

# Ch6. 하이테크 신상품의 개발과 출시전략

# Wii



# The World's 25 Most Innovative Companies

To determine our 2007 list, the Boston Consulting Group asked nearly 2,500 executives worldwide to vote for the most pioneering companies doing business today. Not surprisingly, Apple and Google once again prevailed. But a few new names broke in to the top 25: Walt Disney shot up to No. 8, aided by the Steve Jobs effect (the Mouse House acquired Pixar in early 2006), for instance, and Boeing rose to No. 21 behind its revolutionary new jet, the 787 Dreamliner.

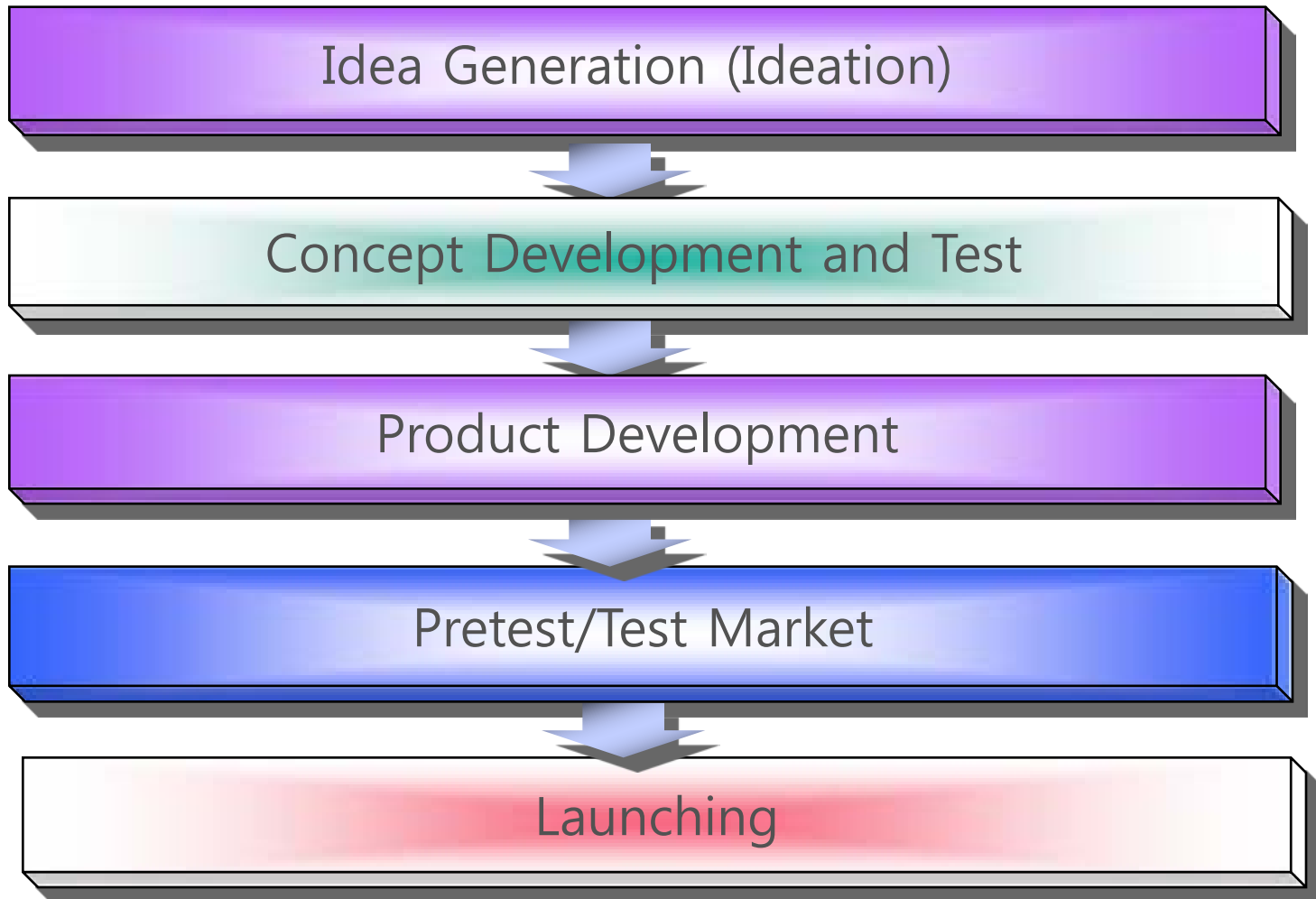
There were also reminders of the resilience of corporate reputation. No. 11 Wal-Mart suffers from slow growth but still commands respect for its supply-chain innovations. Dell wears the brand halo of an innovator for its efficient direct-to-consumer model, though it has struggled to adapt to a shifting computer market and fell from No. 14 to No. 22.

In October, 2006, BCG sent the survey electronically to the 1,500 largest global corporations, determined by market capitalization. They were asked to pass it to their top 10 executives in charge of innovation. We also distributed it to senior management members of the BusinessWeek Market Advisory Board (an online reader panel) and via the Knowledge@Wharton e-mail newsletter. Participation was voluntary and anonymous. The survey—20 general questions on innovation and an optional 12 focused on metrics—closed in March. All told, 2,468 executives answered. To avoid vote-stuffing, self-votes were eliminated and respondents were asked to identify the most innovative company outside their industry.

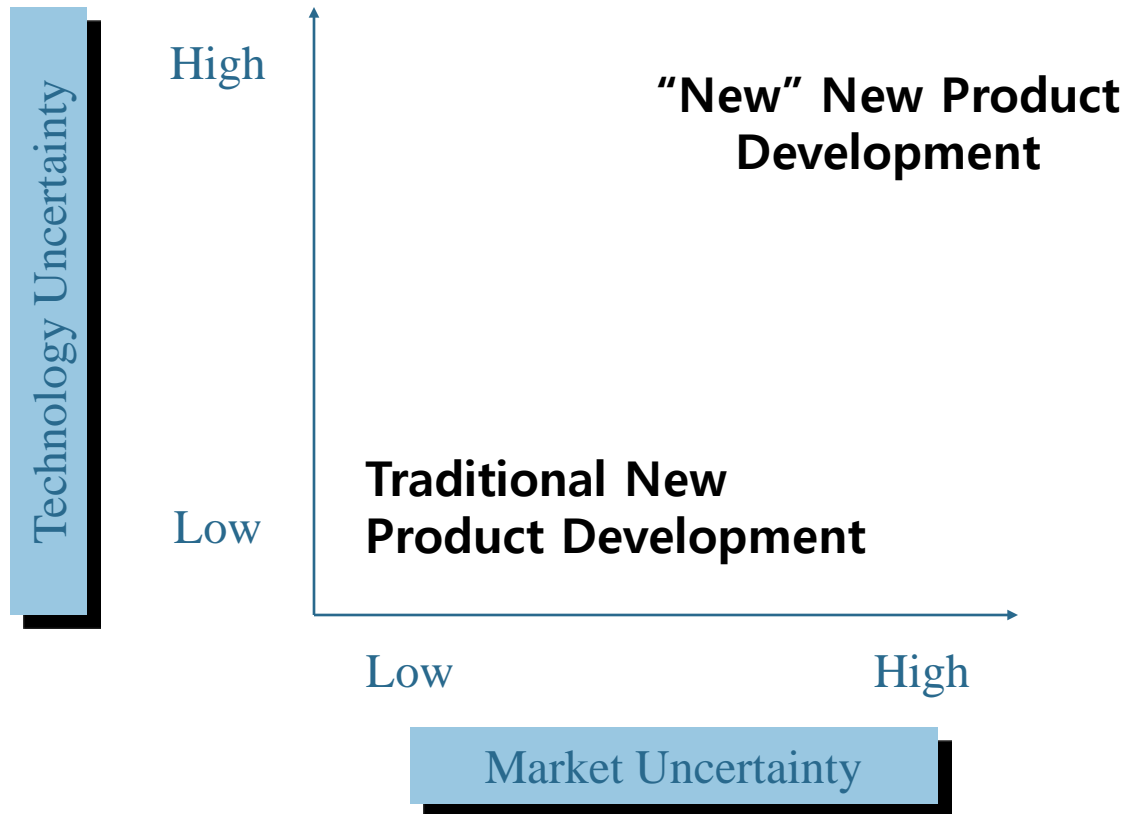
For an extended list of the top 50, rankings by industry, and more on our methodology and BCG's analysis, go to [businessweek.com/gp/innovativecompanies/](http://businessweek.com/gp/innovativecompanies/)

RANKING 2007	RANKING 2006	WHY	STOCK RETURNS, 2001-06*	MARGIN GROWTH, 2001-06*
1	1	<b>Apple</b> Our first-place innovator for the third year in a row, Apple is a master of product and store design. Now that it's invading the cell-phone market, will it continue its winning streak?	50.60	n/a**
2	2	<b>Google</b> It didn't invent search advertising but lifted it to its current heights. Google's famously chaotic innovation process has plunged it into everything from radio ads to online office software.	n/a^	n/a^
3	4	<b>Toyota Motor</b> Toyota's dominance in hybrids could lead to the first plug-in electric auto in the next four years. Now the No.1 carmaker, its continuous improvement process is copied worldwide.	20.50	5.21
4	6	<b>General Electric</b> CEO Jeff Immelt's push for "imagination breakthroughs," or growth opportunities of \$50 million to \$100 million, are increasingly leading GE into emerging markets and green tech.	1.11	1.36
5	5	<b>Microsoft</b> To some, Microsoft is more fast follower than leading innovator. Still, the software giant's massive R&D budget generates creations that help ensure Windows' and Office's hegemony.	0.83	-3.04
6	7	<b>Procter &amp; Gamble</b> After years of scouting for new products outside its walls, P&G has mapped the innovation strengths of global regions. CEO A.G. Lafley is pushing for more disruptive new ideas.	12.20	3.70
7	3	<b>3M</b> The legendary Post-it Note is just one of 3M's many creations, which include everything from dental fillings to roofing shingles. Next on its list: diagnostic tests for infectious diseases.	7.77	5.49
8	43	<b>Walt Disney</b> CEO Bob Iger is refueling Disney's creative culture, quashing bureaucracy. Moves such as putting ABC shows on iTunes and acquiring Pixar helped move Disney up our list.	11.71	7.35
9	10	<b>IBM</b> Last year the tech services behemoth held an online brainstorm with 150,000 people to dream up new ideas. It hosts annual symposia with outsiders to collaborate on forecasting.	-3.48	4.97
10	13	<b>Sony</b> This traditional tech hardware maker is devoting more resources to software. To turn its PlayStation 3 console from living-room box to virtual gateway, it created a 3D online world.	-2.62	1.14
11	20	<b>Wal-Mart Stores</b> Wal-Mart is struggling with growth. But its "green" actions, such as using its leverage as the world's largest retailer to cut suppliers' packaging waste, helped move it up our list.	-3.35	3.54
12	23	<b>Honda Motor</b> Headed by a former R&D chief, Honda has been known for its fuel-efficient cars. But its environmental approach isn't limited to autos. Next up: solar panels and a fuel-sipping jet.	13.61	0.38
13	8	<b>Nokia</b> To build sales in emerging markets, managers spend time in the homes of local customers. That has led to features for illiterate users such as an icon-driven handset directory.	-9.24	4.37
14	9	<b>Starbucks</b> The coffee chain's 50-person R&D group created eight new flavors last year. It also started its own music label and partnered with outsiders to publish books and produce movies.	30.04	1.51
15	22	<b>Target</b> Target stands out from its discount rivals by selling designer-inspired products. Innovative marketing, such as buying all the ads in one issue of <i>The New Yorker</i> , has also set it apart.	7.55	4.23
16	16	<b>BMW</b> BMW is flat, flexible, and fast-reacting. Employees are urged to "break the rules" to cut costs or push through winning ideas, such as the Z4 coupe, which higher-ups initially nixed.	4.30	-1.23
17	12	<b>Samsung Electronics</b> Samsung stays ahead with intensive investment in new facilities and production systems. These days, it's focusing on the convergence of technologies and phone features.	36.24	8.07
18	11	<b>Virgin Group</b> Most of its businesses, such as credit card or mobile virtual networks, are collaborative: Virgin supplies the branding and customer service while partners put up much of the cash.	private	private
19	17	<b>Intel</b> The world's largest chipmaker, Intel is making big headway in health care. It recently previewed its most powerful chip to date and is planning a \$2.5 billion plant in China.	-7.57	12.55
20	21	<b>Amazon</b> The online retailer is now innovating its business model, turning its backroom operations into a digital utility that rents out computer power and warehouse space to other firms.	29.53	n/a**

# 전통적인 NPD 프로세스



# “New” NPD Process



# “New” New Product Development



- **Technology Development**
  - Build technology platforms
- **Product Development (“Productization”)**
  - Move new technology into products quickly
  - Product revision postponed to later models
- **Market Development**
  - Need for speed: enter quickly without conventional testing
  - Market education

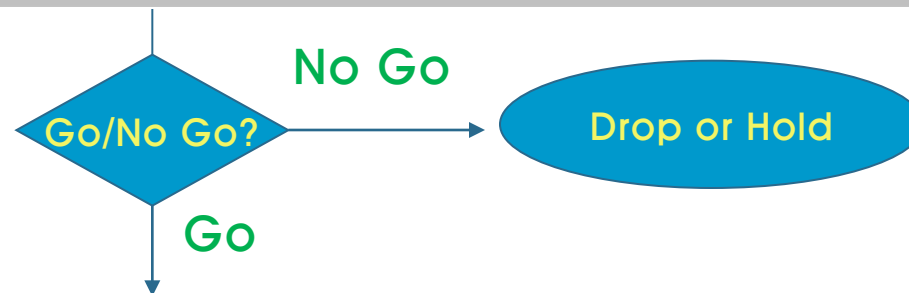
# 상품화 기회분석 (MOA) 5단계

Step 1: 대상기술의 '고객기능' 파악

Step 2: 각각의 고객기능에 대한 시장 정의

Step 3: 시장 매력도 평가

Step 4: 산업 및 경쟁 분석



Step 5: 마케팅 플랜 작성

# 신규기술 상품화를 위한 MOA 체크리스트

- A. 상품의 아이디어와 컨셉은 무엇인가?
- B. 목표로 하는 시장의 특징은 무엇인가?
- C. 신상품이 대체할 것으로 예상되는 기존 상품을 충분히 분석하고 이해하였는가?
- D. 신상품은 대체하고자 하는 기존 상품보다 우월한 무엇을 제공할 수 있는가?
- E. 시장의 규모와 성장률은?
- F. 기존 상품을 만들어 제공하는 기업은 누구이고 어떤 성향을 가지고 있는가?
- G. 우리가 성공적으로 시장에 진입한다면 뒤따라 들어올 가능성이 있는 경쟁자는?
- H. 진입 후에 어떠한 기술적 비기술적 진입장벽을 구축할 수 있는가?
- I. (1)시장개발과 (2)제품개발을 위해 취해야 하는 구체적인 액션은 무엇인가?
- J. 상품개발 이후 시장진입까지의 구체적 단계는 어떻게 되는가? 각 단계의 시점과 목표는?
- K. 현재 보유하고 있는 자사 상품과의 관계는 어떠하며 시너지를 얻을 수 있는 가능성은?
- L. 기존 제품라인과의 자기잠식 가능성은 어떻게 되는가?
- M. 소요될 자원의 규모와 예상되는 수익은 얼마나 되는가?
- N. 만약 4단계 이후 판단 결과가 "No Go"라면 다음 세 분야에 있어서 이루어져야 할 변화는?  
(1) 자사 상품시장 (2) 경쟁자 상품시장 (3) 신상품 조직
- O. 만약 결과가 "Go"라면, 성공을 위한 조건(contingencies)과 퇴장전략(exit strategy)은?





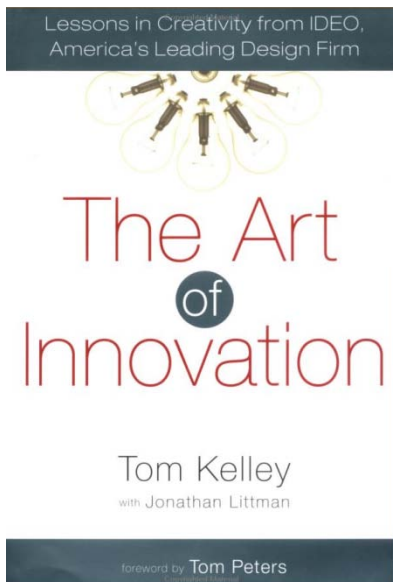
# 이노베이션과 하이테크 R&D

- Metcalfe: "Invention is a flower, innovation is a weed."
  - 효과적인 놀라움(effective surprise): "Ah..of course!"
- **이노베이션의 원천**
  - 영감(inspiration)과 창의적 조직문화
    - IDEO
  - 지식과 노력
    - Drucker: 7 Sources of Innovation
  - 소비자
    - Thomke and von Hippel의 "Toolkit approach"
  - 이노베이션 아웃소싱 (open innovation)

# The IDEO Way

## ❖ IDEO's Best Practices of Innovation

- Brainstorming, a real one.
- Rapid Prototyping: Boyle's Law
- Culture of innovation: "passion" team



- 3 INNOVATION BEGINS WITH AN EYE 23
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- 10 CREATING EXPERIENCES FOR FUN AND PROFIT 193



# IDEO의 이노베이션 5단계

## 01 관찰 (Observation)

무엇이 진짜 사람들을 움직이는지 알아내기 위해 실제 상황에서 그들을 관찰한다. 관찰팀은 다양한 배경을 가진 멤버로 구성한다.

## 02 브레인스토밍 (Brainstorming)

관찰로부터 얻어진 자료들을 분석하고 브레인스토밍을 통해 아이디어를 추출한다. 브레인스토밍은 절대 한 시간이 넘지 않도록 하고, 틀을 벽에 붙여놓고 엄격하게 지킨다.

## 03 신속한 시제품 제작 (Rapid Prototyping)

작동 모델을 만드는 것은 가능한 해법에 대한 사람들의 시각적 이해를 도울 뿐 아니라 의사결정 시간을 단축한다.

## 04 정교화 (Refining)

이 단계에서 아이디어들 중 실현 가능한 몇 가지 해법들을 선정한다

## 05 실행 (Implementation)

IDEO의 공학, 디자인, 사회과학 분야 전문가의 능력을 최대한 발휘하여 제품이나 서비스를 실제로 구현한다.

# IDEO의 혁신적 기업문화



# Ideation Tool

## TOOL: METHOD CARDS

One way to score a winning hand in the innovation game: decks of cards issued by the Foresight & Innovation team at Arup, a leading-edge engineering design firm, and IDEO, a top innovation consultancy. These portable stacks of idea-inspiring images, social and technological trends, and market statistics aim to spark creative thinking. Consultant Creative Advantage also has a deck. For the paper-averse: KnowBrainer cards are also available in a PC-based Flash program.





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클릭하시면 DEMO를 보실 수 있습니다.



G O L D F I R E

TRIZ Korea의 지식 기반 활동은 고객의 지적재산 및 부가가치를 극대화하고자 모든 산업체 및 지식 관련 기관에 대하여 **차이점 연구개발 활동 (Creative Activity), 혁신 식 관리 (Productive Management), 지식 생산 (Knowledge Generation)**을 실현할

### What's New

- [05,28] [6월18일~22일]
- [05,28] TRIZ 전문가 인
- [04,18] Goldfire Ver. 4
- [04,07] 국제공인 TRIZ2
- [04,07] TRIZ 공개강좌

## Inventio

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## TOOL: TRIZ

Although it's gaining steam as a trendy method for fostering structured innovation, TRIZ (a Russian acronym for Theory of Inventive Problem Solving) is a 60-year-old strategy conceived by the late inventor and patent inspector Genrich Altshuller. Altshuller devised a matrix of 39 basic engineering problems and 40 possible solutions to solve them. Consultants say an updated, broader version can teach inventiveness. Avon, BMW, Electrolux, GM, IBM, Johnson & Johnson, Motorola, Pfizer, Samsung, and Toyota are all using TRIZ. But managers beware: this pet tool of engineers is wildly complex and best suited for solving technical dilemmas.

# TRIZ의 구성요소

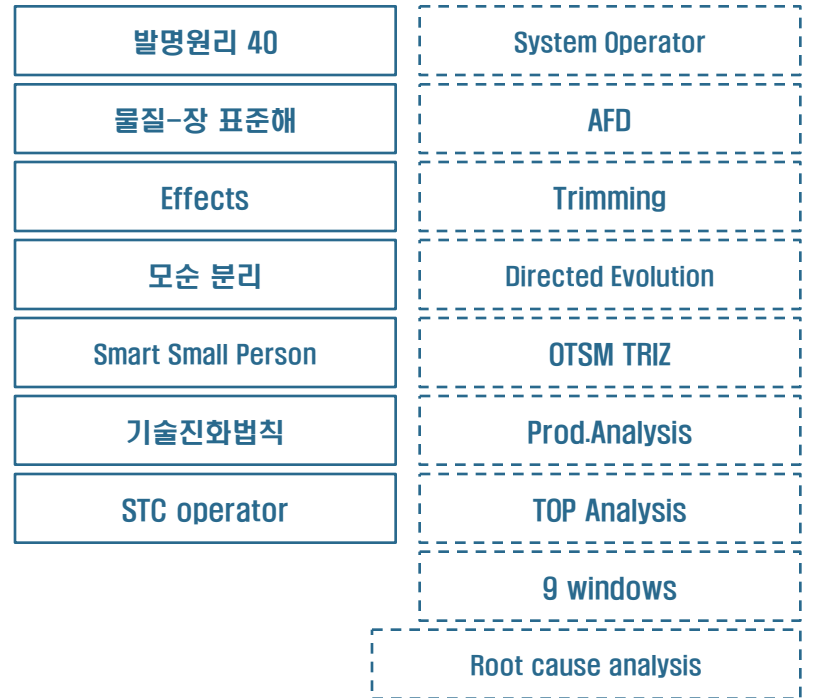
## 개념



## 프로세스



## 기법



# Bill Gates' Think Week

**“TWICE A YEAR I TAKE A WEEK TO DO NOTHING BUT READ.”**



- ❖ The most important thing any company can do is hire the smartest people possible and then give them the resources to transform their ideas into reality.
- ❖ Twice a year I take a week to do nothing but read literally hundreds of papers about advances in computing, business trends, and ideas from our researchers and developers.



# Open-Market Innovation

## ❖ 폐쇄형 혁신에서 개방형 혁신으로

- Needs: Brain Drain
- Seeds: Information flows cheaply and instantaneously  
(인터넷 확산으로 global talent에의 접근 용이해짐)

## ❖ 연구소의 “invent-it-ourselves” 모델은 한계

- 새로운 기술이 쏟아져 나오고 있다
- R&D 생산성 저하되고 있다
- 신상품 성공률 저하
- 치열한 신상품 출시경쟁, 속도가 중요

# Open Innovation의 사례

혁신의 도입(importing innovative ideas)	
Intel	Intel은 상호수분을 촉진하기 위해 미국과 영국 내 주요대학 인근에 연구소를 개설함. 또 대학교의 연구지원을 활발히 하되 Rotation 함으로써 다양한 기회를 활용. 그 결과 광범위한 학계 네트워크를 가지게 되었고, 제품의 연구개발 과정에 활용하고 있음.
Eli Lilly	온라인 지식 브로커인 이노센티브( <a href="http://www.innocentive.com">www.innocentive.com</a> ) 설립하여, 세계 각국의 과학자와 전문가들로부터 연구개발 상의 문제점 해결을 위한 조언을 획득. 그 결과 중국, 러시아 등의 과학자로부터 200건 이상의 해결방안을 얻었고, 그 대가를 지불함.
Mattel	Mattel은 다른 장난감 메이커들 그리고 Wal-Mart와 합동으로 Big Idea Group ( <a href="http://www.bigideagroup.net">www.bigideagroup.net</a> )이라는 아이디어 브로커를 만들고, 신상품 아이디어를 수집함. 그 결과 다수의 장난감 아이디어를 획득하기도 하고, 기업 매수가 이루어지는 계기가 됨.
혁신의 제공 (Exporting intellectual capital)	
Schlumberger	시추 기술등 유전 개발과 관련된 혁신적 아이디어를 고객과 경쟁사에 제공함. 그 대가로 상당한 로열티 수익을 획득
IBM	IBM은 반도체 설비의 잉여부분을 다른 기업에 대여하고, 다양한 서비스를 제공함. 최근에는 경쟁사의 반도체 디자인도 일부 대행해 줌으로써 설비의 가동율을 높이고 고정비를 낮출 뿐 아니라 Cross-Licensing을 통해 지적재산권(IP)관련 소송을 예방하게 됨.
Dreyer's Grand Ice Cream	미국의 대표적 아이스크림 업체인 Dreyer's는 자사의 혁신적 물류, 배송 시스템을 경쟁사인 Ben & Jerry로 하여금 사용하게 하고 대가를 받음. 물류 전체적인 효율이 향상되고 고정비의 배분 효과를 달성함.



## **Drew Buschhorn** InnoCentive "solver"

Now a 21-year-old chemistry grad student at the University of Illinois, Bloomington, Drew Buschhorn signed up last summer with InnoCentive, an online global network of 80,000 independent scientists who help the likes of Procter & Gamble, Boeing, and Eli Lilly solve knotty research and development problems. When Buschhorn saw that one company was offering \$10,000 to anyone who could find a new substance to replace an art-restoration chemical the Environmental Protection Agency was phasing out, he realized he had the solution: a substance he had found years ago to help his mother preserve colors in dyed cloth. Presto! He soon had the down payment for a new car.

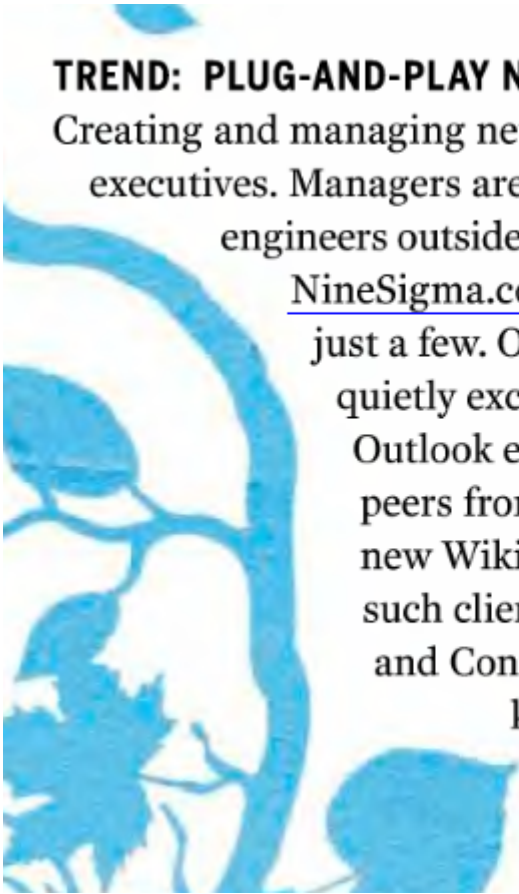
InnoCentive Chief Executive Darren Carroll says his four-year-old company couldn't exist without the Internet. "It creates huge new opportunities for cooperation," he says. "There's no better way to cooperate over the Internet than to share minds."



## **TREND: PLUG-AND-PLAY NETWORKS**

Creating and managing networks has become an essential skill for executives. Managers are harnessing networks of scientists and engineers outside their corporations for new ideas and solutions.

[NineSigma.com](#), [InnoCentive.com](#), and [YourEncore.com](#) are just a few. Others are also joining select consortiums to quietly exchange best practices. IBM's Global Innovation Outlook encourages cross-pollination of ideas among peers from different companies. Still others are using new Wikipedia-type tools, including TWiki (used by such clients as British Telecom and Michelin China) and Confluence (Earthlink and Lockheed Martin), to keep the creative juices flowing between managers and workers.

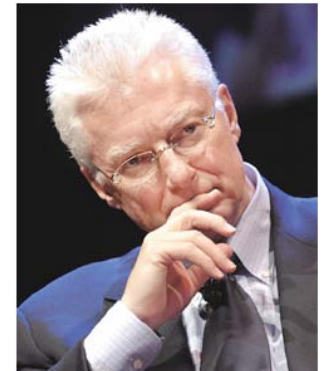


# “Connect and Develop”

## ❖ P&G’s “C&D” (vs. R&D) strategy

- A.G. Lafley set the goal of bringing in 50% of P&G’s innovations from external sources
- P&G has 7,500 R&D people
- InnoCentive (80,000 chemists) 적극 활용
- Launched “YourEncore”, a network of high-performing retirees from 150 companies
- Launched “Ninesigma” to help companies source innovation globally
- Currently, 35% of P&G’s innovations come from outside.
- R&D productivity –sales per R&D person – is up 40%

P&G



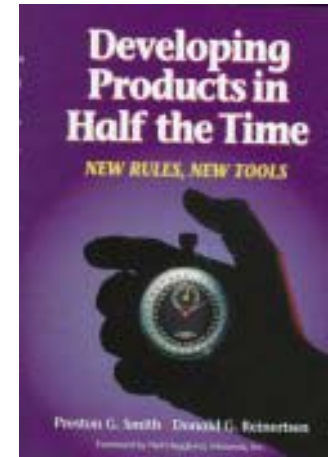


# Open-Market Innovation

- 언제 open-market innovation이 유리한가?  
(Rigby & Zook 2002, HBR)
  - Intensity of innovation
  - Economies of innovation
  - Need for cumulative innovations
  - Applicability of innovations across companies and industries
  - Market volatility

# 하이테크 제품의 R&D 프로세스

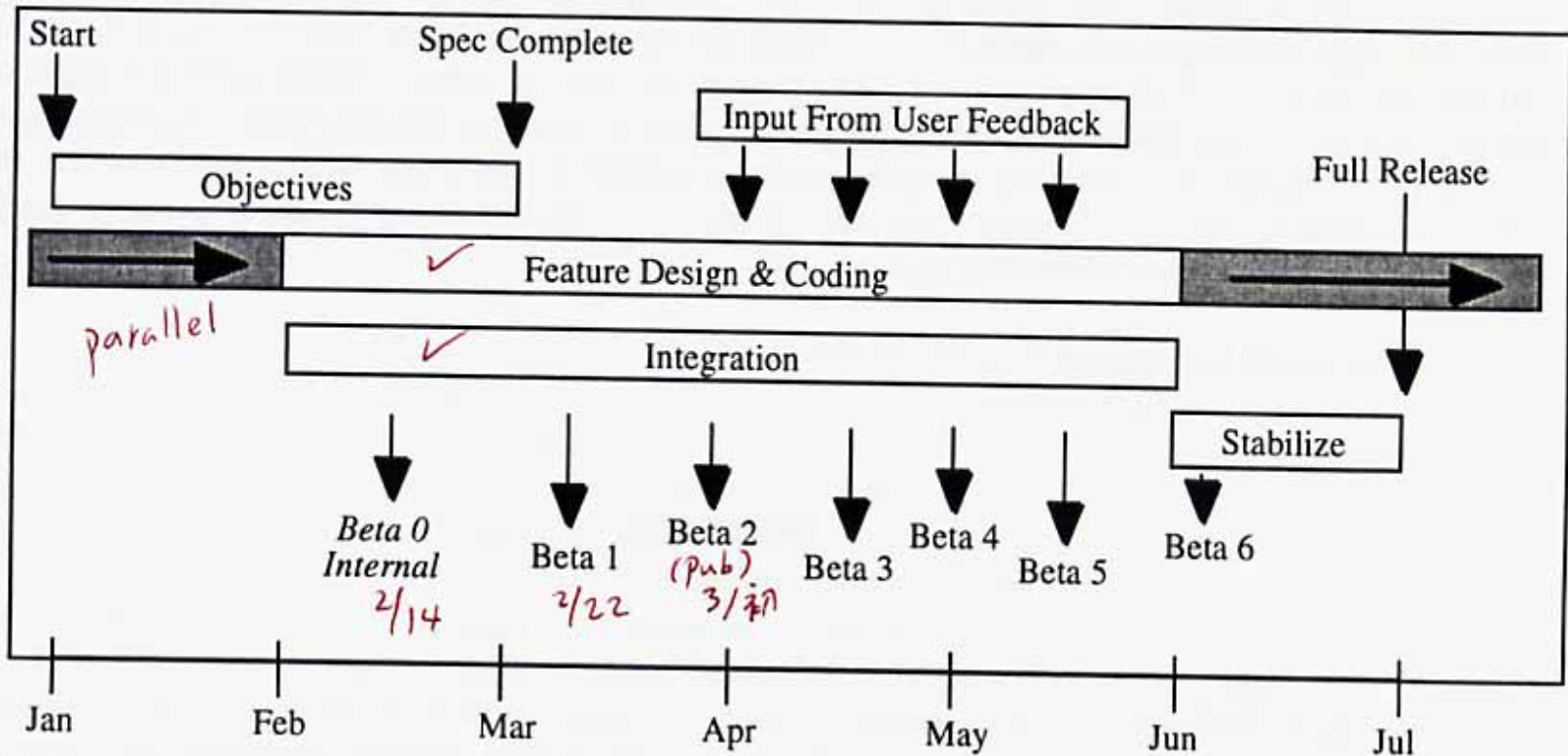
- **시간경쟁**
  - R&D Race and Cycle Time Reduction
- **프로젝트 진행관리(PM)**
  - Netscape, Yahoo!, Microsoft 사례 비교
- **How MS makes large teams work like small teams:  
“synch-and-stabilize” approach**
- **연구개발-마케팅 연계**





# Navigator 3.0의 개발과정

Figure 1 The Development of Navigator 3.0

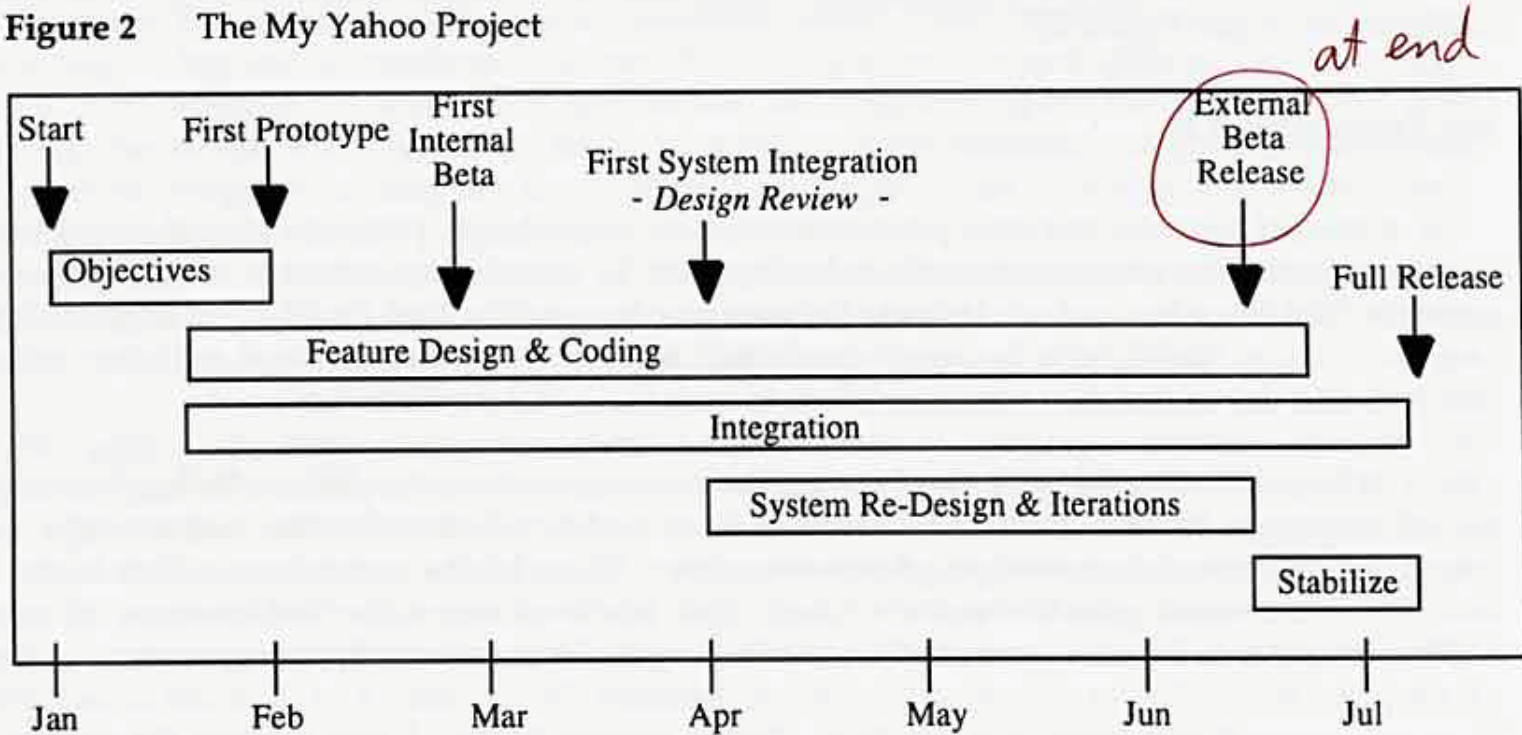


출처: Harvard Business School Case, "Living on Internet Time: Product Development at Netscape, Yahoo!, NetDynamics, and Microsoft."



# My Yahoo 프로젝트 진행과정

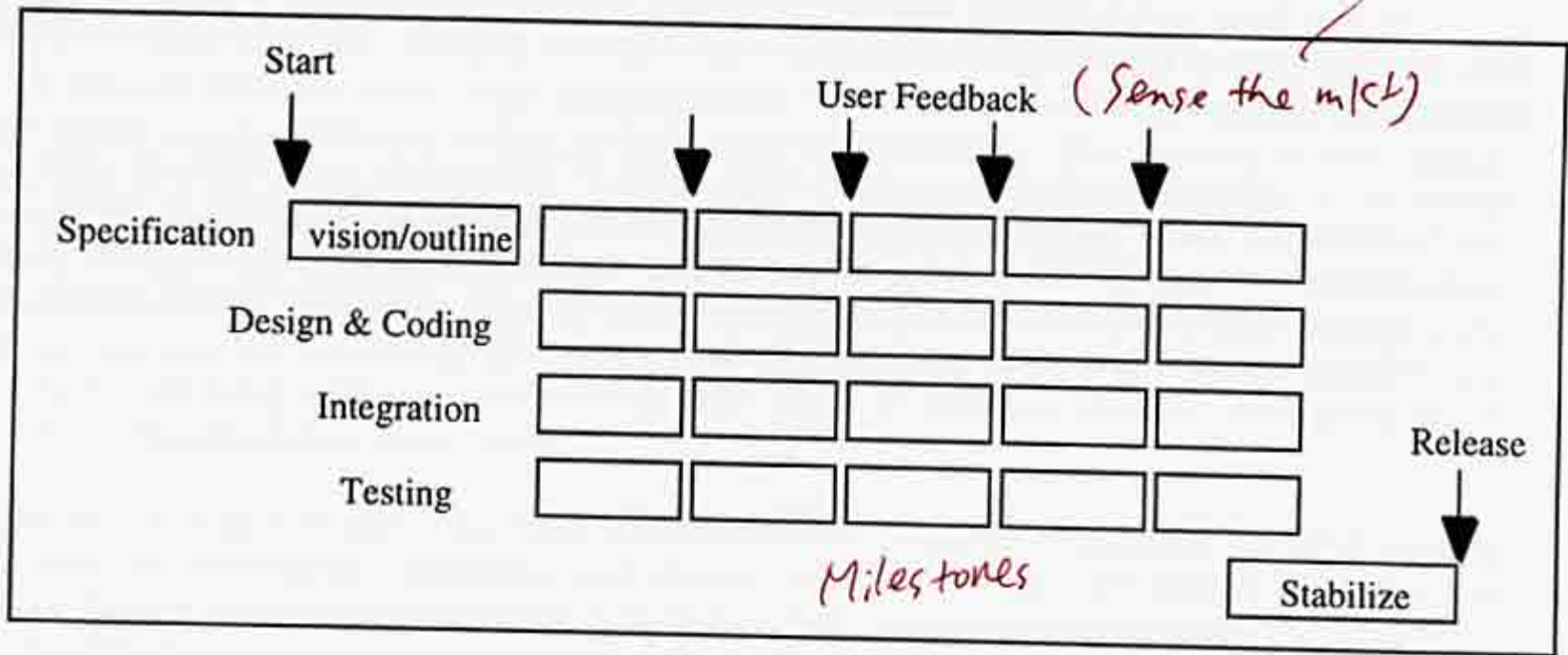
Figure 2 The My Yahoo Project



출처: Harvard Business School Case, "Living on Internet Time: Product Development at Netscape, Yahoo!, NetDynamics, and Microsoft."

# Microsoft의 제품개발 과정 개요

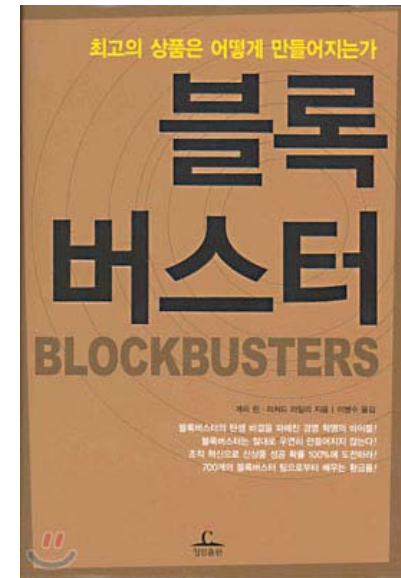
Figure 4: An Outline of Microsoft's Development Process



출처: Harvard Business School Case, "Living on Internet Time: Product Development at Netscape, Yahoo!, NetDynamics, and Microsoft."

# 블록버스터 탄생의 조건

- ❖ 고위경영진의 적극적 참여
- ❖ 분명하고 일관된 프로젝트 기동
- ❖ 재빠른 피드백
- ❖ 정보공유 및 교환 시스템
- ❖ 압력하에서의 협력



# Project Pillars

- ❖ 프로젝트 기둥은 팀의 방향을 제시하는 불변의 원칙
- ❖ 프로젝트 기둥은 이해하기 쉬워야 하며 모두가 동의한 것이어야 한다
- ❖ 전 개발과정을 통틀어 프로젝트 기둥을 끝까지 사수하라



아이오메가의 Zip-drive

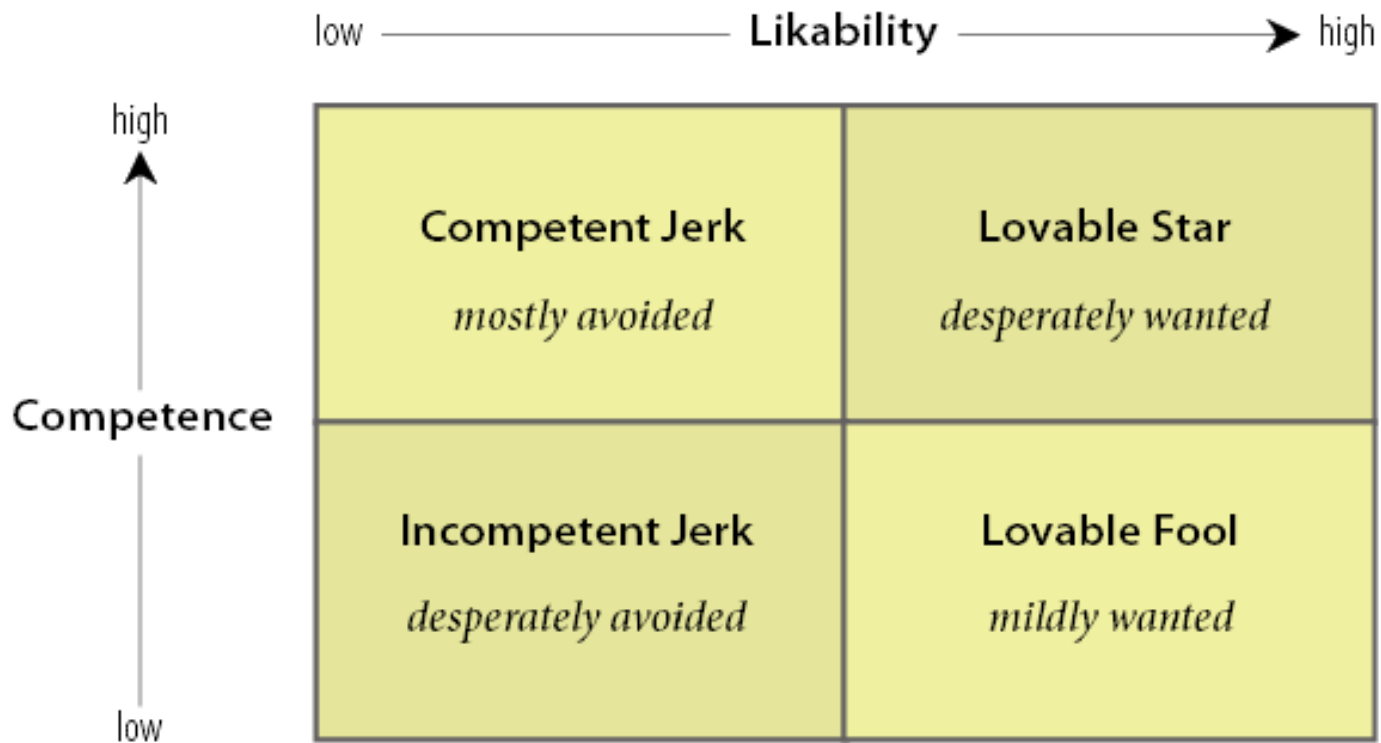
- ☑ 100메가 바이트를 저장할 수 있어야 한다
- ☑ 충분히 빨라야 한다
- ☑ 바보도 설치할 수 있을 만큼 단순하게 만든다
- ☑ 내장형보다 저렴한 200-300불에 판다
- ☑ 컴덱스를 준비한다



팜의 PalmPilot PDA

- ☑ 호주머니에 들어갈 정도로 작아야 한다
- ☑ 완벽하게 호환이 되어야 한다
- ☑ 쉽고 빠르게 사용할 수 있어야 한다
- ☑ 가격은 299불 이하로 낮춘다

# Team Work



## Innovation as a Team Sport

**THE TEN FACES OF INNOVATION** IDEO's Strategies for Beating the Devil's Advocate & Driving Creativity Throughout Your Organization

By Tom Kelley with Jonathan Littman; Currency/Doubleday; 276pp; \$29.95

Like many people these days, I only have time for books during airplane trips. And I measure how long they take to read by mileage. Tom Kelley's *The Ten Faces of Innovation* is a coast-to-coast, five-hour affair. But unlike the mostly unsavory food served on transcontinental flights, this book delivers some tasty morsels

to managers hungry to boost their companies' level of innovation. It is funny, insightful, and chock-full of surprising examples. If you take it on a flight from Los Angeles, you will have something to use at work by the time you land in New York.

Kelley begins by breaking down the process of innovation and debunking the notion that it is somehow magical and the stuff of individual genius. "Innovation is a team sport," he says, then proceeds to lay out the 10 personas, or types of people, who bring their talents to a winning team. There's the Anthropologist, who goes into the field to observe how people interact physically and emotionally with products, services, and spaces. The Experimenter is the team member who transforms new ideas into working prototypes, taking calculated risks on something different.

The Collaborator has the skills to lead multidisciplinary teams and win over skeptical "buyers" within the corporation. One of my favorites is the Experience Architect, who designs compelling experiences that go way beyond functionality to connect with consumers emotionally, as in the cases of Starbucks Corp. cafes and Apple Computer Inc. iPods. Each player is important to innovation, but the only way to raise your company's overall score is to build a great team.

My favorite section is Kelley's examination of brainstorming. To generate new thinking, companies expend huge amounts of time in meetings—much of it wasted. Meetings tend to be too big, last too long, start with banal prep talks, and take place in the duller of rooms. And there's almost always a joker who wants to undermine every new idea. Kelley takes direct aim at the devil's advocate, which he regards as the enemy of innovation, and offers advice on how to counter negativity. This is important: Brainstorming is vital, and most companies are new to it.

Kelley also talks about how companies can build their own innovation labs. The hot new thing, these are places set aside to let people focus on new projects and encourage creativity and new-design strategies throughout an organization. Procter & Gamble calls its lab "The Gym." Mattel had "Platypus," and Eastman Kodak, Steelcase, and many others have such centers.

Kelley's advice? Keep labs small, with room for 15 to 20 people max, and physically separated from where daily work goes on. There should be lots of props to provoke conversation and ample wall space for sketch boards and visuals. Meetings there should shoot for a large number of possible ideas. Are Kelley's tips obvious? Perhaps. Yet it is amazing how many managers don't know how to shape a gathering that generates ideas. A good hour-long session can come up with 100, and often the wackiest turns out to be the best. DVDs by mail? A mop that doesn't use water? An Apple retail store?

Kelley's book is also a trove of pointed stories. One, offered by Henry Ford, concerns the danger of listening too closely to customers. "If I had asked my customers what they wanted," Ford said, "they would have said a faster horse." Customers don't envision the future, they inform the present. Another tale concerns the 1921 birth of masking tape. It involves one Charles Richard Drew, a banjo-playing college dropout and lowly lab technician for 3M, which was then an unprepossessing maker of sandpaper. While delivering sandpaper to an auto-body shop, Drew observed a worker struggling with glue and butcher paper as he attempted a two-tone paint job. Eureka! Drew envisioned masking tape. Unfortunately, 3M would have none of it. But, working in secret, Drew found a way to make the tape. The lesson? Observation and imagination—plus insubordination—can be great for innovation.

For all that it delivers, Kelley's book has one severe limitation: The author's insights are all filtered through a single design consultant, IDEO, where he is general manager. This account is filled with references to IDEO's work. That's fine up to a point—the cutting-edge company is one of the largest innovation and design consultants in the world. But there are many others doing great work—ZIBA Design, Design Continuum, Jump Associates, Stone Yamashita Partners, Peer Insight, and Involution Studios, to name a few. Still, Kelley's volume is a helpful reminder that innovation

has changed. In the '90s it involved dealing with vast technological shifts that disrupted and threatened companies. Today it means building the processes that promote an idea-generating culture. You can learn a lot by flying. ■

—By Bruce Nussbaum

**BusinessWeek** online For the best of Tom Kelley's how-to advice, go to [www.businessweek.com/ideas](http://www.businessweek.com/ideas)



**IDEO's Kelley delivers an insightful guide to building a creative culture**

### TREND: INNOVATION CAMP

Flash back to summer camp and the many lessons learned in an intense, unfamiliar environment. Innovation consultancies such

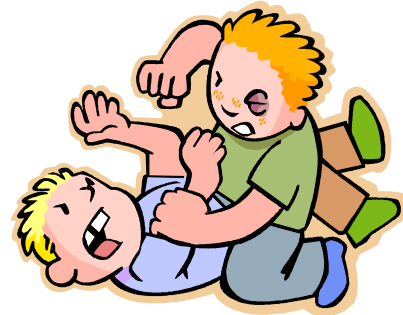
as Doblin, ZIBA Design, IDEO, Jump, and Idea Factory offer immersion workshops on creative thinking. Tomorrow Makers ran the CEO Creativity workshops at the World Economic Forum in Davos. The aim of such experiences is to change managerial culture.

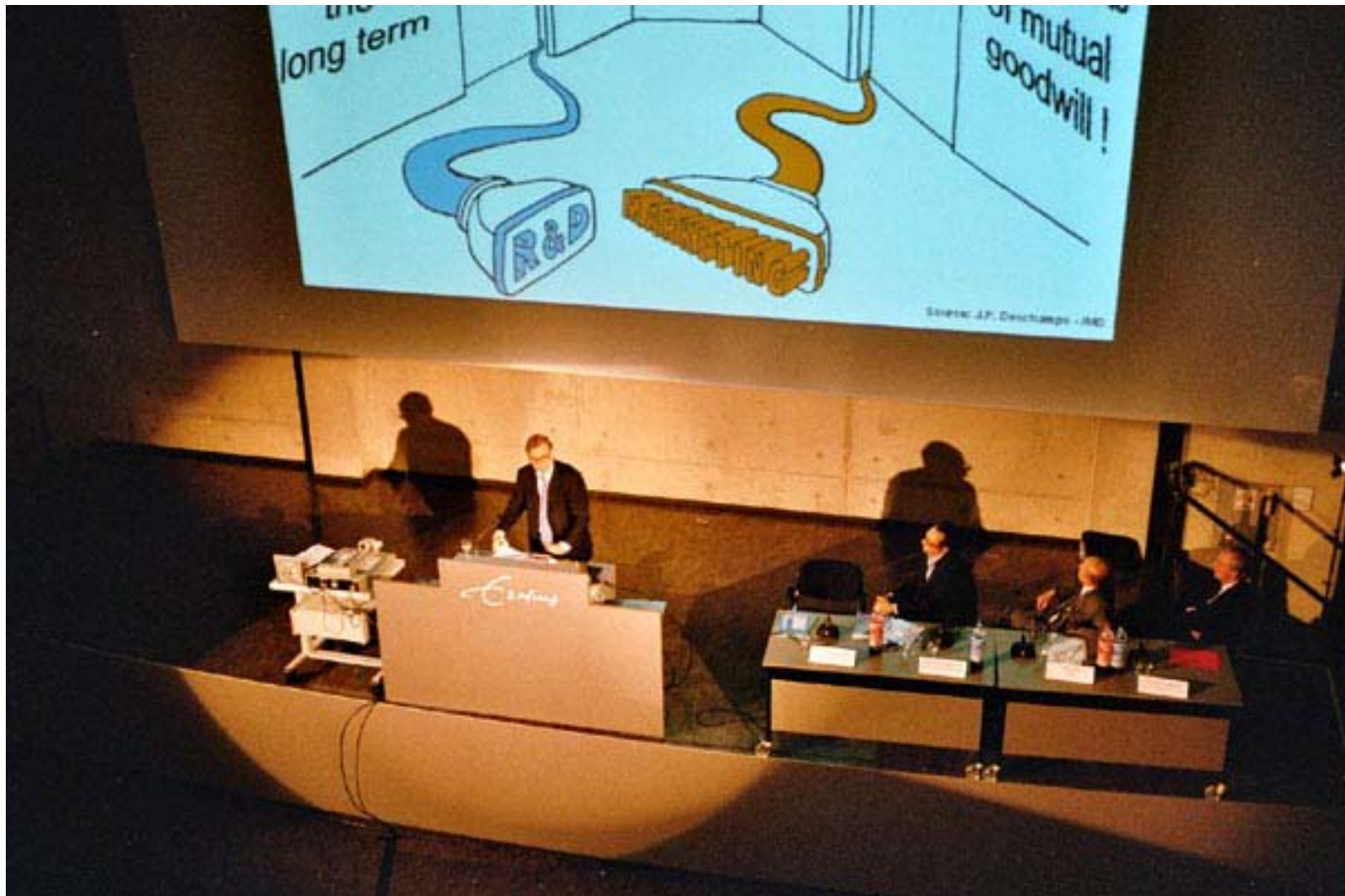




# R&D-마케팅 연계

- **R&D-마케팅의 연계는 신제품개발 성공의 핵심조건**
  - R&D는 혁신능력, 마케팅은 상품화/상업화 능력을 제공
  - 연구개발 부서와 마케팅 부서의 커뮤니케이션은 성공확률 증대
  - R&D에서 마케팅의 도움을 필요로 할 때:
  - 마케팅에서 R&D의 지원을 필요로 할 때:
- **Barriers to Communication and Collaboration**
  - 인성(personality)의 차이: Are they really different?
  - 세계관의 차이 (thought worlds)
  - 물리적인 거리

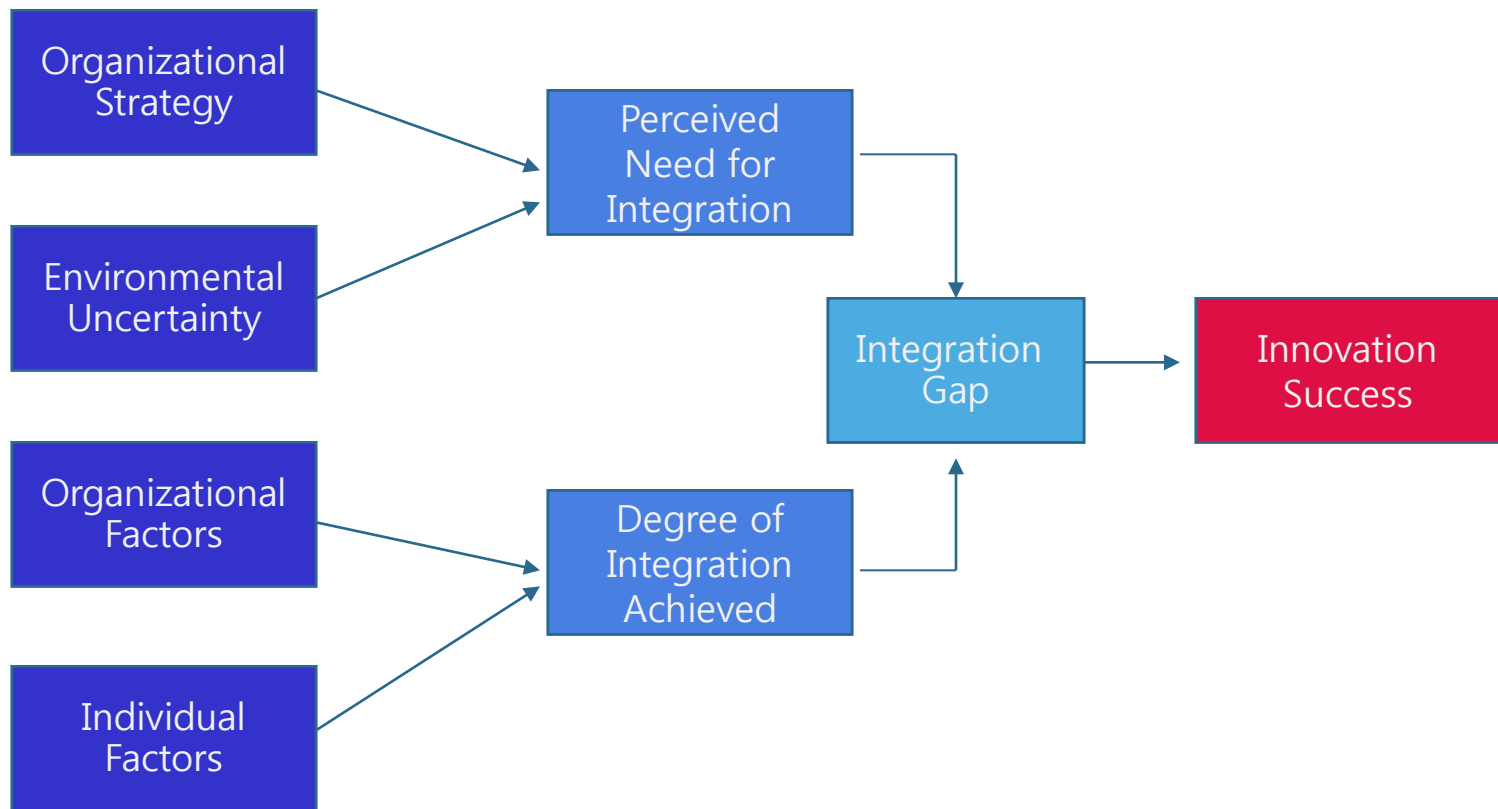






# Model of Marketing-R&D Interface

## Gupta, Raj, and Wilemon (1986)

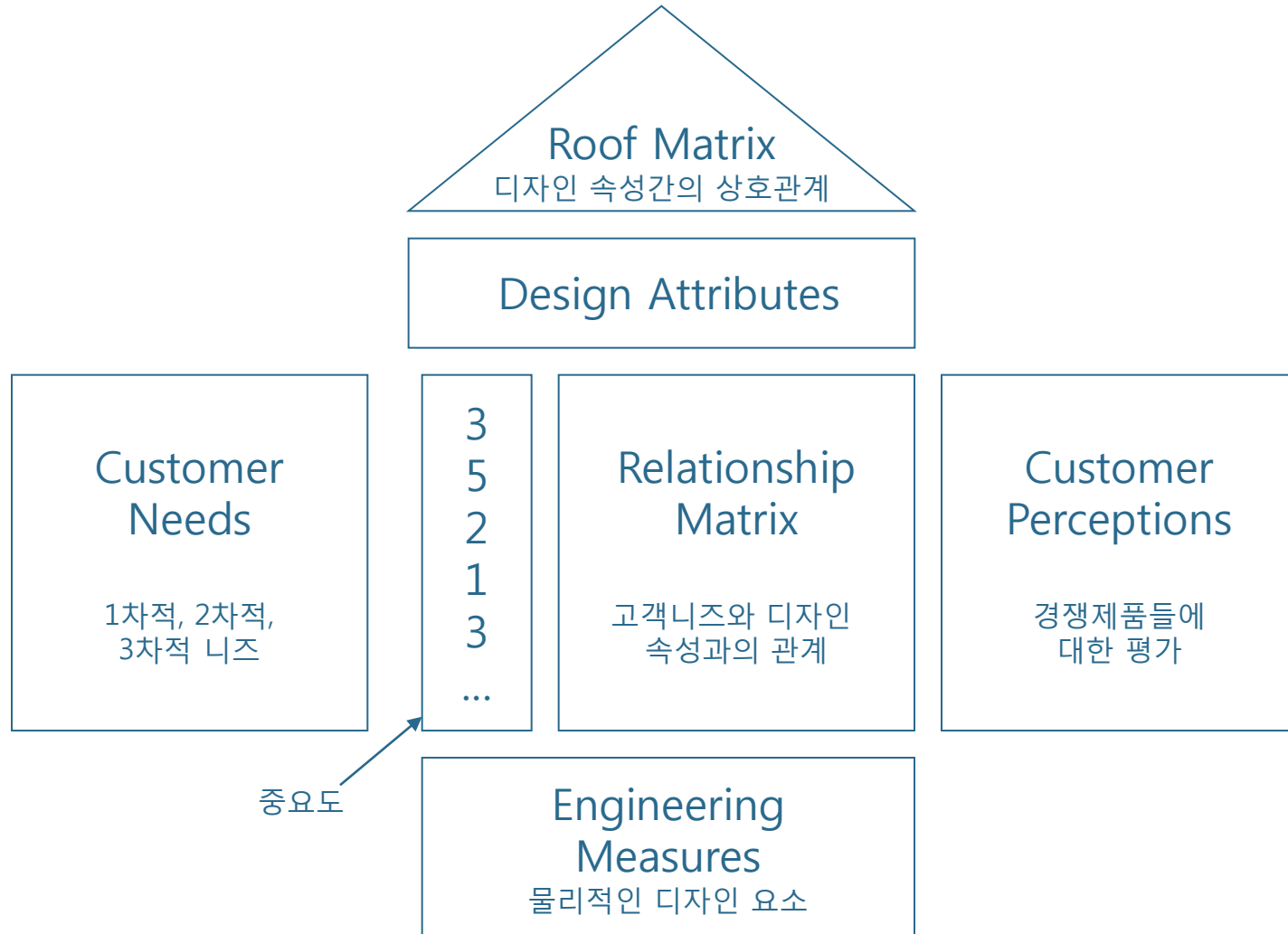


# R&D-마케팅 연계: How?

- **Overcoming Barriers: Communication이 열쇠!**
  - Relocation
  - Informal social systems
  - Organizational structure
  - Incentives and rewards
  - Formal systems and processes:  
QFD



# House of Quality



# 하이테크 상품 출시전략

- The costliest stage of entire NPD process: most critical, but largely neglected
- 하이테크 상품의 상업화 4단계

