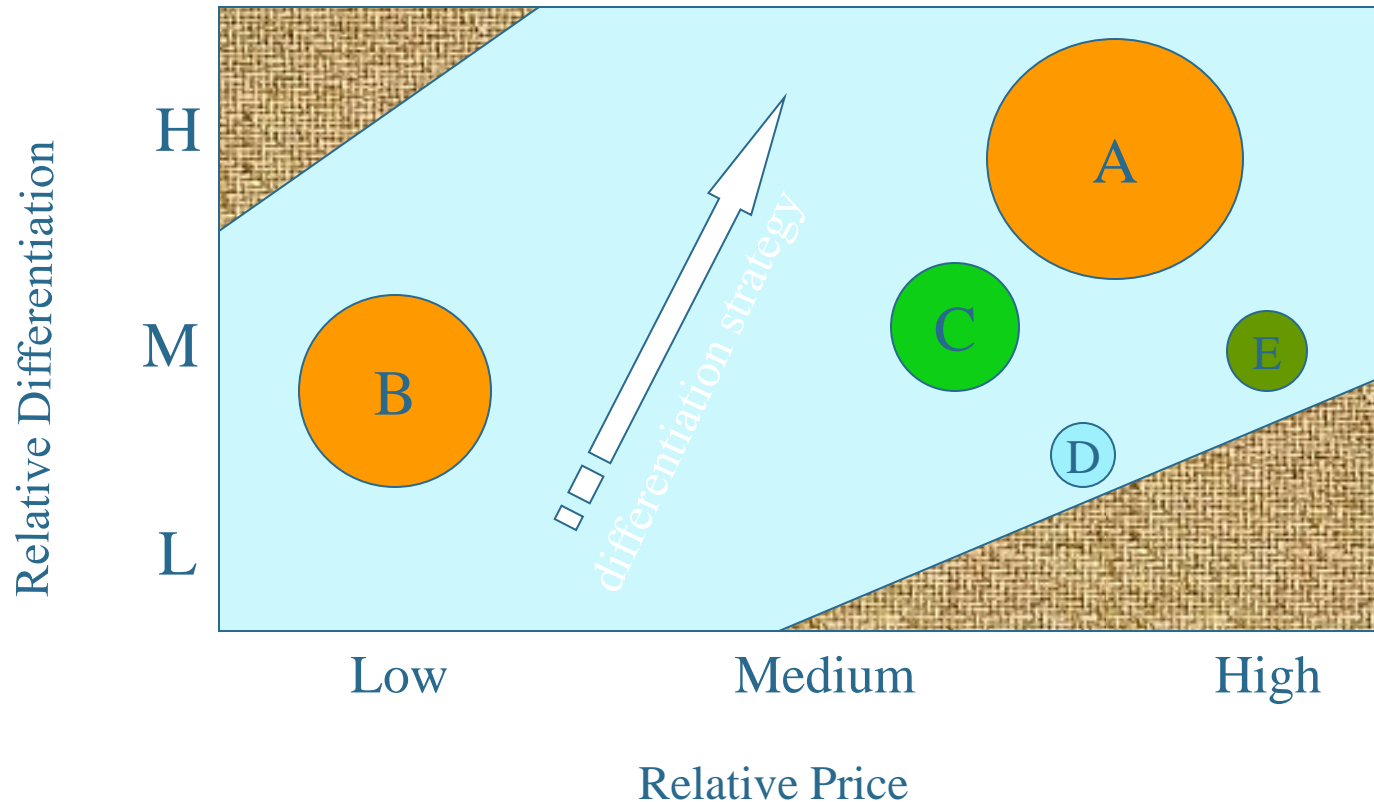
2. 차별화는 시장을 세분화한다

BEST BUY

How to Break Out Of Commodity Hell

Best Buy Co. looks like the ultimate Big Box consumer electronics store—commodity products at low prices. In fact, the company has been plotting an escape from low-margin hell. It's undertaking a radical shift to improve the customer experience, bring innovative products to market, and generate new retail concepts. "We empower our people to listen and serve, and, at the same time, we go upstream to find out what the suppliers are doing. It's about speed to market. We know what the customers are looking for, and we have a time advantage in getting it to them," says Executive Vice-President Ron Boire.

Nothing about this is business as usual. The company has divided its customers into five distinct demographic groups and is doing extensive market research to figure out how to serve them better. For instance,

THE LESSON

Segment your customers into distinct demographic groups and figure out how you can serve each one better.

into gathered in the suburban community of Naperville, Ill., resulted in studio d, a concept store there aimed at soccer moms that sells the latest gizmos and offers classes in how to use them. It's just one of three concept stores Best Buy has launched in the past 16 months, some of which may become new chains. The most offbeat: eq-life shops, where customers can attend a Pilates class, get a massage, and buy health-related tech gear.

Rather than waiting passively for large consumer electronics makers to ship their

latest goods, Best Buy has started creating its own. One example: Its Geek Squad service team dreamed up an external disk drive for PCs packaged in its own protective case. Best Buy sketched out a concept for partners to engineer and manufacture. Time lag: just 120 days from concept to delivery. The company now has a handful of house brands and expects to increase overall margins by 0.5% by 2008.

Another wrinkle: Best Buy has also started tapping tech startups so it can bring the hottest innovations to market. Kal Patel, executive vice-president for strategy, meets regularly with entrepreneurs in Silicon Valley and Asia. One recent discovery: Slingbox, a $250 device from Sling Media Inc. that lets people pipe TV programming from their homes to their PCs wherever they are. It's a brand-new concept. When Slingbox launched last July, Best Buy had a three-month head start on most rivals. That paid off. The company got a close early look at a promising new product category, and Slingbox became one of the year's surprise hits.

AAH Getting a massage at an eq-life concept store

To quickly incubate ideas, the company runs "accelerated leadership" programs that pull together employees from many backgrounds. They're held in rooms at headquarters set off from the bustle of daily business where there's a calming indoor stream and waterfall and even a small cabin for private conversations. Now that's thinking outside the Big Box.

designs that it can quickly customize for a particular client. These designs include the chips and circuitry for various networks and combinations of features. Cellon, with operations in China, works with nearby manufacturers to prepare its designs for production. It takes just five months to go

model, and it expects to launch in three more this year. By using the wireless networks of other companies, Virgin can concentrate on the marketing and customer service that it does best. "It's a template. We'll roll out in a new country
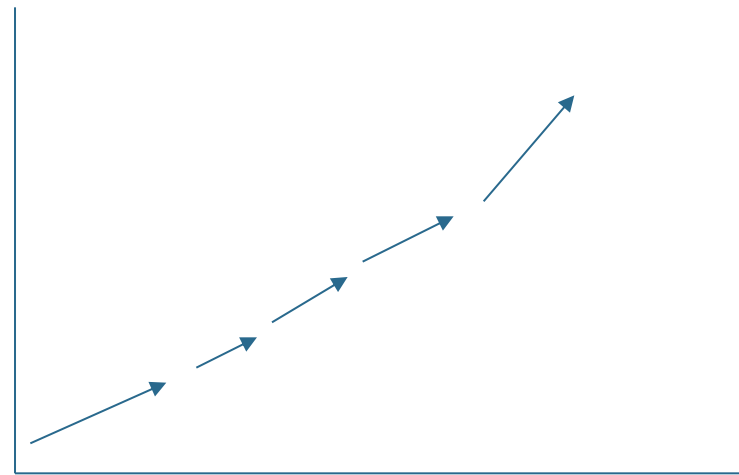
3. 차별화는 시장의 수명주기(MLC)에 따라 진화해야 한다

4. 차별화는 점이 아니라 벡터로 관리되어야 한다
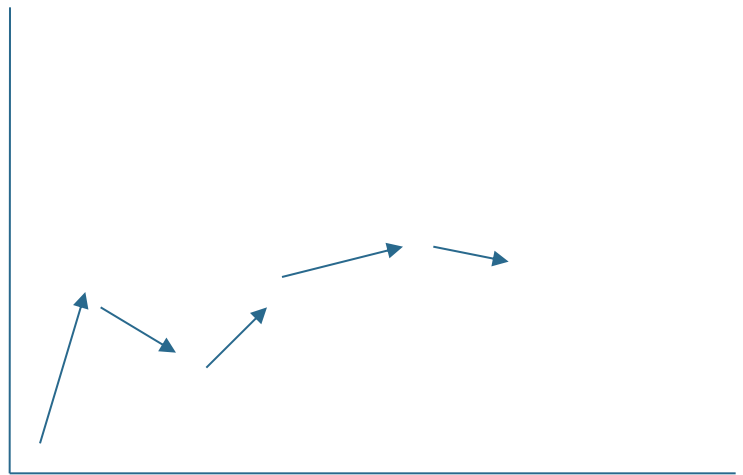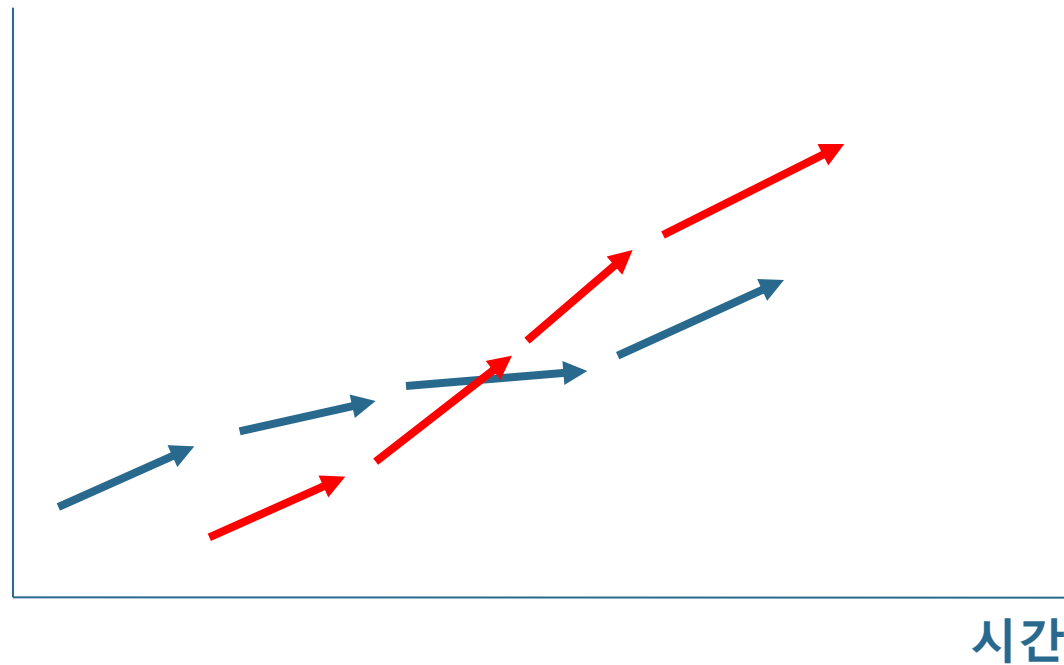
(a) 점으로 관리된 차별화　　　시간

(b) 벡터로 관리된 차별화　　　시간

차별화 벡터: VOD

- **MPP는 차별화 전략의 기반**
  - MPP involves selecting, deselecting, and prioritizing market segments thru a consistent winning '*vector of differentiation*.'

- **VOD 추구의 이점**
  - VOD separate the strategic from the tactical
  - A VOD focuses product improvements
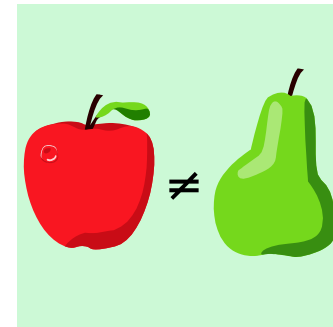 - The length and slope of a VOD provide strategic insights over *time* (I.e. market life cycle).

- **Capabilities / Performance**
- **Compatibility / Standard**
- **Unique features**
- **Ease of use / User interface**
- **Cost reduction**
  - productivity
  - cost of investment
  - cost of product failure
  - total cost of ownership (TCO)
- **Brand Reputation**
- **Design**

It's not just a dual-wake-up alarm clock, it's a CD player and an aromatherapy machine, too!

But wait, there's more—it has a shortwave transmitter and a Dictaphone function for recording late-night brainstorms.

Defeating Feature Fatigue

And that's not all…

by Roland T. Rust, Debora Viana Thompson, and Rebecca W. Hamilton

A MOUSE PAD IS A SIMPLE THING. Essentially an oversized coaster, it keeps the incessant scooting of a computer mouse from destroying a desktop's finish. Beyond that, the most it might do is amuse, soothe, or advertise with the artwork imprinted on it. Or so we thought. Enter the mouse pad/clock/calculator/FM radio. Recently, one of us was the reluctant recipient of this innovation in office equipment. Thoughtfully, it featured a pair of earphones. Less thoughtfully, it did not include the two batteries required to operate it. A glance at the
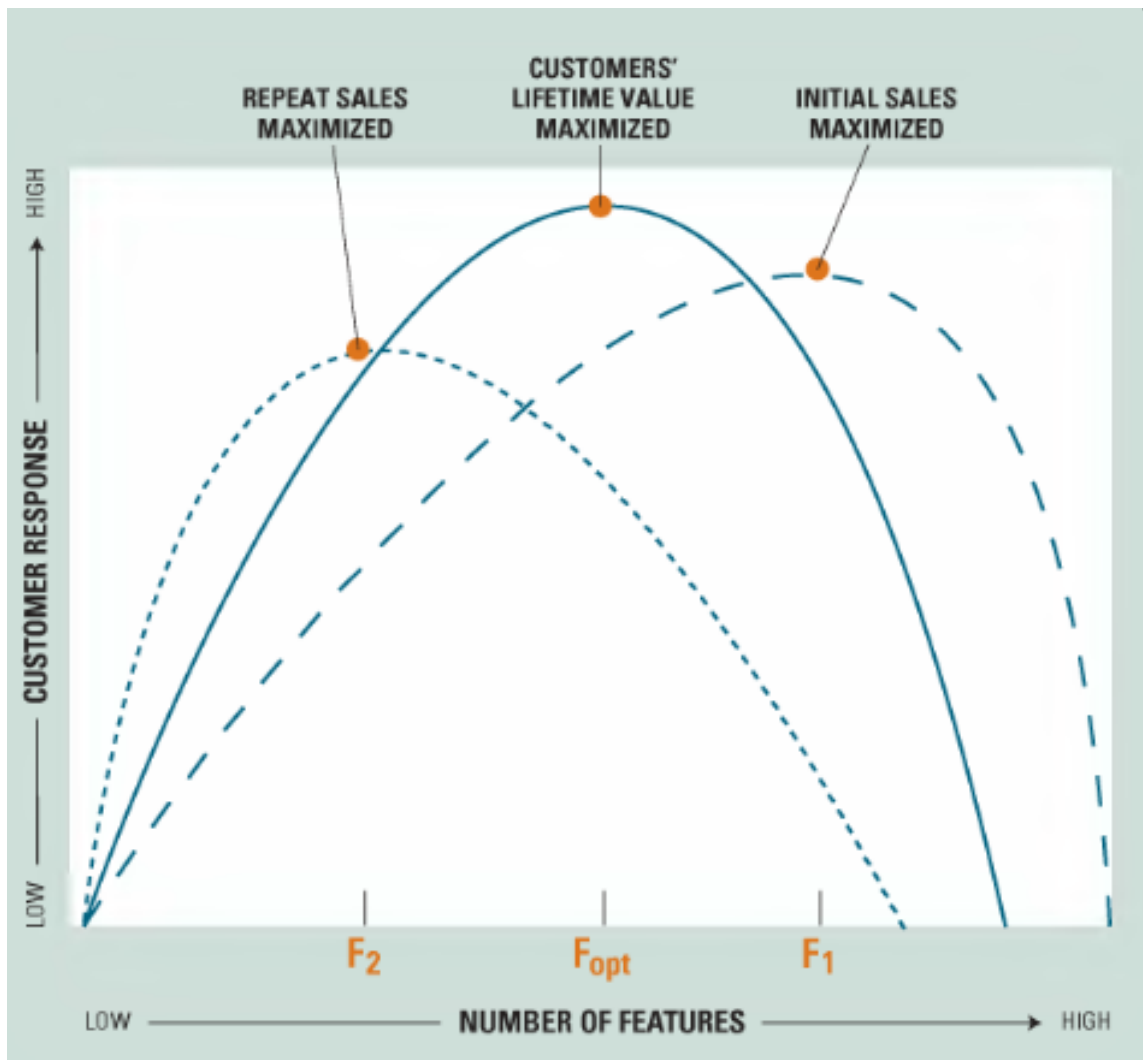

IT'S ALIVE … WITH FEATURES!

✦ IT GRINDS FRESH MEAT!
✦ IT JUICES FRUITS AND VEGETABLES!
✦ IT MAKES DELICIOUS ICE CREAM!

SOLD SEPARATELY

ALSO AVAILABLE

2004-2008 IDEA 수상현황

디자인회사	수상실적		
	2004-2007	2008	TOTAL
IDEO	24	7	31
Fuseproject	14	5	19
Ziba Design	9	4	13
Continuum	11	2	13
Smart Design	11	1	12
Whipsaw	5	4	9
Antenna Design	7	2	9
Formation Design Group	7	1	8
Lunar Design	7	1	8
Tools Design	4	3	7
Ergonomidesign	3	3	6
NewDealDesign	5	1	6
Pentagram	5	1	6

기업	수상실적		
	2004-2007	2008	TOTAL
Samsung	12	3	15
Apple	9	4	13
Decathlon	5	6	11
Philips Design	9	2	11
Hewlett-Packard	8	2	10
Panasonic	10	0	10
Eva Denmark	4	4	8
Motorola	4	4	8
Nike	7	1	8
Belkin	4	2	6
Timberland	6	0	6

출처: Business Week 2008.7.17

From Laggard To Leader

How Samsung ratcheted up its design emphasis

1969

Samsung Electronics established as maker of TVs with technology borrowed from Sanyo.

1977

Samsung introduces its first color TV.

1980s

Focuses on undercutting Japanese rivals with me-too products. Design is an afterthought.

1988

Launches first mobile phone.

1993

Chairman Lee Kun Hee tells execs to reinvent Samsung through design.

1994

Hires U.S. design consultancy IDEO to help develop computer monitors.

1995

Sets up in-house design school, the Innovative Design Lab of Samsung.

1996

Lee declares "Year of Design Revolution," stressing that designers should lead in product planning.

1998

Asian financial crisis dents Samsung's ambitions; design staff cut by 28%.

2000

Samsung once again focuses on design, and CEO Yun Jong Yong calls for design-led management.

2001

Yun initiates quarterly design meetings for top execs; opens design labs in Los Angeles and London.

2002

Samsung's "usability laboratory" inaugurated in downtown Seoul.

2004

Samsung wins a total of 33 awards at top design contests in the U.S., Europe, and Asia.

DESIGN CHIEF
Choi Gee Sung

MacMillan and McGrath (HBR 1997)

- **Open up your thinking to your customers' entire *experience* instead of your product per se.**

- **Step 1: Mapping the "Consumption Chain"**
  - How do people aware needs – find – select – order/purchase – deliver – install – pay – store – move around – really use – get help – return/exchange – repair/service – dispose of

- **Step 2: Analyzing Your Customer's Experience**
  - Consider how a series of simple questions apply at each link in the consumption chain: What, Where, Who, When, How
  - Brainstorm and select the most promising.

Differentiation is Risky When…

- 유지 가능한 차별화 벡터가 아닐 경우 (범용화의 함정)
- 적절한 가격전략과 병행되지 않을 경우
- 추구하는 차별화의 축이 소비자에게 중요하지 않을 경우
- 차별화에 너무 많은 투자와 비용이 소요되는 경우
- 새로운 차별화 벡터의 등장으로 시장의 추가세분화(sub-segmentation)가 이루어질 경우
- 마케팅 커뮤니케이션의 실패

PC WORLD magazine cover, July 1998:

CYRIX'S FAST, CHEAP M II-300 CHIP TAKES ON INTEL'S PENTIUM II-300

NETSCAPE COMMUNICATOR 5

PC WORLD

WWW.PCWORLD.COM — JULY 1998 $5.99

Huge Storage, Tiny Prices — Gobs of Gigabytes: 13 Humongous Hard Drives From $199

Add Bite to Your Browser — Make It Perform New Tricks With 38 Web Utilities

Products of the Year — 16th World Class Awards Honor Top Hardware, Software

UPGRADE OR WAIT?

J. HUGH JACKSON LIBRARY
Graduate School of Business
STANFORD UNIVERSITY

Windows 98

- Is It Really **Better**?
- Is Your Hardware **Ready**?
- Is It **Stable** and **Safe**?
- Will the **Courts Yank** It?

Is It Right for You?

Tech&You
BY STEPHEN H. WILDSTROM

Vista: Upgrade—or Trade Up?

After all the hype and delays, Windows Vista is finally here. Should you rush out and buy a copy when upgrade versions go on sale on Jan. 30? Probably not, given the odds against a satisfactory upgrade experience. But I'd certainly consider speeding up the purchase of a new computer when PCs loaded with Vista become available in a few more weeks.

The marketing barrage that Microsoft has prepared will focus on Vista's new look—the first major design overhaul for Windows in more than a decade. Many of the concepts come from Apple Computer's Mac OS X, but Vista pushes the visual effects much further. Photorealism replaces the garish cartoonishness of Windows XP for everything from program icons to file folders. To cut the confusion that can occur when you have lots of windows open, a thumbnail image pops up when you run your mouse over the program's task-bar icon. Folders look like actual manila folders and show a glimpse of what's inside: a bit of album art for a music folder, a slice of one of your pictures for a photo folder.

All this eye candy is nice, but it's not going to make it any easier to draft a business plan or a budget. And it does come at a price. As is the case with the new version of Microsoft Office, which I wrote about last week, novelty breeds confusion. There are many new ways to display the contents of file windows, for example, including stacking folders that are sorted by size. You won't find the "select all" command on the Edit menu—because the menus have been banished. On the other hand, hitting control-A will still select all the contents of a window, and you can find ways to do everything else you need to do, too. It just takes time to figure it out.

THE MOST IMPORTANT CHANGES IN VISTA are hidden. Microsoft has made some fundamental alterations to fix Windows' notoriously leaky security, as I'll explain next week. But there are other substantive changes that are both visible and useful.

The ability to find things is paramount. Like the Mac's Spotlight search, the new Windows search is accurate and fast. In the best Windows tradition, there are three ways to seek things out, each producing slightly different results. Each window has a search box, and when you enter a search term, Vista brings up matches found in that window's folders. A search box on the start menu searches the entire computer, including program files. And a separate search application lets you specify the scope of desktop search.

It may make more sense to buy the system all loaded on a new PC

The big question is when and how you should move to Vista. Upgrade today? Or just wait and buy an all-new Vista computer down the road?

When Windows XP came out in 2001, I urged people to move quickly to get rid of the hopelessly unreliable Windows 98 and the even worse Windows Me. That meant upgrading to XP, and like all earlier Windows upgrades, the process was as much fun as a root canal. XP, on the other hand, is good enough that you may just want to make do, for now. Based on the troubles I've had in tests, I'd warn against upgrading if you have old accessories, such as printers, or if you run any custom or obscure business software.

If you decide to upgrade anyway, make sure your existing computer has the horsepower to do Vista justice. Any system older than six months or a year may be trouble.

Functions could feel sticky or sluggish, and if the graphics on your PC aren't up to snuff, you'll lose the fancy visual effects. You'll need at least a gigabyte of memory. And don't try to pinch pennies. There's a Home Basic version of Vista for $100, but it lacks many features, including the new graphic design; you want the $140 Home Premium.

The big risk of upgrading is that you'll get all the confusion of Vista and the looks of XP. With a new made-for-Vista computer, at least you'll know that everything will work. And Vista is a big step forward; in time, you'll want it. ■

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하이테크제품과 업그레이드

- **교체구매의 유형**
  - 정상적 교체구매 vs. 재량적 교체구매
- **하이테크 제품은 업그레이드 비즈니스**
- **교체구매 의사결정은 어떻게 이루어지나?**
- **영향요인**
  - 기술발전에 대한 기대와 "leapfrogging"
  - 업그레이드 비용
  - 소비자 개인적 특성 (혁신성 등)
  - 로컬 네트워크 효과와 또래집단 압력
  - 업그레이드 버전의 상대적 이점, 호환성, 지각된 위험

- **Cannibalization: 위험인가 기회인가?**
  - Cannibalization is bad because…
  - Cannibalization is good when the transition is *orderly* and *profitable*.

- **Cannibalization as offensive strategy: 도전자의 전략**
  - 신기술로 게임의 룰을 변화시킨다
  - Cannibalization hurts the market leader more.
  - Judo Strategy

Self Cannibalization

- **Cannibalization as defensive strategy: 리더의 전략**
  - 자기잠식 (Self-Cannibalization)
  - You don't want someone else to do it.

    "피할 수 없다면 즐겨라"

    "It's better to shoot yourself in the foot than to allow somebody else to shoot you in some more vital part of the anatomy." – John Henessy

- **타이밍이 핵심**
  - Intel의 사례: 타이밍과 가격을 적절하게 관리