

DISCUSSION

COURSE: INNOVATION DEVELOPMENT IN
COMMERCIAL BANKS

PRESENTED BY FARKHOD ODILOV

DEGREE OF NOVELTY

- **Incremental innovations**
- **Radical innovations**
- **Systemic innovations**

Classification of innovations

SYSTEM	New series of cars, planes, computers, TV	New generation (MP3 and download as substitution of CD)	Steam engine, ICT, biotechnology, nanotechnology
COMPONENT	Improvement of components	New components for existing systems	Advanced materials improving component properties
	INCREMENTAL		RADICAL
	„do better what we already do“	„new for the company“	„new for the world“

INNOVATION PROCESS

- **Research and development (R&D)**
- **Production**
- **Marketing**

Innovation is an opportunity for something new, different. It is always based on change.

Innovators do not view any change as a threat but as an opportunity

FOCUS

- Use the limited resources in the most effective manner; focus on one of the following:
 - **Operational output**
 - **Top-quality products**
 - **Perfect knowledge of customers**

RECOMMENDATIONS

- Solve the correct problem correctly – be effective and efficient
- Manage innovation as a project
- Analyze risks
- Use models, scenarios, computer simulation
- Study examples of successful and unsuccessful innovation projects

WHAT TO DO

1. Start with analysis and study of opportunities.
2. Go among people, ask questions, listen
3. Effective innovations are surprisingly simple. They must be focused on specific needs and on specific final products.
4. Effective innovation start on a small scale.
5. A successful innovation always tries to win a leading position, otherwise you create opportunities for your competitors.

WHAT TO AVOID

1. Don't try to be too "clever". All that is too sophisticated will almost certainly go wrong.
2. Don't try to do too many things at once. Focus on the core of the problem.
3. Don't try to make innovations for the future but for today. An innovation can have a long-term impact but there must be an immediate need for it.

Three conditions for innovations

1. Innovation means work, hard, concentrated and thorough work. If these qualities are lacking then there is no use for the big talent, cleverness or knowledge.
2. Successful innovations must build on your strong points. The innovation must be important to the innovator.
3. Innovation must focus on a market, must be controlled by the market (market-pull).

CASE STUDIES

Linet Želevčice



- Hospital products
- Hospital beds, intensive care beds, medical furniture and other equipment increase the comfort of patients and help the nurses.
- Nursing-care products
- *Nursing beds, bed accessories, bedside cabinets, mattresses and other furniture.*

No comment ...

1990



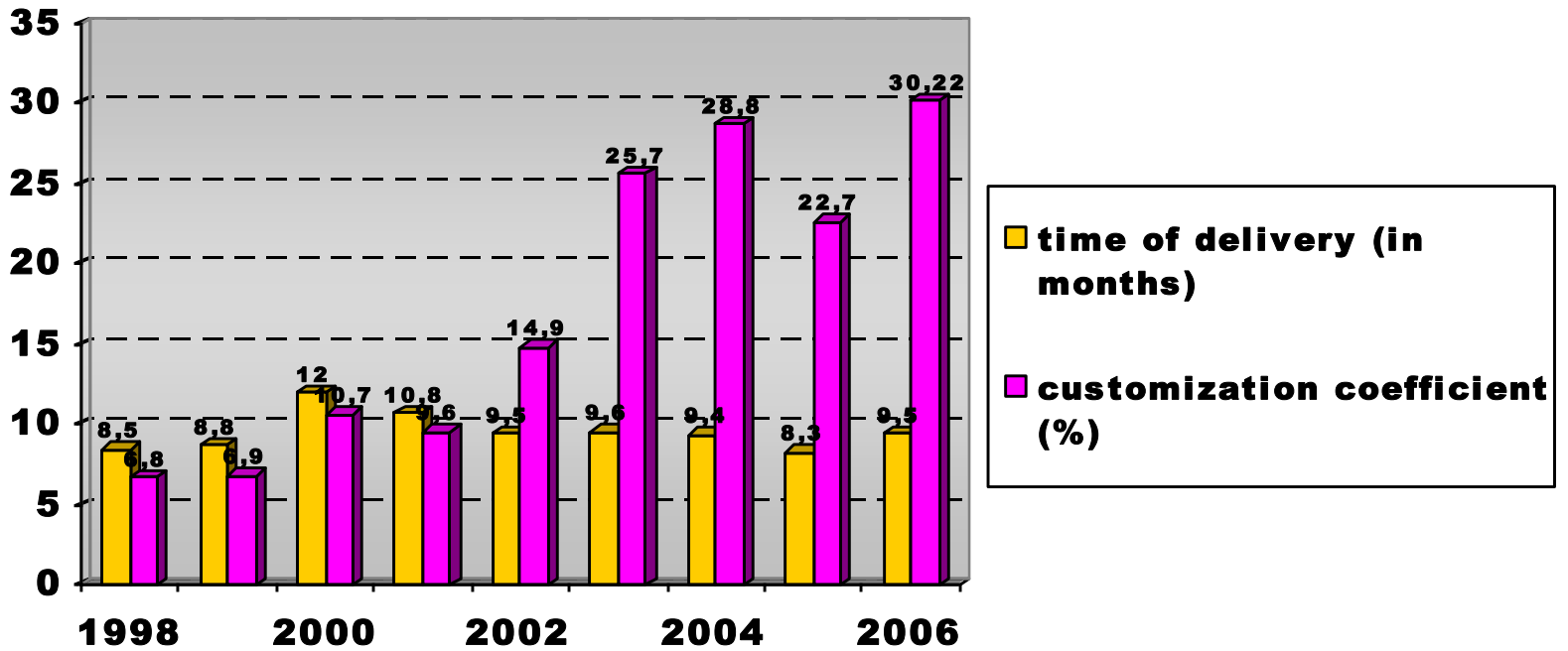
2005



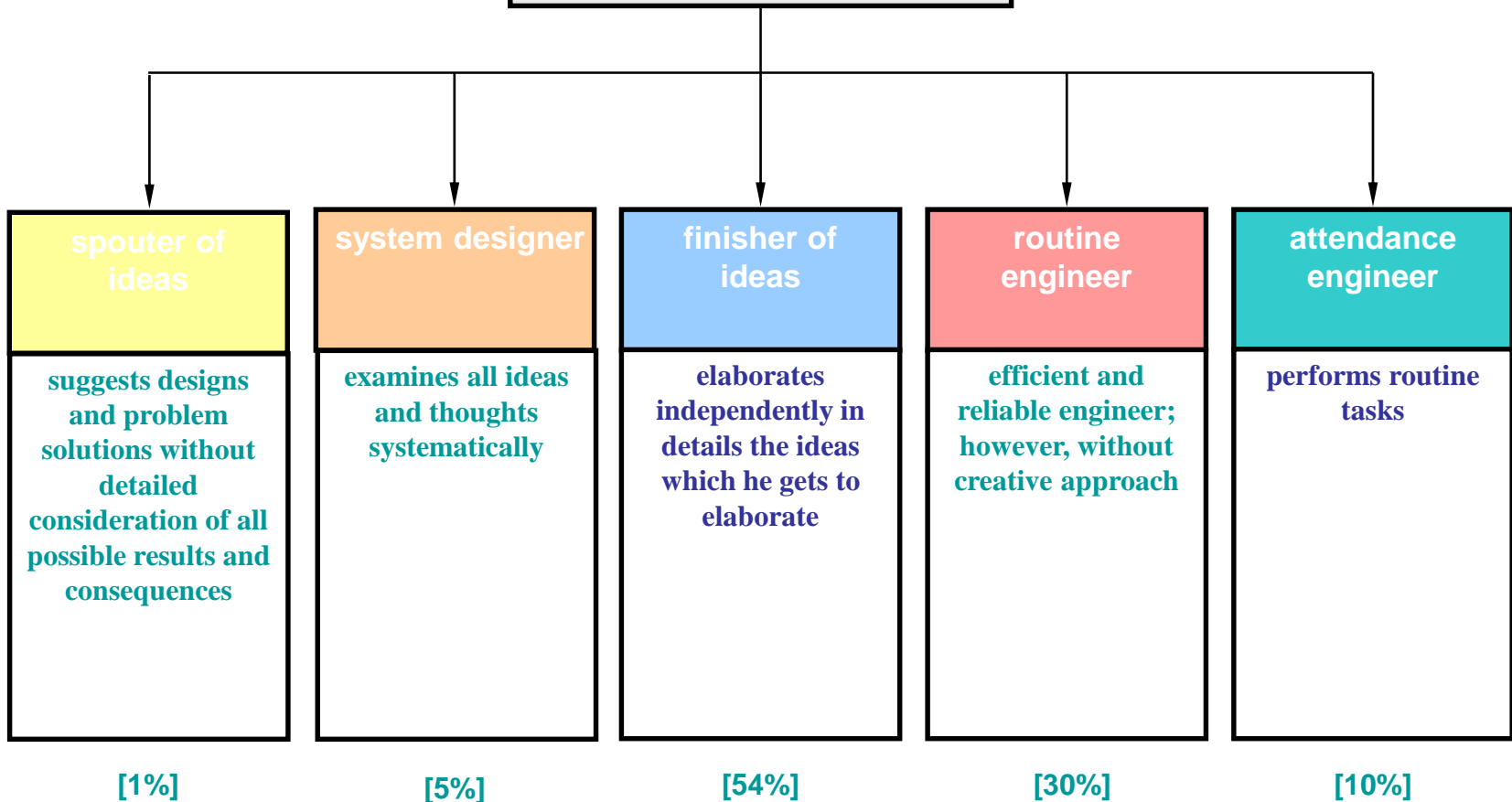
TOSHULIN

Development of new machines:

- 1. Customized – the machines developed for the specific customer according to its requirements – market pull**
- 2. Prototypes – there is no specific customer – market push**



Types of design engineers



Contipro

Connective

tissue

products

RNDr. Vladimír Velebný, CSc.

Holding – current state

- 167 employees
 - sales (2008) – 242 mil Kč
 - export – 98% of total sales
- one of the biggest produces of hyaluronanu inthe world

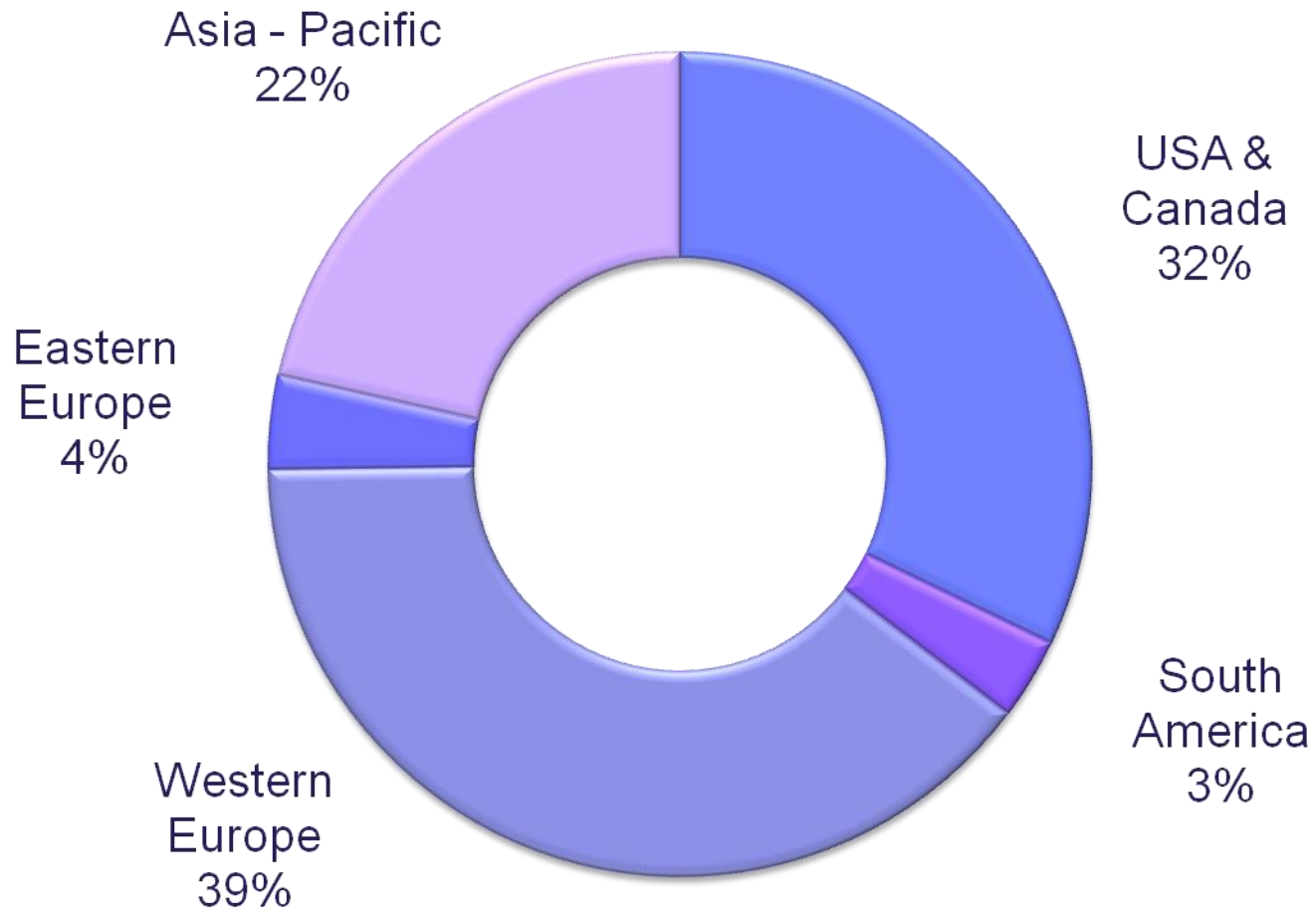
◎ 30% of the world market

◎ 60% of the European market

- Customers in 43 countries



Sales in regions



3 pillars of success

- 1. Maximum attainable quality**
- 2. Sharing expenses with customers**
- 3. Development of original products**

3M and post-it notes



http://www.3m.com/us/office/postit/pastpresent/history_ws.html

More about 3M

A Century of Innovation The 3M Story

http://solutions.3m.com/wps/portal/3M/en_US/About/3M/

iGO – distribution of bateries

- Bateries and accessories for notebooks, mobiles, cameras and other equipment
- Vision: to develop and sell simple and elegant solutions, facilitate the use of electronic devices
- online catalogue, e-commerce, CRM
- Customer - targeted marketing, flexibility
- Growth of sales by 80% in the first year, by 100% in the following year

http://corporate.igo.com/about_us.aspx

Adaptors



- Patented technology [iGo Technology](#), powering of mobile electronic devices using single (universal) adaptor;
- [Power Technology Patent Brochure](#) (PDF)

Bang & Olufsen

- www.bang-olufsen.com
- **VISION:** „**Courage to constantly question the ordinary in search of surprising, long-lasting experiences.**“
- Founded in 1925 in Struer, Denmark, Bang & Olufsen a/s is world renowned for its distinctive range of quality audio, video and multimedia products that represent our vision: Courage to constantly question the ordinary in search of surprising, long-lasting experiences. Bang & Olufsen employs over 2.550 staff members and had a turnover of DKK 4.092 million (EUR 548,6 million) in the 2007/2008 financial year.
- Bang & Olufsen manufactures a highly distinctive and exclusive range of televisions, music systems, loudspeakers, telephones, and multimedia products that combine technological excellence with emotional appeal. Bang & Olufsen products are sold by over 1.200 dealers in more than 100 countries in an extensive network of retail stores. Approximately 65% of these stores are B1-stores, which exclusively sell Bang & Olufsen products. The B1 stores account for 81% of the total turnover.
- **Production also in the Czech Republic**

Bang & Olufsen – products



More case studies

- IBM Case Studies:

<http://www.ibm.com/search/?en=utf&v=14&lang=en&cc=us&lv=c&q=case+study+innovation&x=13&y=5>

- Industry podcasts: Midsized clients and experts in seven industries share their insights -

<http://www->

[1.ibm.com/businesscenter/smb/us/en/mbpodcasts?&ca=smbIndustryPodcasts101706&tactic=&me=W&met=inli&re=smbibmcomTopPagesIndustriesPromo1usen101706](http://www-1.ibm.com/businesscenter/smb/us/en/mbpodcasts?&ca=smbIndustryPodcasts101706&tactic=&me=W&met=inli&re=smbibmcomTopPagesIndustriesPromo1usen101706)

More case studies

- Sustainable energy (hydrogen, fuel cells, biofuels, zero emission, ...
http://ec.europa.eu/research/energy/nn/nn_pu/article_1078_en.htm
- <http://www.zoner.com/>
- <http://www.kerio.com/>

The most important innovations in last 30 years

- http://www.pbs.org/nbr/site/features/special/subdir/top-30-innovations_slide-show/

Innovation categories

- **sustaining** – better products that can be sold with higher margin to demanding customers; incumbents win
- **disruptive** – commercialization of simpler, more user-friendly products, which are cheaper and targeted to new or less demanding customers; new entrants win

Key elements of disruption

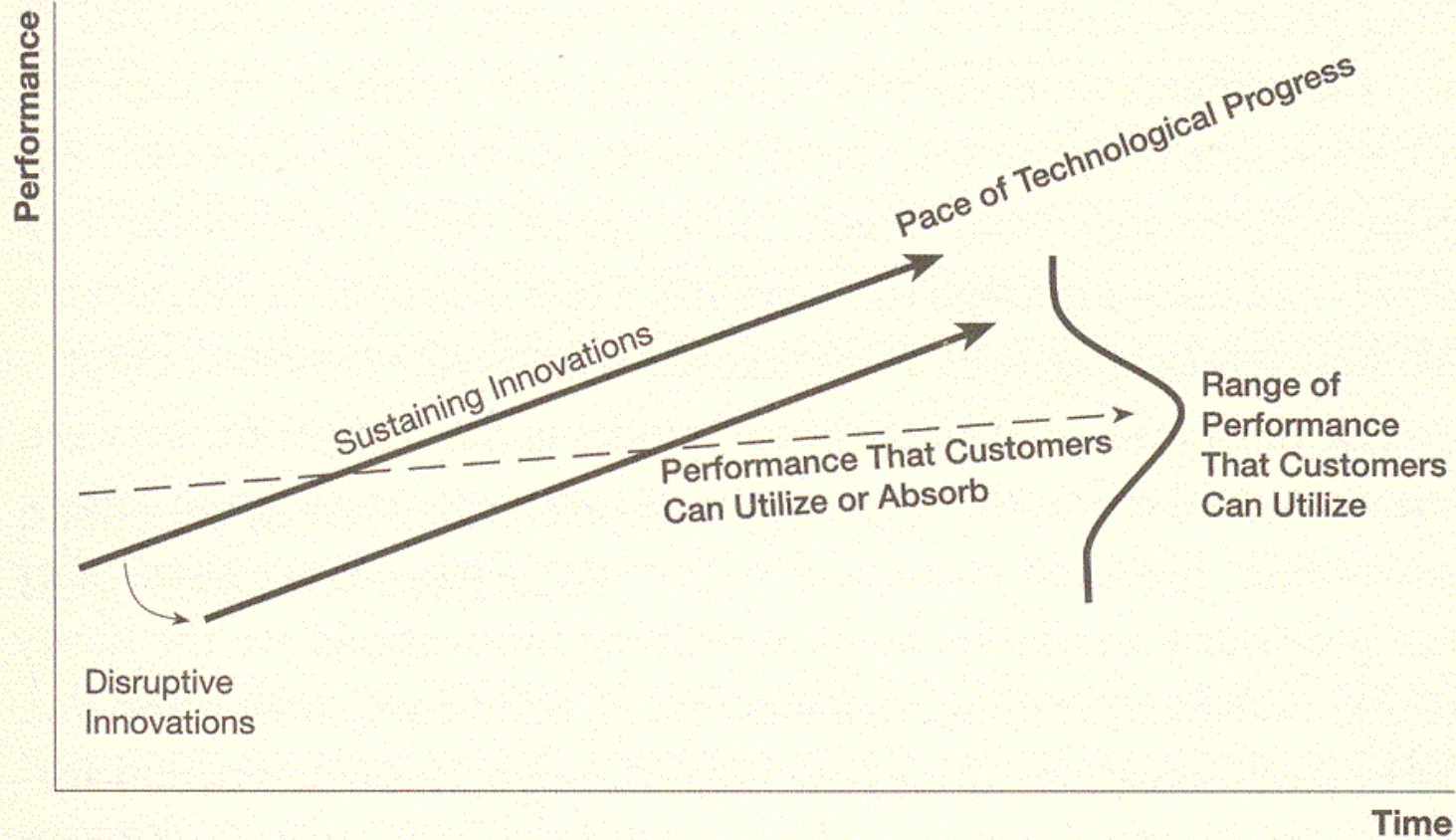
- Customers at each market has limited absorption capacity
- Technological progress usually is faster than the ability of the market to employ it. Companies focus on better products to be sold with higher margin to unsatisfied customers.

Sustaining vs. disruptive

- **Sustaining**: focused on demanding customers; both incremental and radical. Incumbents have resources and motivation.
- **Disruptive**: introduce products and services not as advanced as existing ones, but offering other advantages (simpler, cheaper, more user friendly, ...) and focus on new or less demanding customers.

FIGURE 2 - 1

The Disruptive Innovation Model

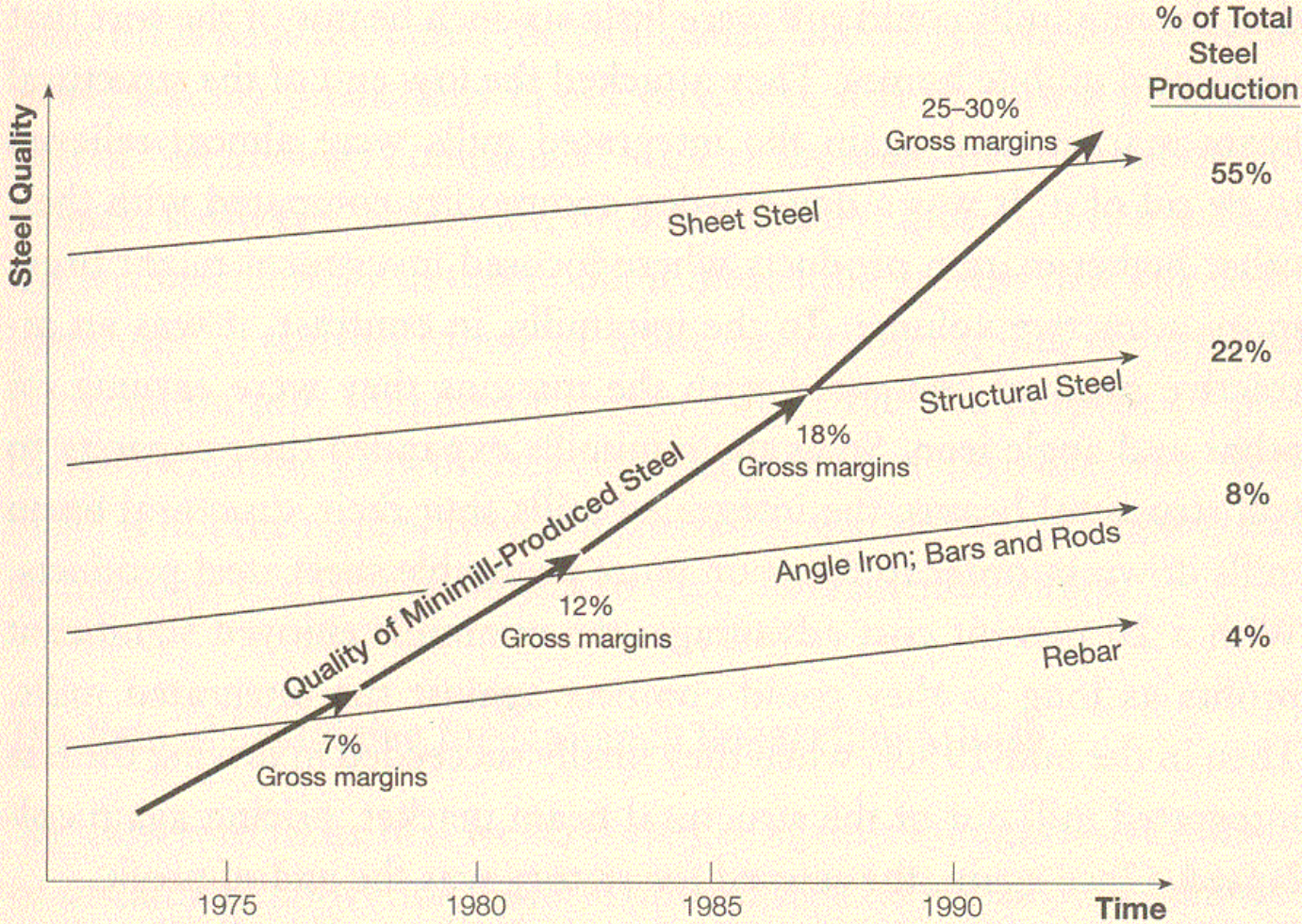


Clayton M. Christensen: *The Innovator's Solution*, Harvard Business Press, 2003

- Due to technological progress the trajectory of the disruptive innovation after some time crosses the trajectory of demands of more demanding customers and starts to replace incumbents who are not principally ready to react adequately, as they are motivated to succeed at „better“ markets, not to defend themselves on „inferior“ ones.

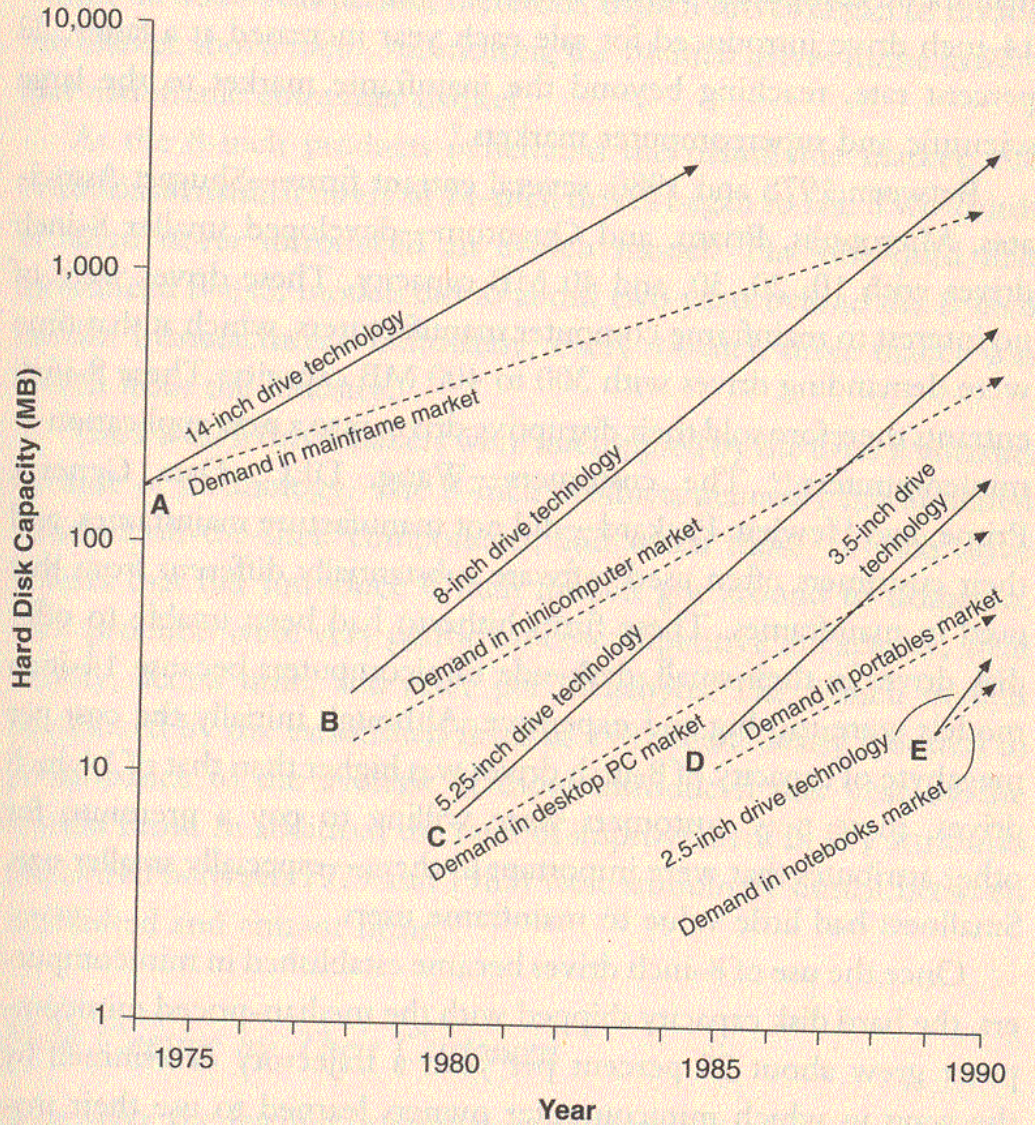
FIGURE 2-2

The Up-Market Migration of Steel Minimills



Source: American Iron and Steel Institute; interviews with company executives. Note that the tonnage percentages do not sum to 100 percent because there are other specialty categories of steel.

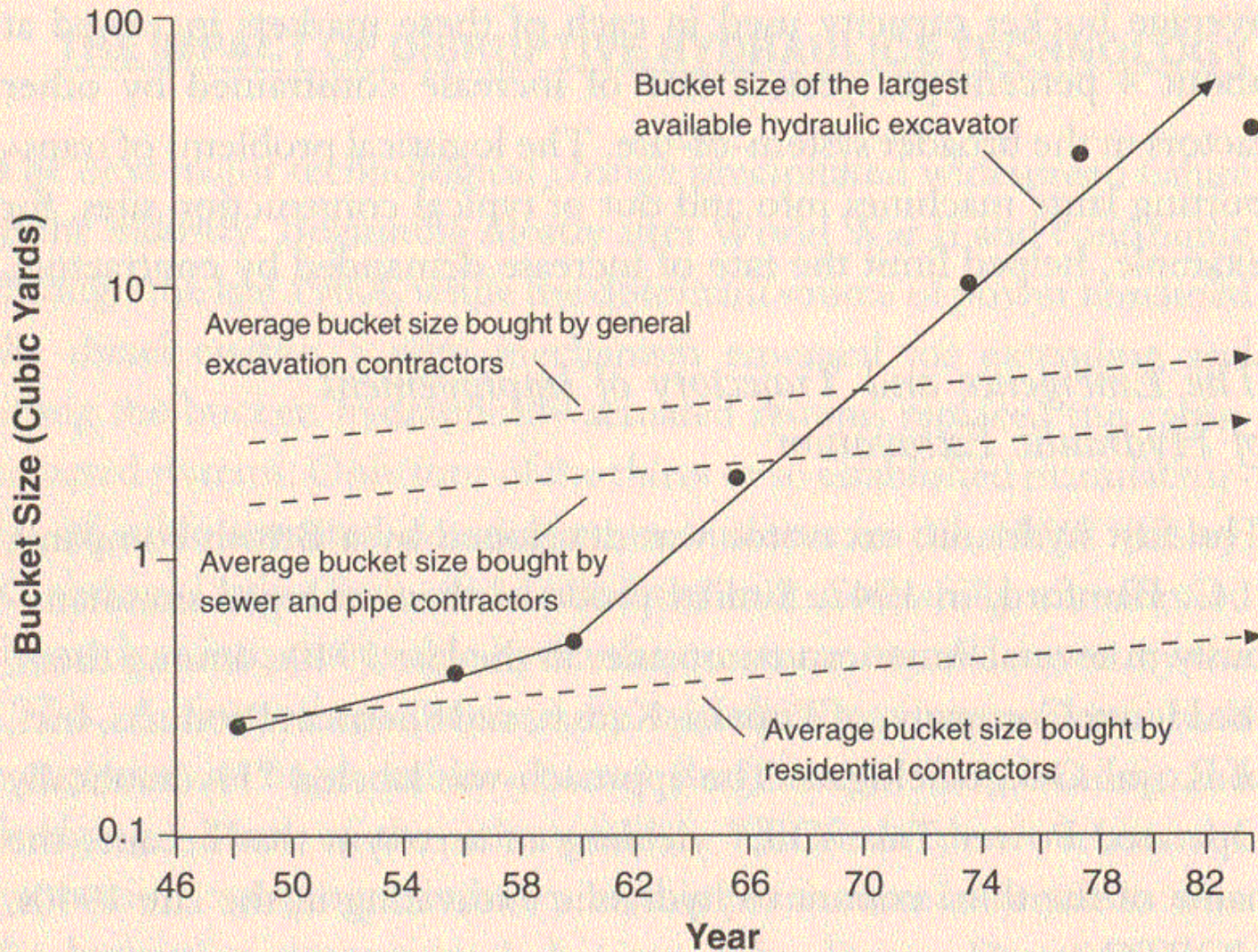
Figure 1.7 Intersecting Trajectories of Capacity Demanded versus Capacity Supplied in Rigid Disk Drives



Clayton M. Christensen: The Innovator's Solution,
Harvard Business Press, 2003

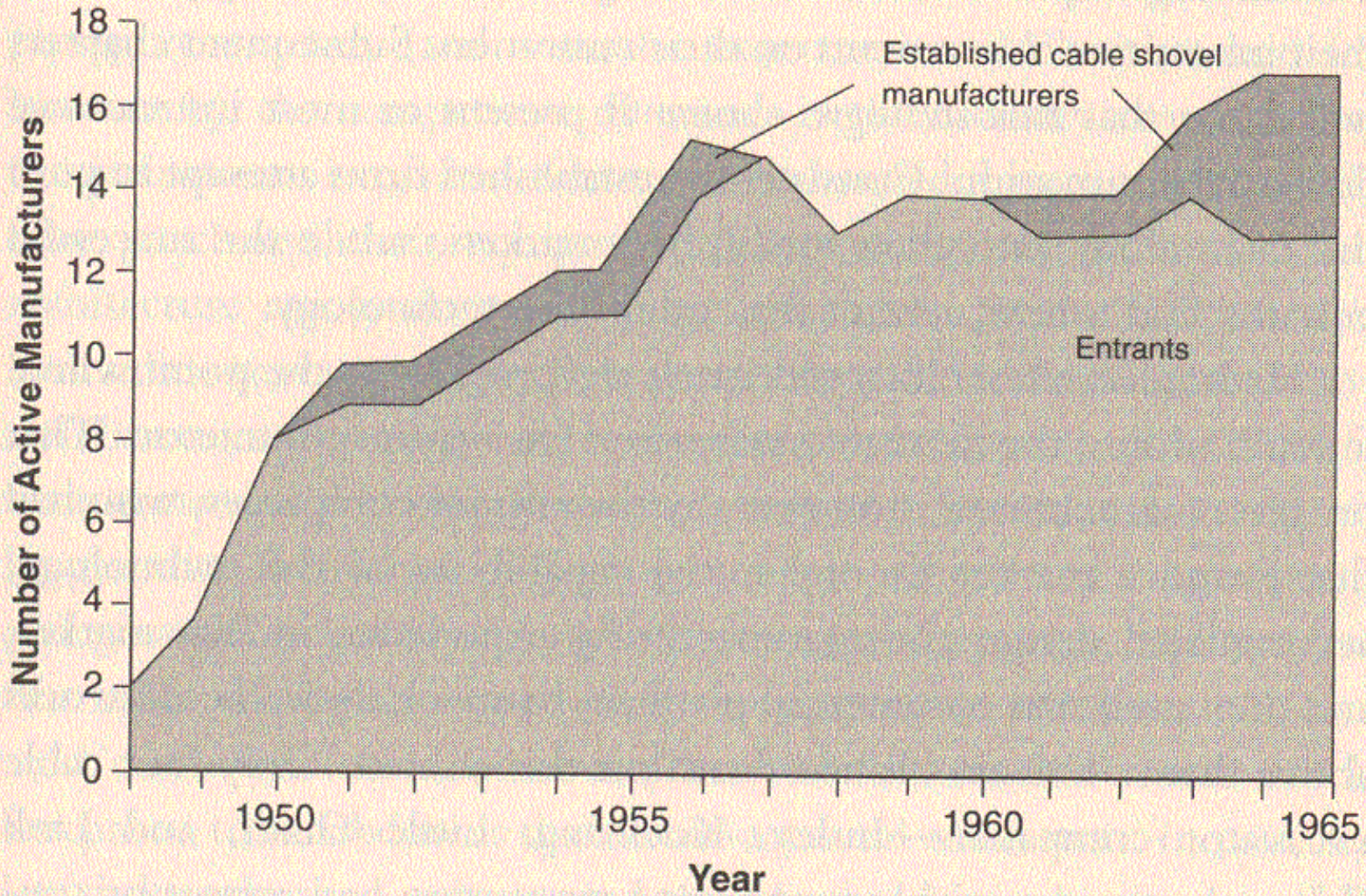
Source: Clayton M. Christensen, "The Rigid Disk Drive Industry: A History of Commercial and Technological Turbulence," *Business History Review* 67, no. 4 (Winter 1993): 559. Reprinted by permission.

Figure 3.3 Disruptive Impact of Hydraulics Technology in the Mechanical Excavator Market



Source: Data are from the Historical Construction Equipment Association.

Figure 3.6 Manufacturers of Hydraulic Excavators, 1948–1965



Source: Data are from the Historical Construction Equipment Association.

Conditions of success - 1

- Disruption is successful, as it is easier to defeat competition that tries to escape than the competition who fights
- Innovation must be disruptive for all companies in the industry
- Ex. Internet – for Dell sustaining, they sold computers formerly by mail, phone, etc.

Conditions of success - 2

- Following the trajectory upwards to market tiers where it is possible to attain higher margins is what good manager is expected to do.
- Each company therefore prepares its own disruption. This is the innovator's dilemma, but also the start of innovator's solution.
- The advice to new, growing firms: focus on products and markets ignored or neglected by incumbents.

Two types of disruption

- New markets: compete with non-consumption: simpler, more user friendly, can be used by less sophisticated customers (PC, transistor radio, desk copiers).
- Low-end: focus on lower tiers of main markets (minimills, discount stores, Korean auto-makers); motivate incumbents to leave the market

FIGURE 2 - 3

The Third Dimension of the Disruptive Innovation Model

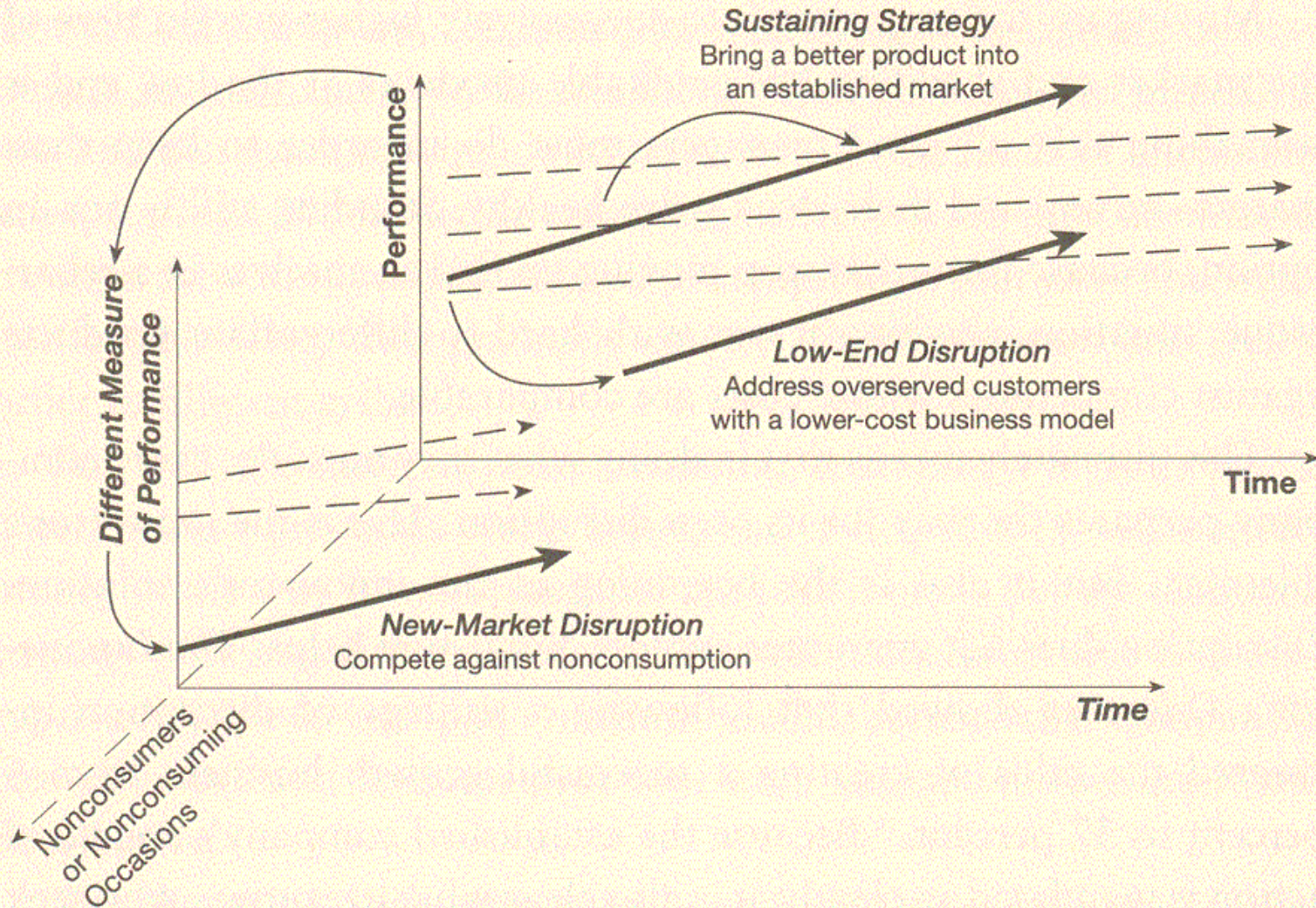


FIGURE 2 - 4

Examples of Companies and Products Whose Roots Were in Disruption

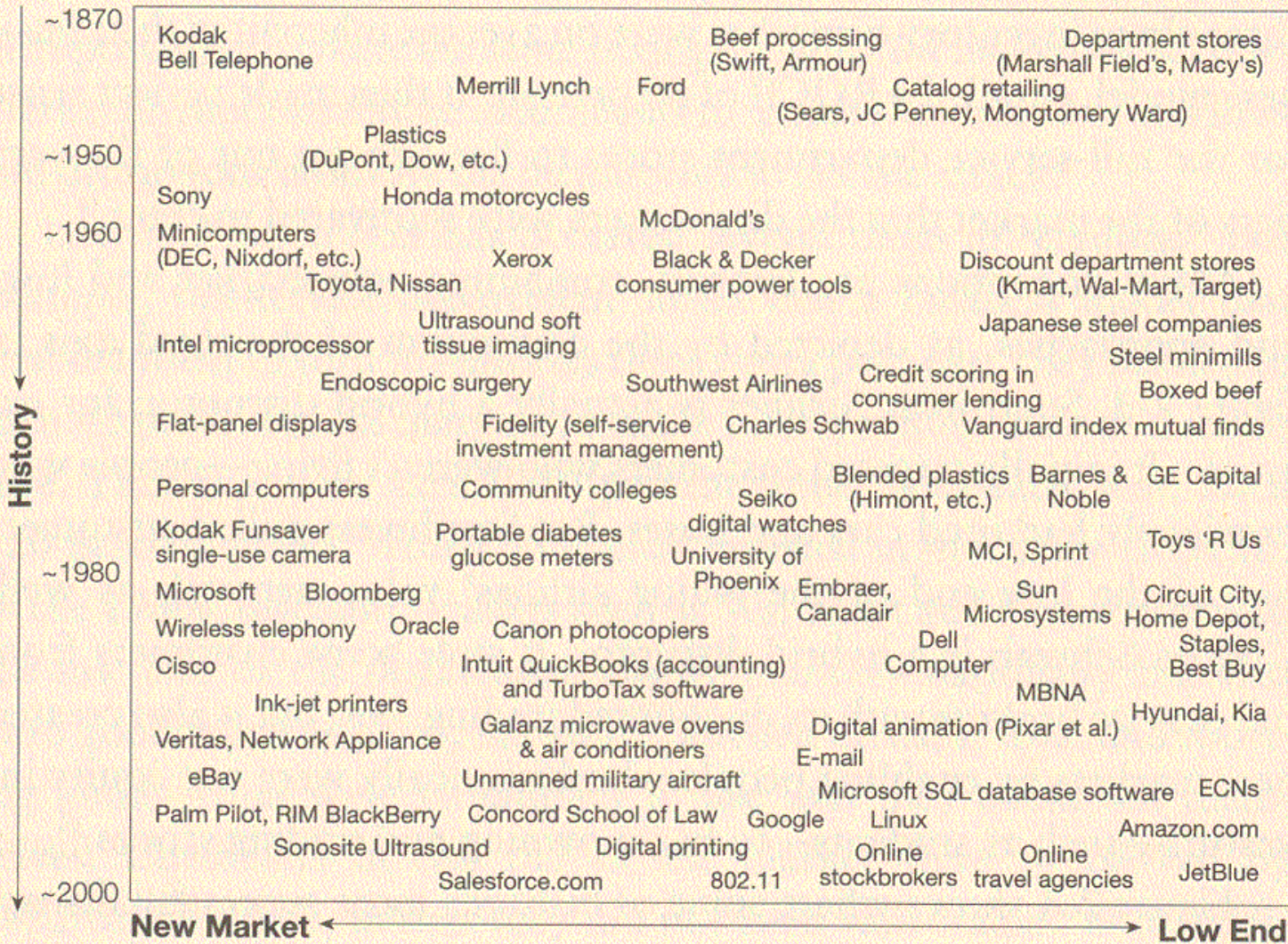


FIGURE 4 - 1

Value Networks for Vacuum Tubes and Transistors

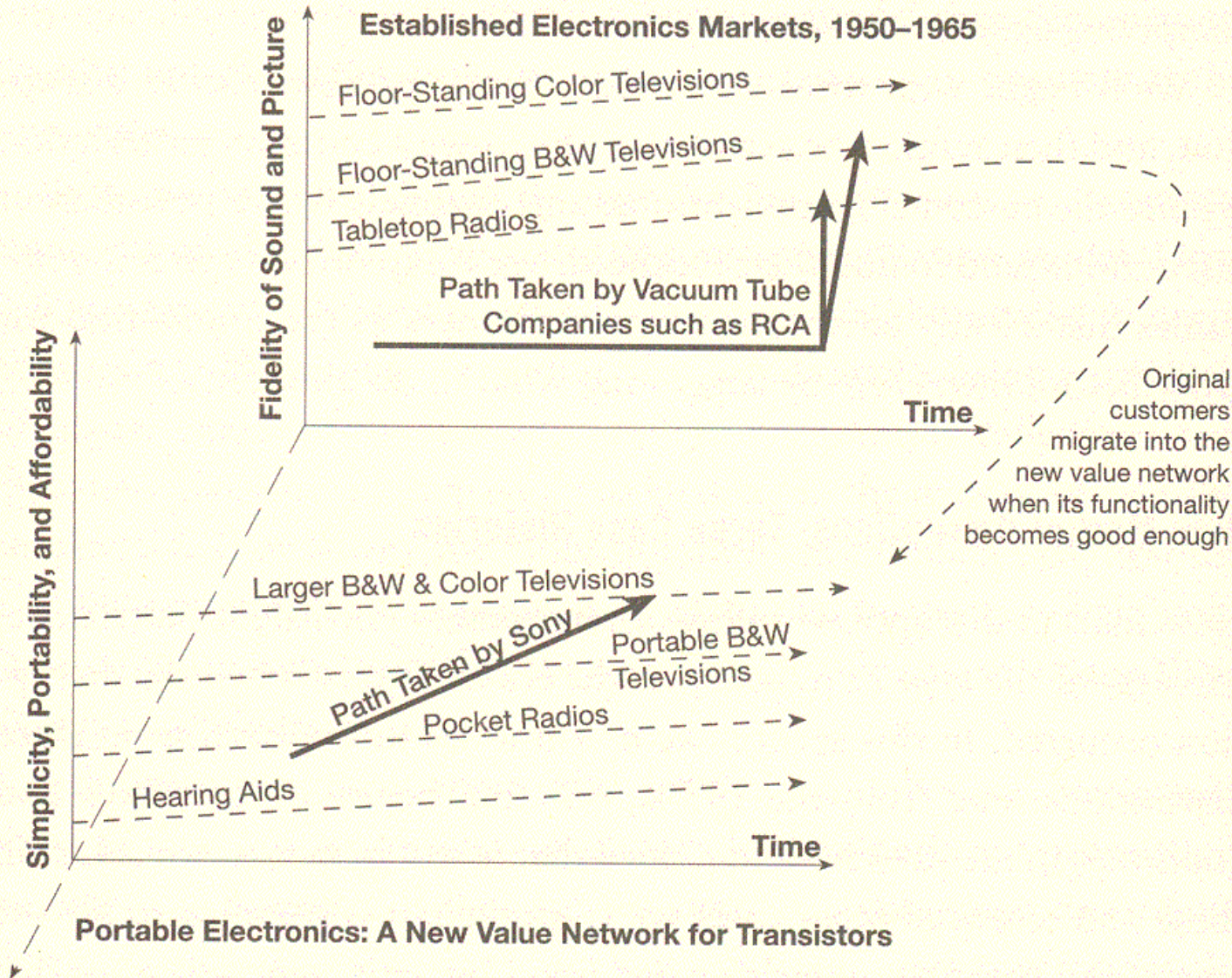
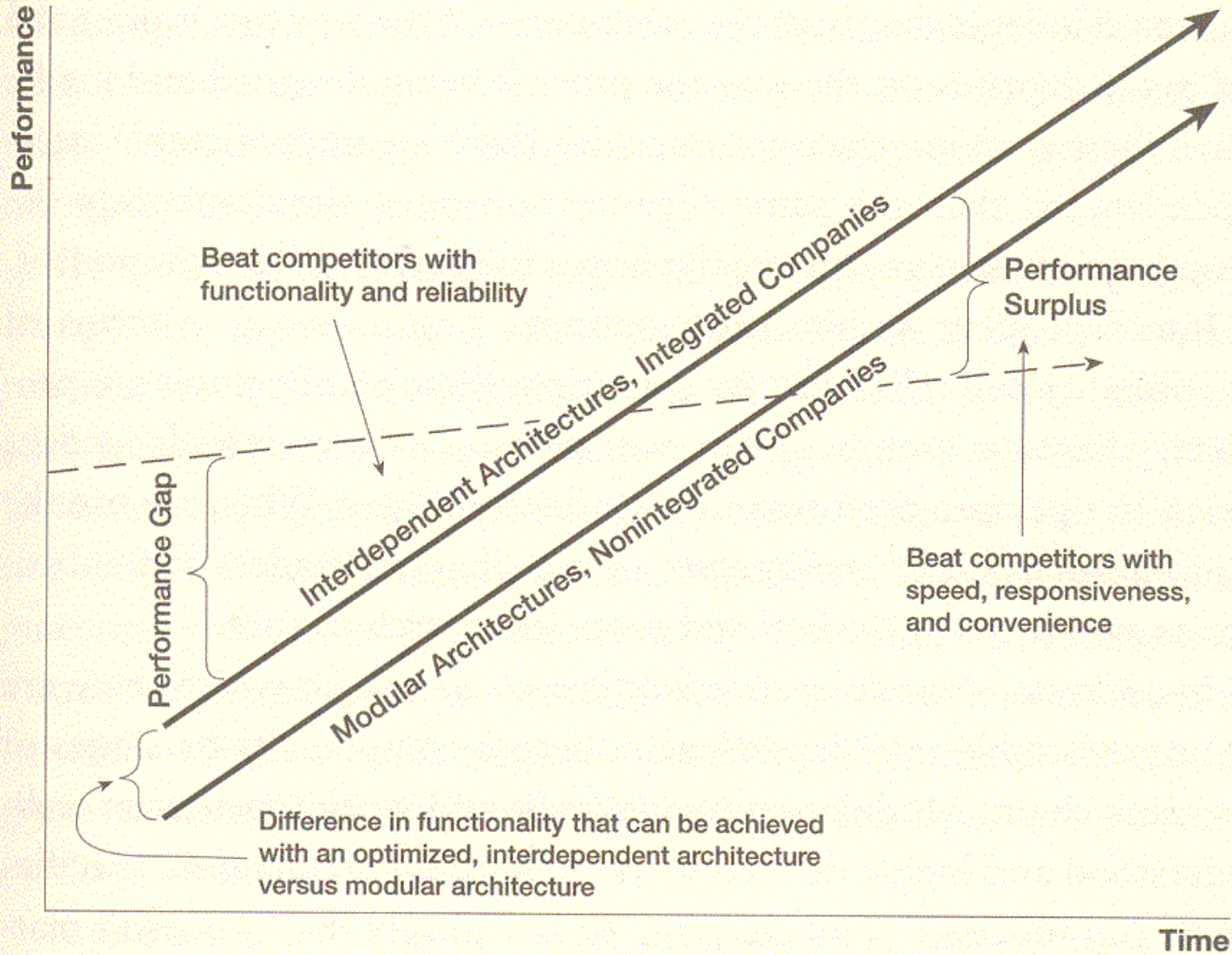


FIGURE 5 - 1

Product Architectures and Integration



OPEN INNOVATION

- Chesbrough, H., “*Open Innovation*”, Harvard Business School Publishing, Boston MA, 2003
- ***Closed innovation*** - requires control
- ***Open innovation***
 - companies use external as well as internal ideas and both external and internal ways to market
 - internal ideas can be taken to the market through external channels to generate additional value

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