

Decision Management Process Planning and Implementation

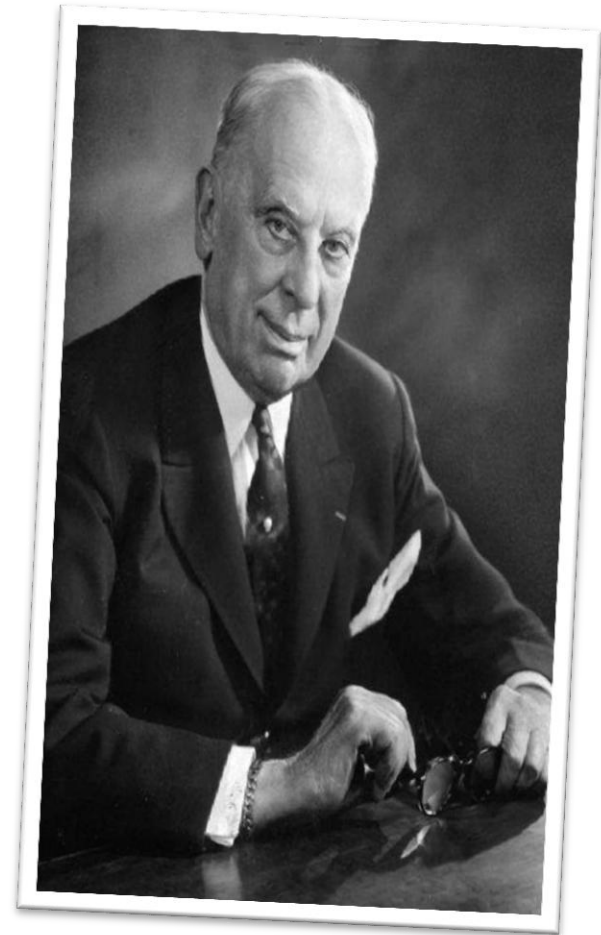
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www.ibii.co.il

If we are all in agreement on the decision – then I propose we postpone further discussion of this matter until our next meeting to give ourselves time to develop disagreement and perhaps gain some understanding of what the decision is all about.

Alfred P Sloan (1875 – 1966)



Decision Making Process

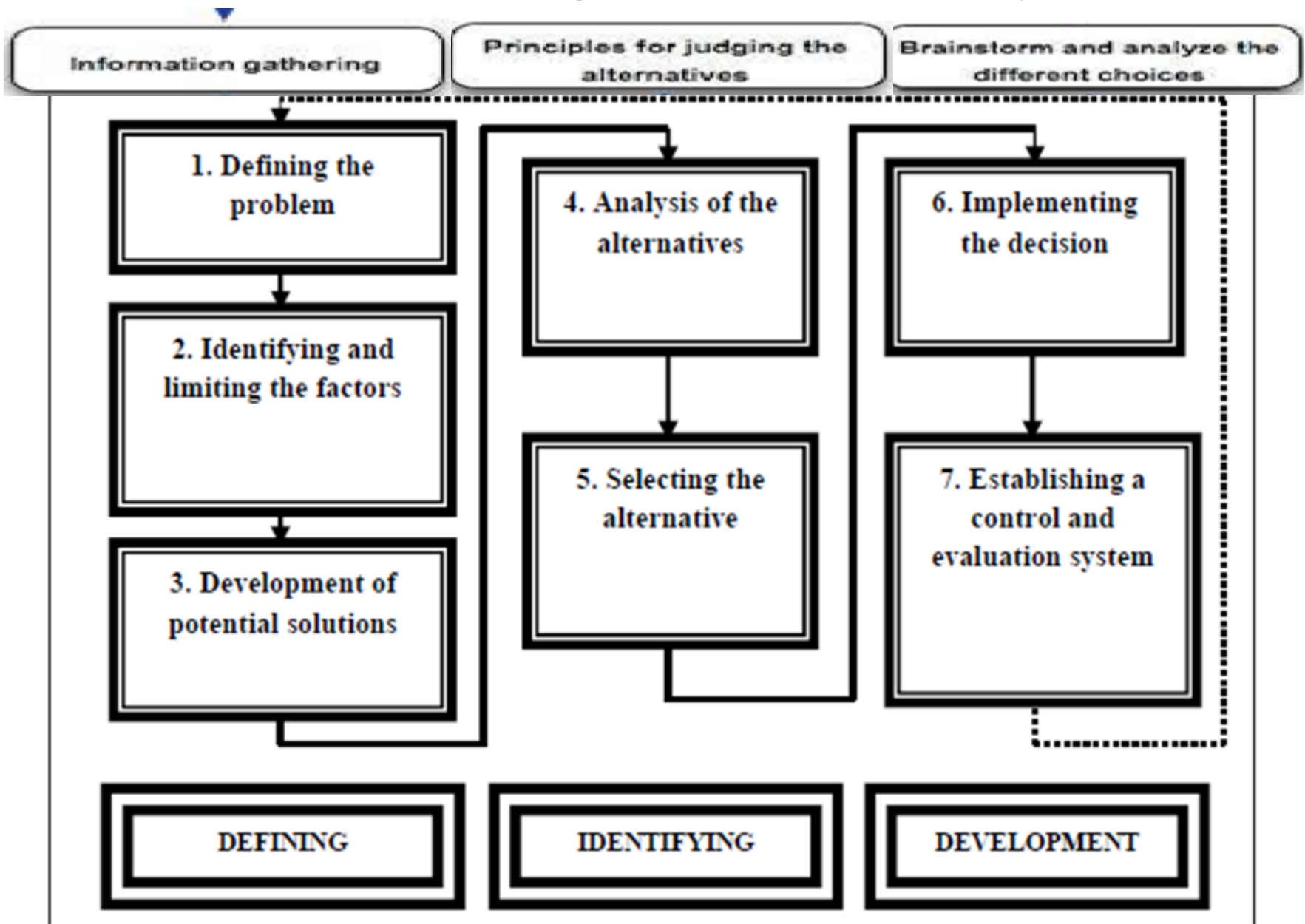
Definition

Behavior by which a preferred option or a course of actions is chosen from among a set of alternatives.

Ongoing activity of managers.

Strategic decision making is being made in a longer time and on a detailed basis.

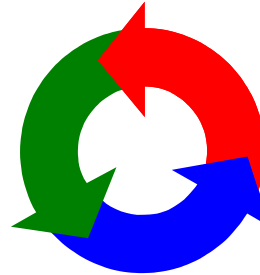
Decision Making Process in 7 Steps



The Decision-Making Process

Systematic Decision-Making Process (Simon's Model)

- Intelligence
- Design
- Choice
- Implementation



Modeling is Essential to the Process

The Intelligence Phase

- Identify organizational goals and objectives
- Determine whether they are being met
- Explicitly define the problem

The Design Phase

- Understanding the problem
- Testing solutions for feasibility
- A model is constructed, tested, and validated
- Conceptualization of the problem
- Abstraction to quantitative and/or qualitative forms

DEVELOPMENT OF ECONOMIC STRATEGY

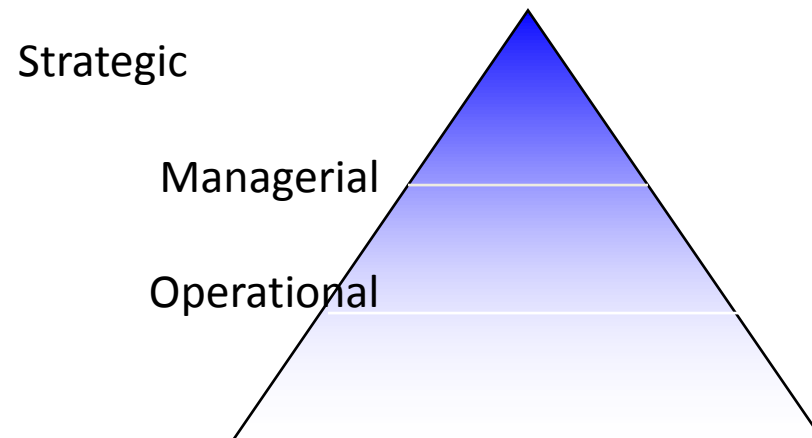


Choice Phase

Type and Scope of Decision

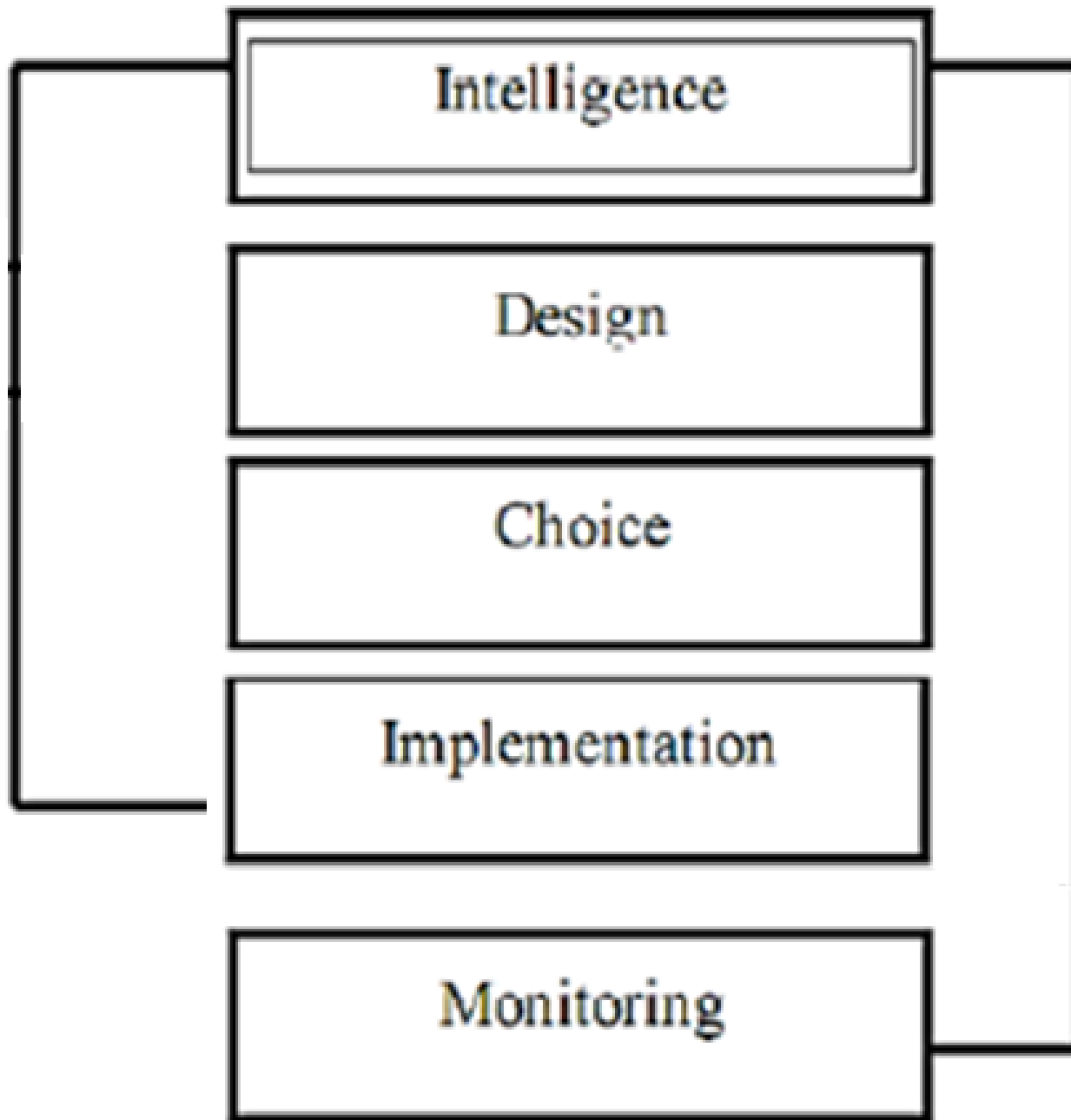
- **Operational Planning and Control:**
 - Focus on efficient and effective execution of specific tasks.
 - They affect activities taking place right now
 - E.g... What should be today's production level
- **Management Control and Tactical Planning**
 - Focus on effective utilization of resources
 - more longer range planning horizon
 - E.g... What is next years production level
- **Strategic Planning**
 - Long-range goals and policies for resource allocation
 - E.g... What new products should be offered

Types of Decisions



Scope of Decisions





Implementation of the Decision Making Process

Intelligence Problem-Goals

- ***Vision***: Organization's dream, beliefs and governing principles
- ***Mission***: Ground your vision in practical terms. action planning process comes in. Key goals.

- **Fedex Mission:** higher financial returns by providing high value added logistics, transportation and related information services
- **Fedex vision:** Leading the way

- **Lexmark mission:** A leading developer, manufacturer and supplier of printing and imaging solutions for offices and homes
- **Lexmark vision:** Customers for life

Vision: the place-like-home between the home and the office,

Starbucks Mission Statement:

Establish Starbucks as the premier purveyor of the finest coffee in the world while maintaining our uncompromising principles as we grow. The following six guiding principles will help us measure the appropriateness of our decisions:

- Provide great work environment and treat each other with respect and dignity*
- Embrace diversity as an essential component in the way we do business*
- Apply the highest standard of excellence to the purchasing, roasting, and fresh delivery of our coffee*
- Develop enthusiastically satisfied customers all the time*
- Contribute to our communities and our environment*
- Recognize that profitability is essential to our future success.*



ZARA

Vision

To **democratise** fashion by offering the latest fashion in medium quality at affordable prices. “good design and good quality at good prices.”

Mission

Quick response policy and advanced information technology all combined to enable **quick response to customer's changing demands**

Design

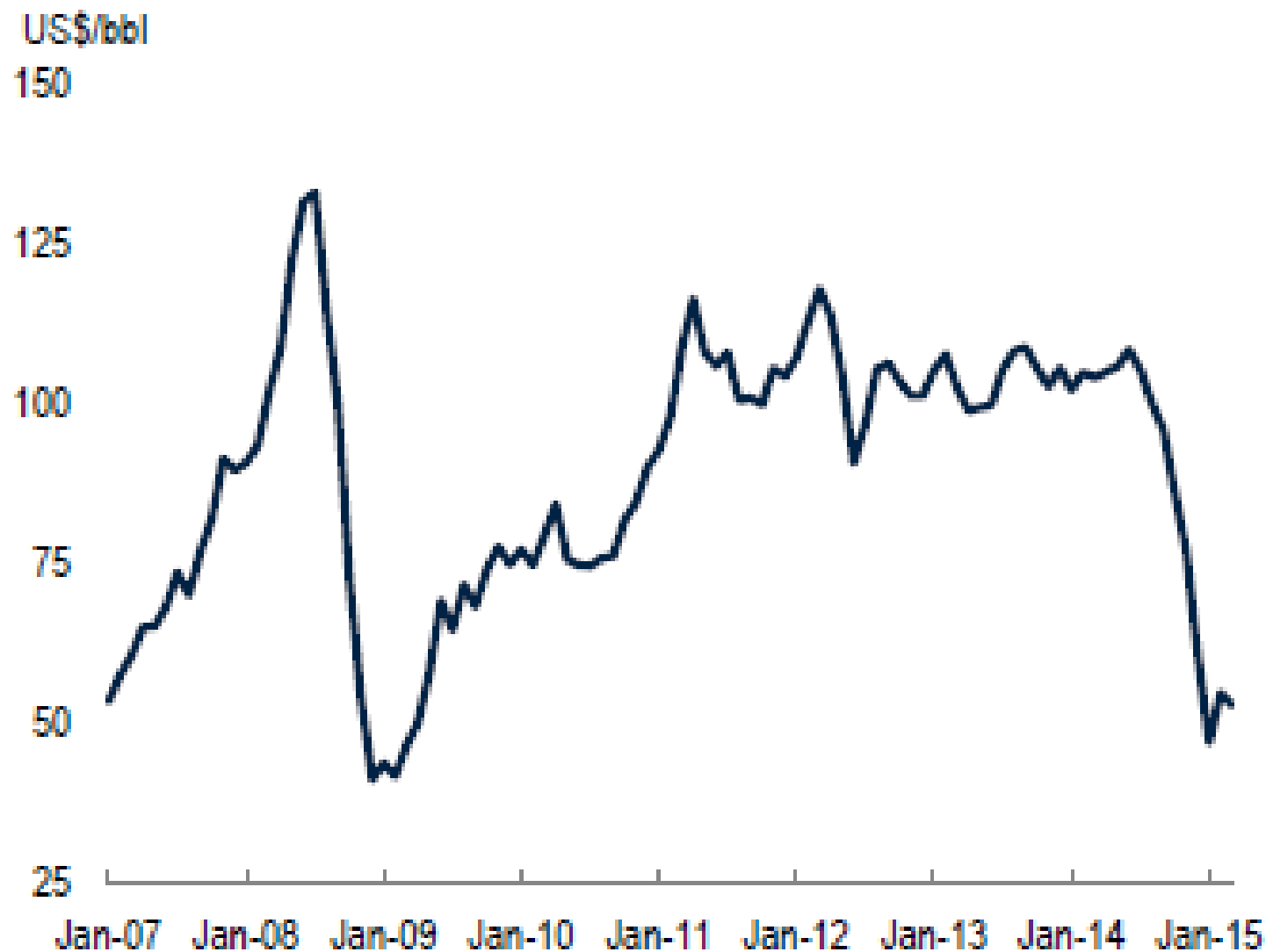
A changing world

TABLE 1 Nominal price indices, actual and forecasts (2010 = 100)

	ACTUAL					FORECAST	
	2010	2011	2012	2013	2014	2015	2016
Energy	100	129	128	127	118	69	74
Non-Energy	100	120	110	102	97	87	88
Metals	100	113	96	91	85	73	75
Agriculture	100	122	114	106	103	93	94
Food	100	123	124	116	107	97	98
Grains	100	138	141	128	104	96	97
Oils and meals	100	121	126	116	109	92	94
Other food	100	111	107	104	108	103	103
Beverages	100	116	93	83	102	93	92
Raw Materials	100	122	101	95	92	84	86
Fertilizers	100	143	138	114	100	97	96
Precious metals	100	136	138	115	101	98	97
Memorandum items							
Crude oil (\$/bbl)	79	104	105	104	96	53	57
Gold (\$/toz)	1,225	1,569	1,670	1,411	1,266	1,240	1,225

Source: World Bank.

FIGURE 3 Oil prices (average of Brent, WTI, and Dubai)

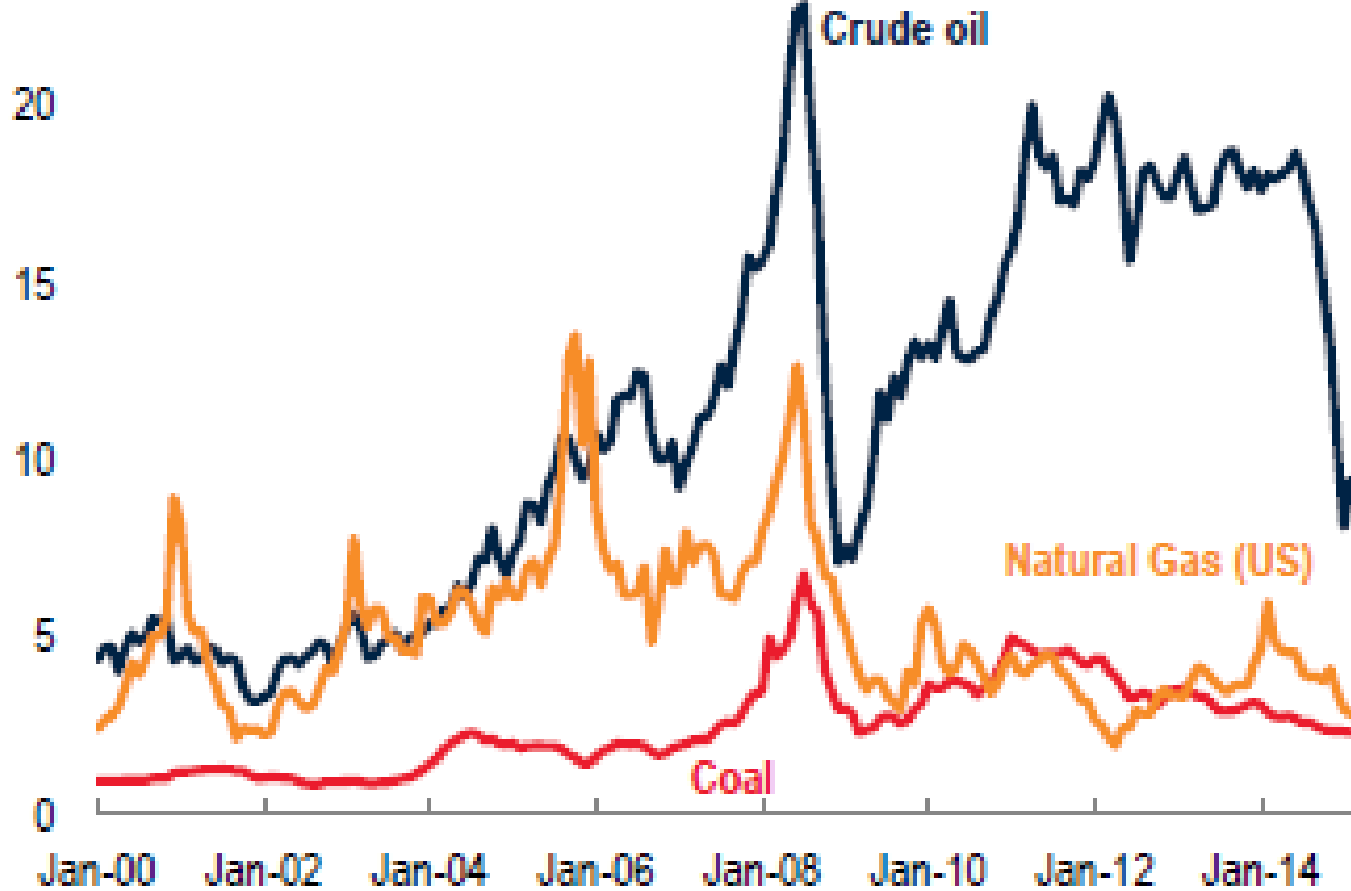


Source: World Bank.

FIGURE 10 Energy prices

US\$/mmbtu

25



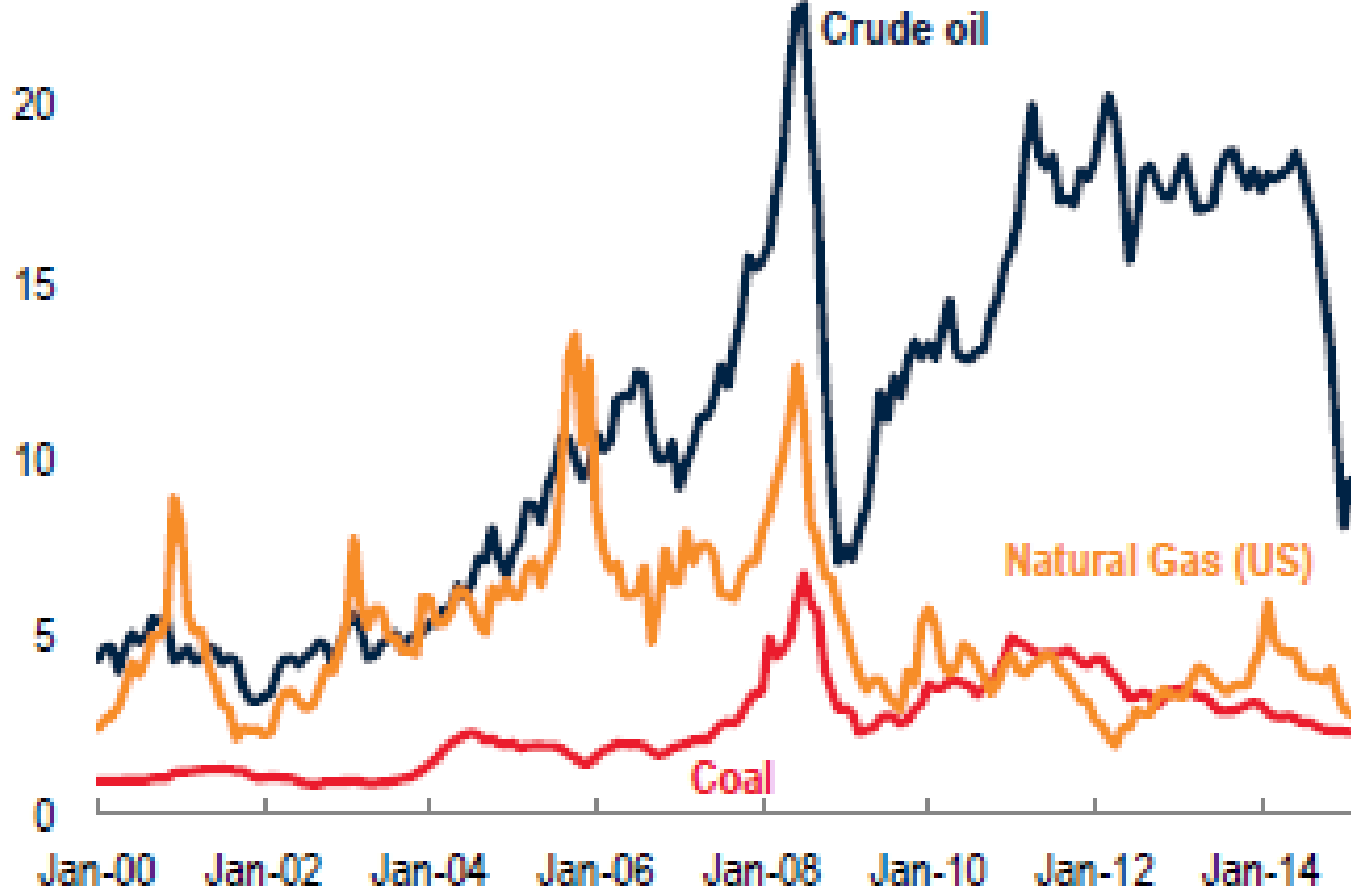
Source: World Bank.

Note: Last observation is March 2015

FIGURE 10 Energy prices

US\$/mmbtu

25



Source: World Bank.

Note: Last observation is March 2015

FAO Food Commodity Price Indices

2002-2004=100

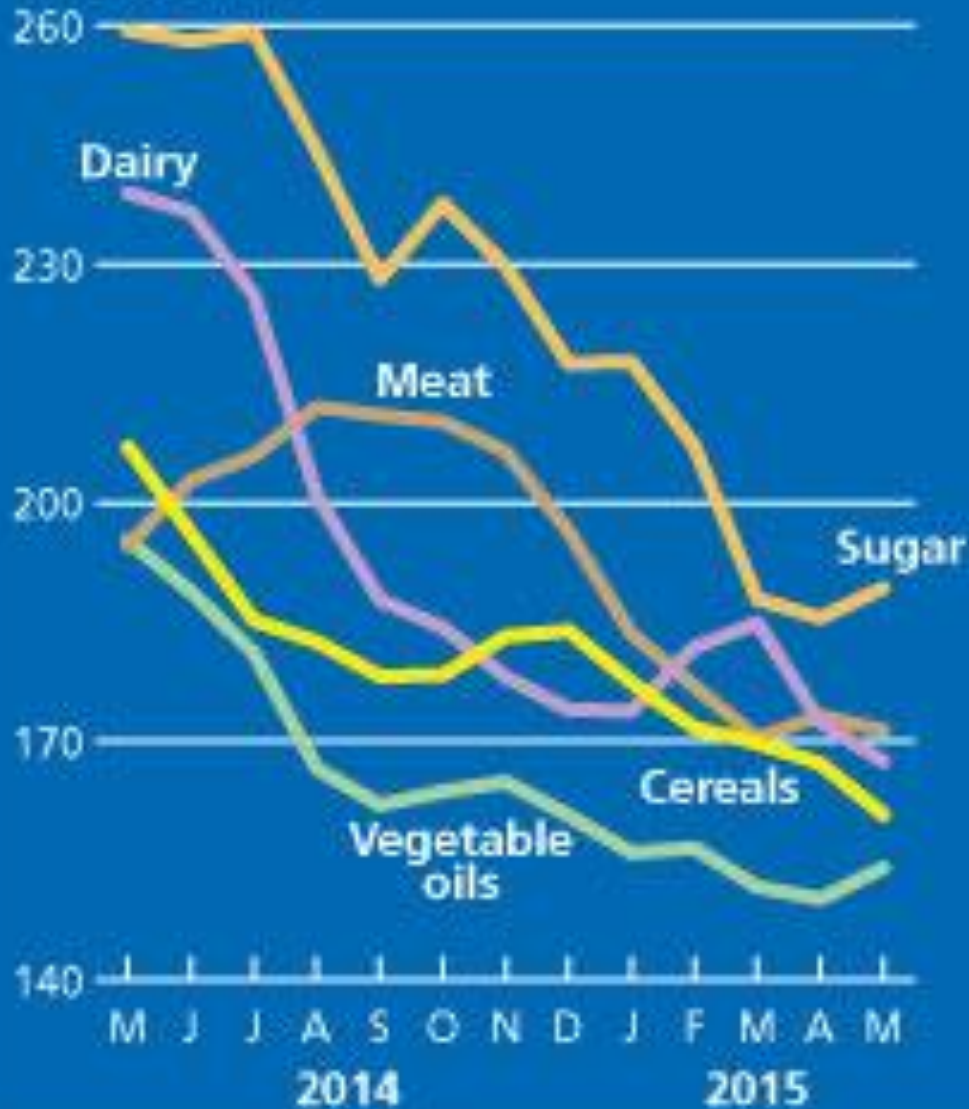
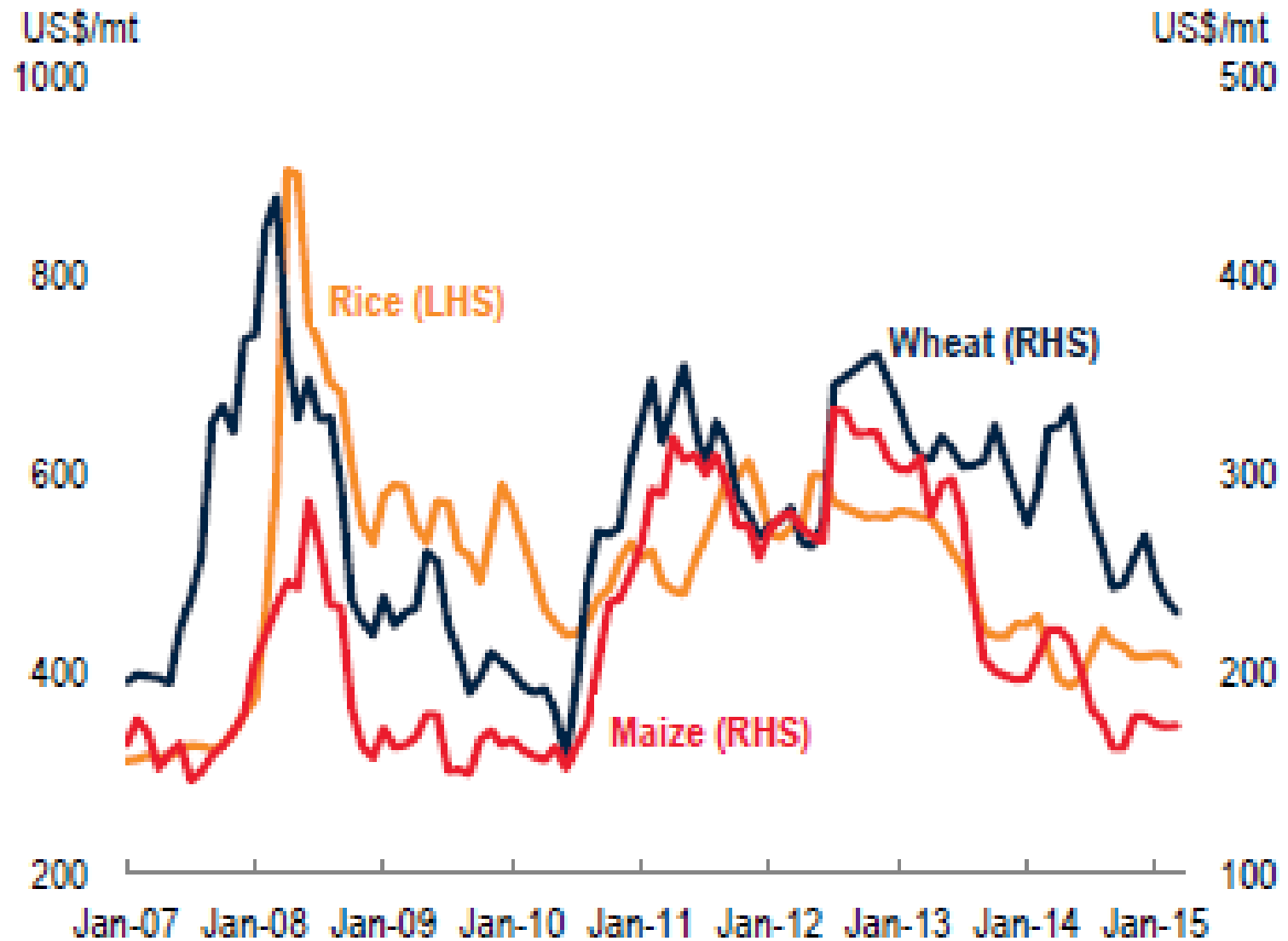
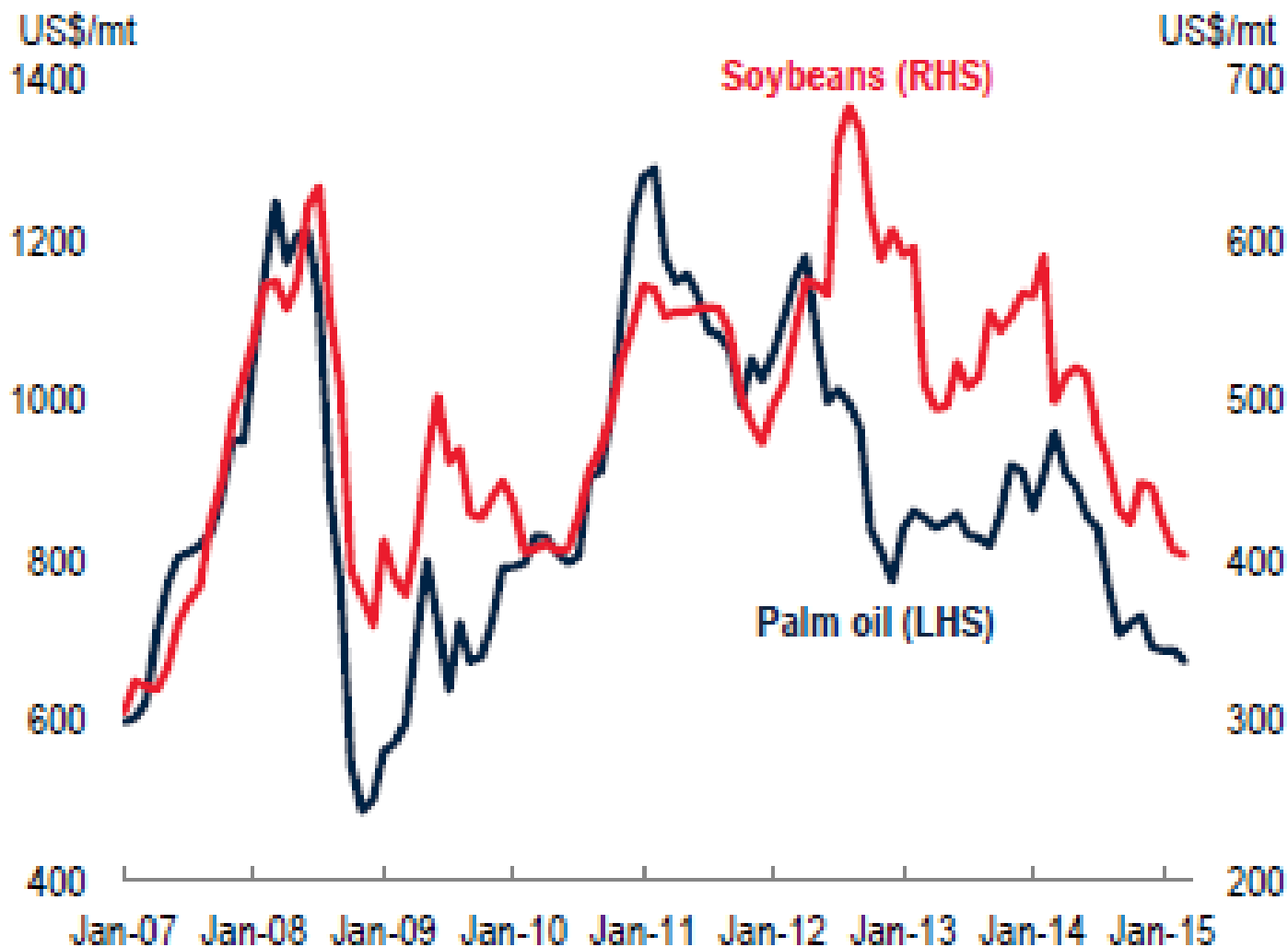


FIGURE 22 Grain prices



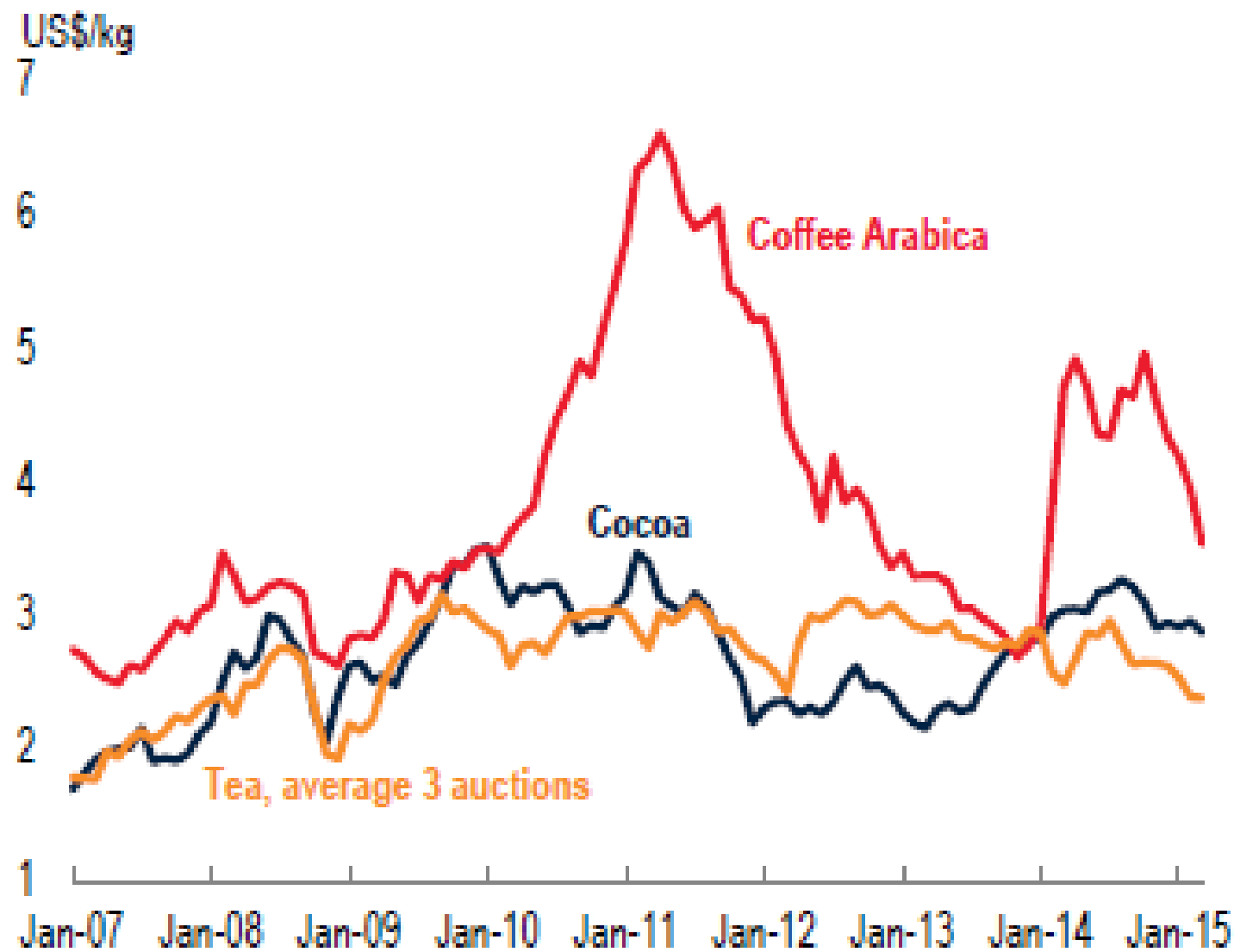
Source: World Bank.

FIGURE 23 Edible oil prices



Source: World Bank.

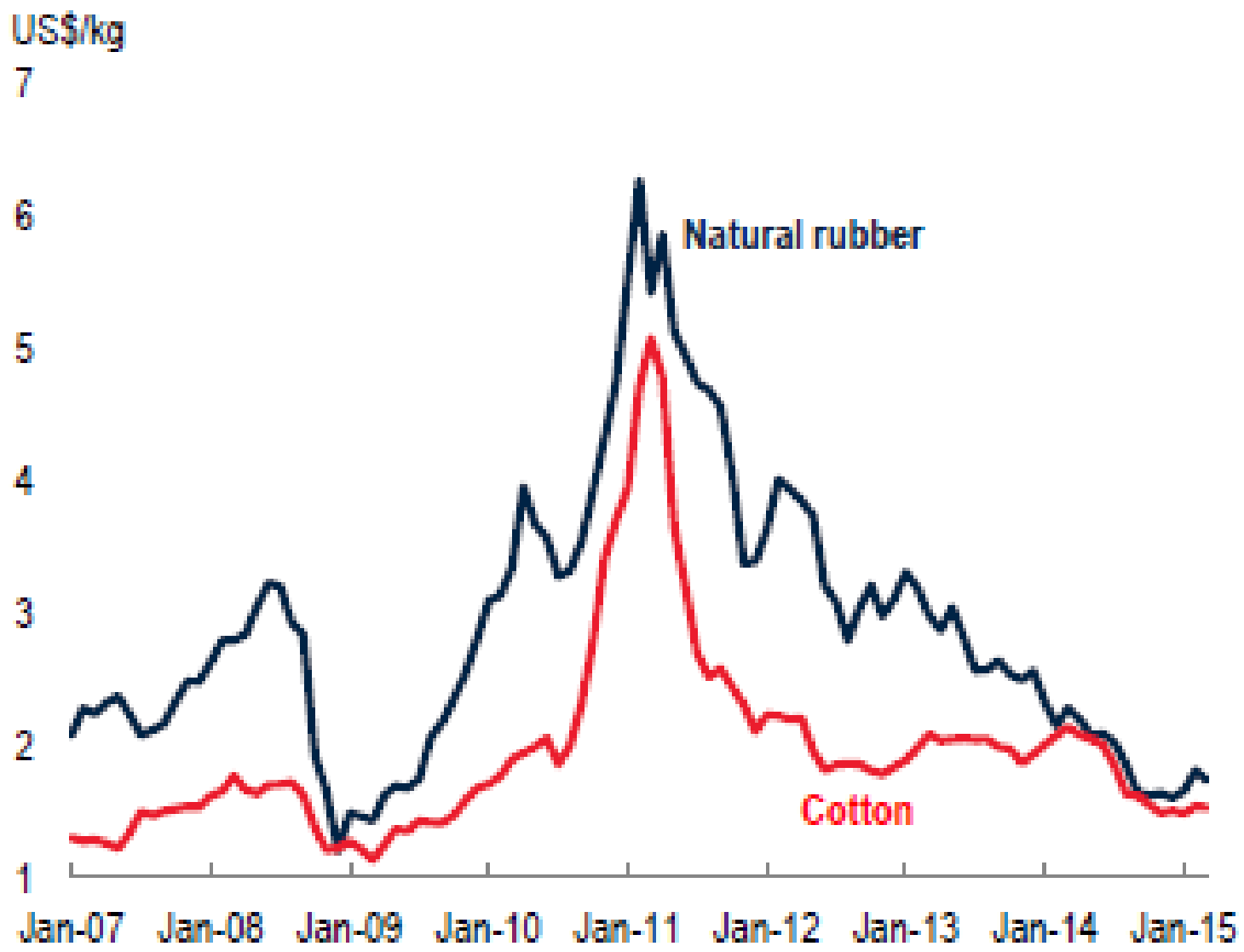
FIGURE 24 Beverage prices



Source: World Bank.

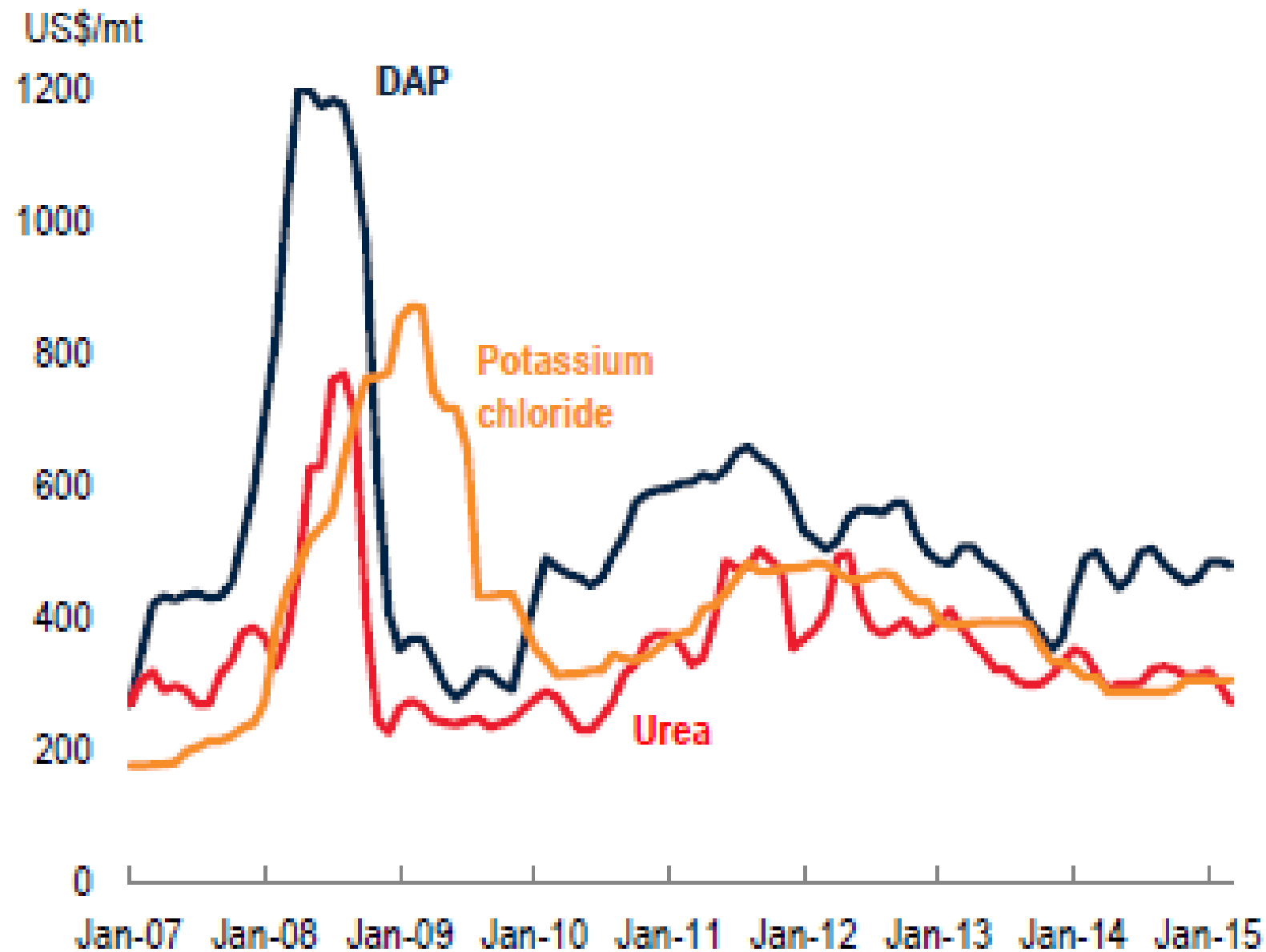
Note: Last observation is March 2015.

FIGURE 25 Raw material prices



Source: World Bank.

FIGURE 18 Fertilizer prices



Source: World Bank.

<http://news.bbc.co.uk/2/hi/programmes/newsnight/7343060.stm?ls>

China to seal \$9bn DR Congo deal

By Tim Whewell

BBC Newsnight, Democratic Republic
of Congo

, Monday, 14 April 2008 12:07 UK

In return, China gets a slice of DR Congo's precious natural resources to feed its booming industries - 10m tonnes of copper and 400,000 tonnes of cobalt.

,400 miles of road, 2,000 miles of railway, 32 hospitals, 145 health centres and two universities.



state-owned firm based in Beijing, the China Railway Engineering Corporation, or CREC

East Africa Railway Good News for Kenya and ?Africa But What's in it for China

By [Nigel Wilson](#)

May 12, 2014 18:57 GMT

to build a line connecting Kenyan cities Mombasa and Nairobi, will cost in the region of \$3.8bn (£2.3bn, €2.8bn.) The line will link to Kampala in Uganda, Kigali in Rwanda, Bujumbura in Burundi and Juba South Sudan

China's Eximbank will put up 90% of the costs

Civil Engineering and Construction Corp (CCECC)

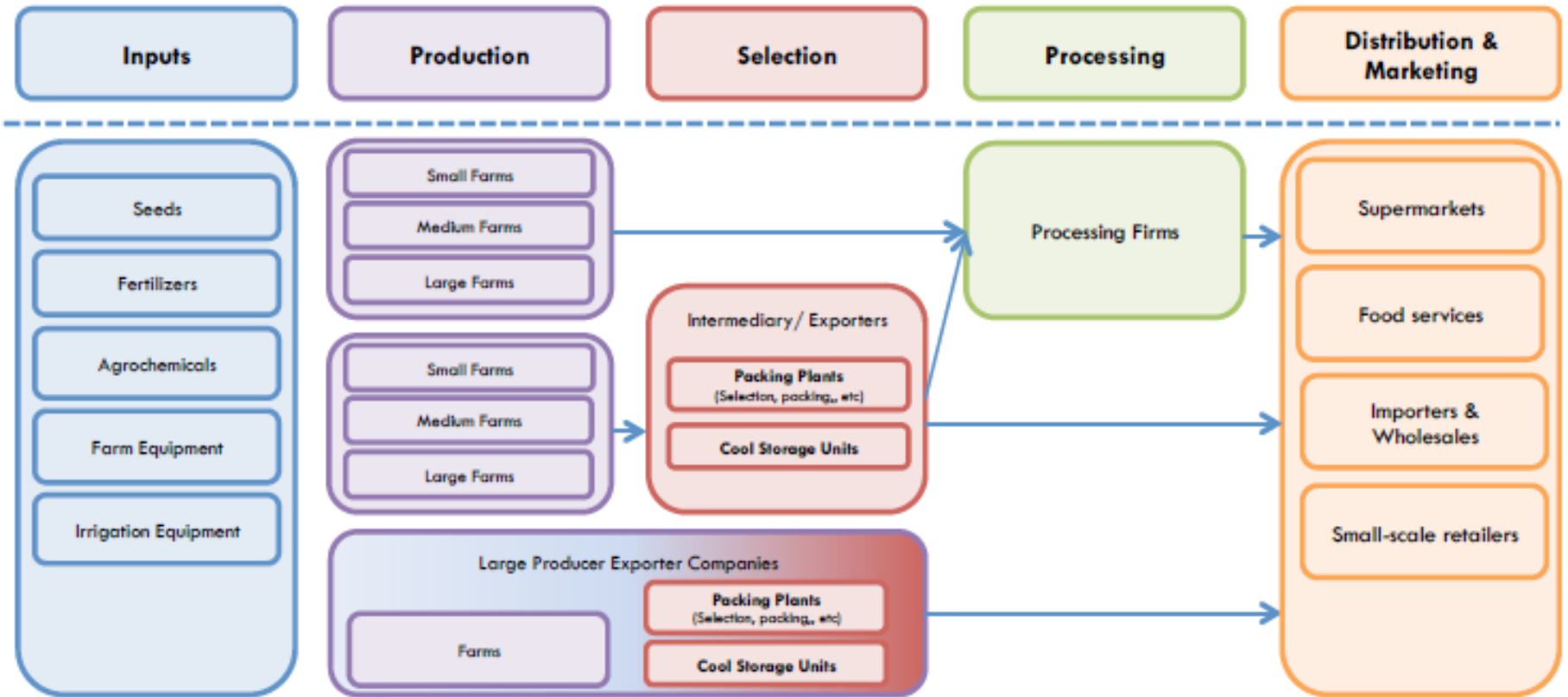
<http://www.ibtimes.co.uk/east-africa-railway-good-news-kenya-africa-whats-it-china-1448279>

<http://www.africareview.com/News/East-Africa-starts-building-14bn-railway/-/979180/2091202/-/255nd4/-/index.html>



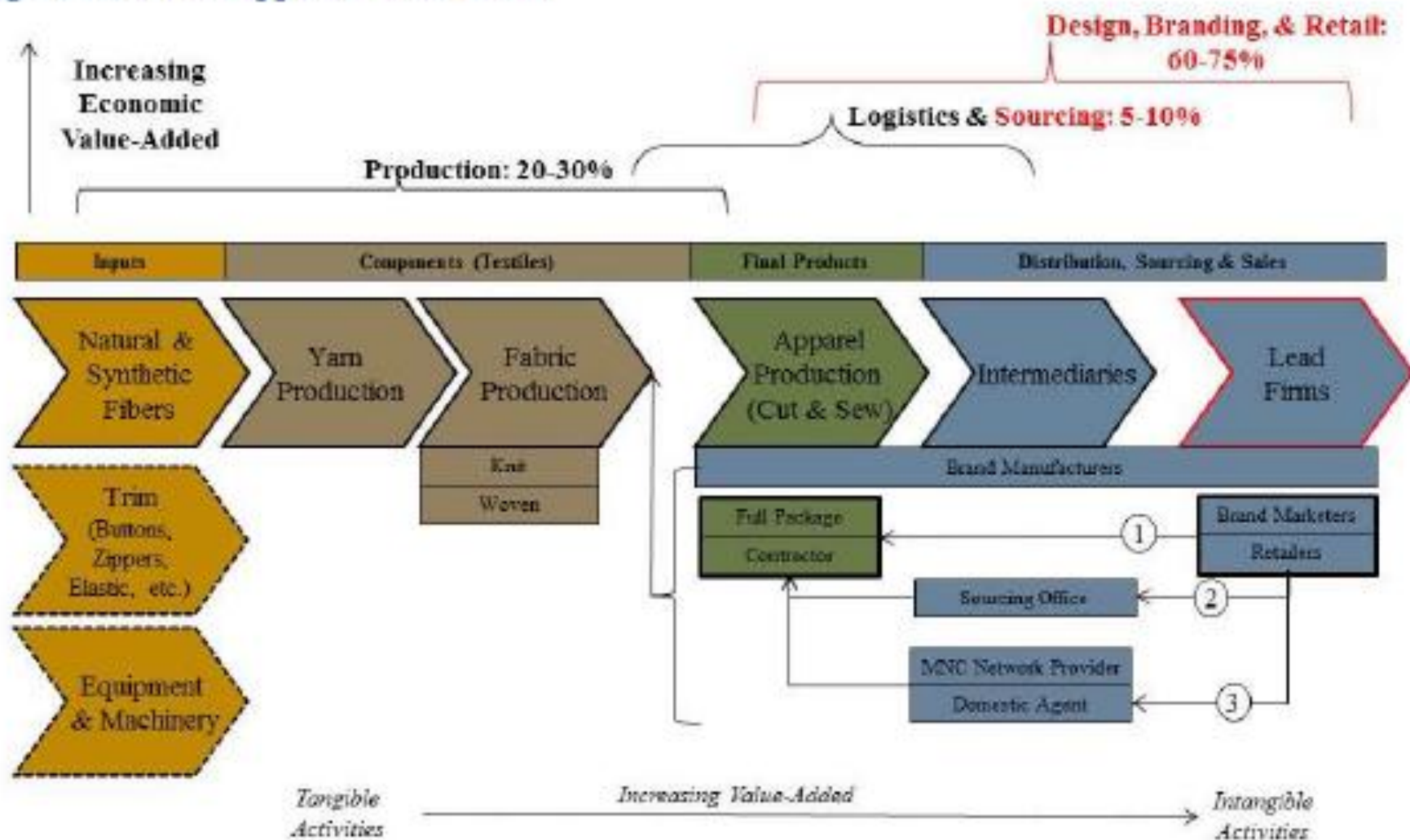
TEDA now has seven industry clusters – some of which have been established as sub-zones, for example the Micro-electric Industrial park (Meng, 2003:146). The clusters are as follows: (1) electronic information, (2) optical, mechanical and electronic integration, (3) biomedicine, (4) new materials such as maintenance chemicals for industry, (5) new energy, (6) machinery, and (7) environmental protection (Xiaoxi, *et al*, 2010:95)

Figure 1. Example of a High-Value Agriculture Value Chain



Source: Duke CGGC.

Figure 2: Global Apparel Value Chain

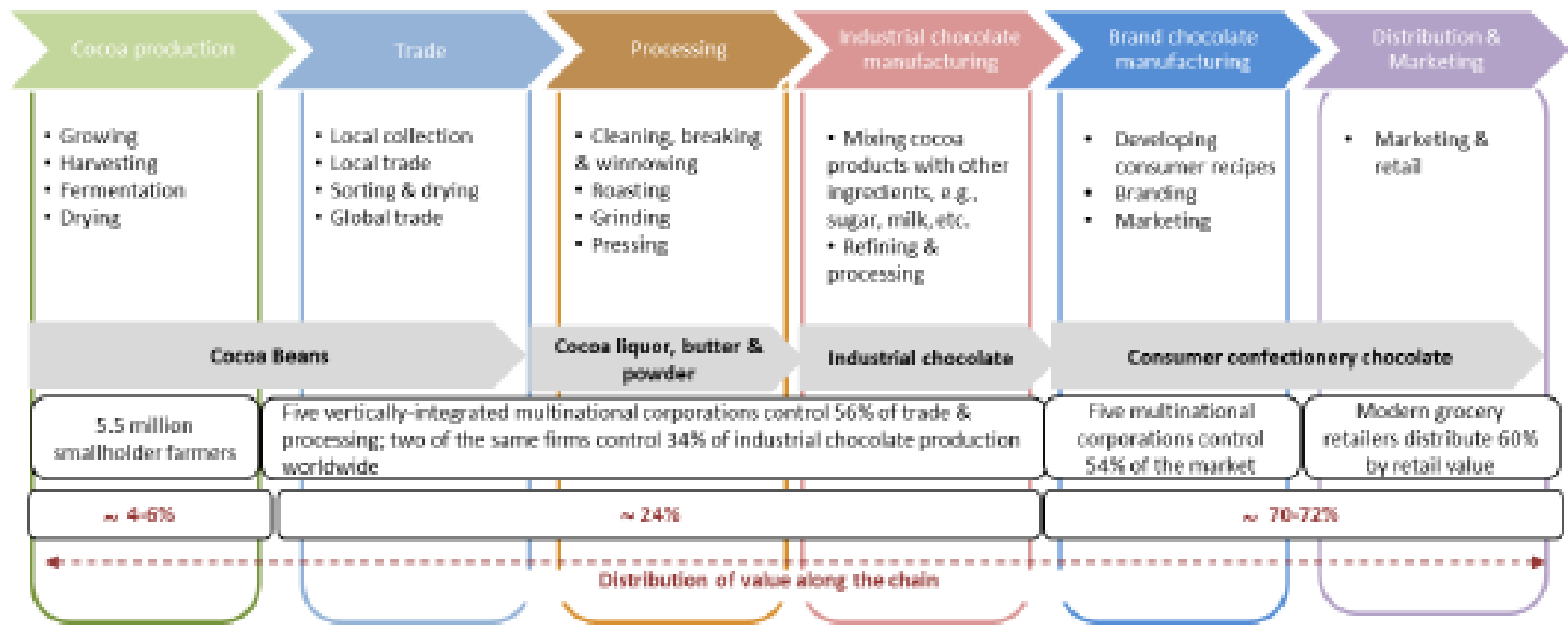


Red indicates highest value-added activities + control power over the chain

Percentages represent relative shares of apparel retail selling price attributed to value-adding activities

Source: Author (Frederick, S.)

Figure 3: The Cocoa-chocolate Value Chain



Source: CGGC

Table 8. Distribution of value for the iPhone, 2010 (in percentage)

<i>Costs and profits</i>	<i>Percentage of total value</i>
Apple profits	58.5
Korean profits	4.7
Unidentified profits	5.3
Japan profits	0.5
Taiwan Province profits	0.5
EU profits	1.1
Non-Apple U.S. profits	2.4

<i>Costs and profits</i>	<i>Percentage of total value</i>
Cost of inputs: China labour	1.8
Cost of inputs: materials	21.9
Cost of inputs: non-China labour	3.5

Source : Dedrick, J., Kraemer, K.L., Linden, G. (2011). "Capturing Value in Global Networks: Apple's iPad and iPhone", p5.

Table 9. Distribution of value for the iPad, 2010 (in percentage)

<i>Costs and profits</i>	<i>Per cent of total value</i>
Apple profits	30
Korean profits	7
Unidentified profits	5
Japan profits	1
Taiwan Province profits	2
Non-Apple U.S. profits	2
Cost of inputs: China labour	2
Cost of inputs: materials	31
Cost of inputs: non-China labour	5
Distribution and retail	15

Table 2. Average farm size is small in China

	Average farm size (ha)
China	0.6
Vietnam	0.7
Indonesia	0.8
Japan	1.2
India	1.3
Thailand	3.2
Turkey	3.2
Columbia	25
Venezuela	60
Brazil	73
Chile	84
South Africa	288

Design: SWOT analysis

Strengths: distinctive competence & resources

Natural resources, technology

Capabilities, Management

Financial

Infrastructure

Opportunities for value creation:
from: local and international environment

Markets

Technology

Information

Production,

Weaknesses: in competence and resources

Gaps in capabilities

Financial

Supply chain- transport

Education

Threats: from local and international environment

Political, Cultural

Environmental effects

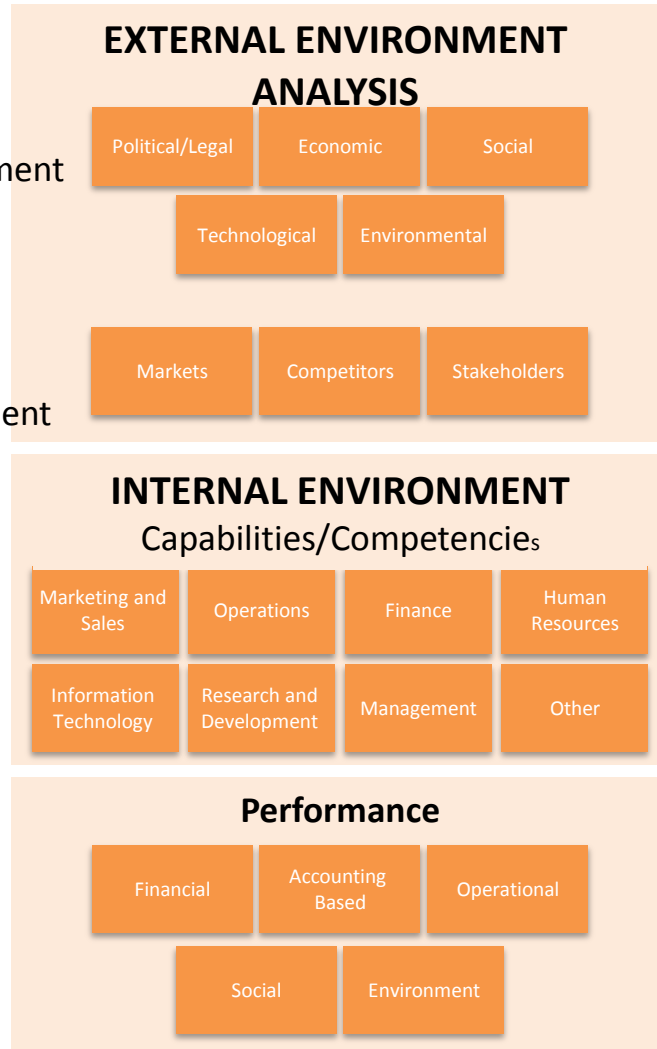
Competitor intentions

New technologies

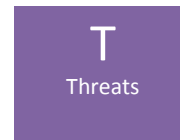
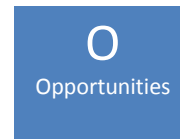
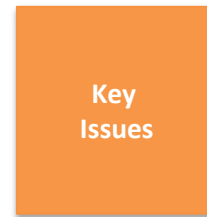
Choice:

Strategic planning model

'Where are we now?'



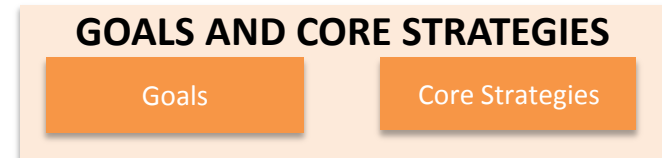
SYNTHESIS



'Where do we want to be?'



'How will we get there?'



'What must we do?'



'Who must do what?'



'How are we going?'



Methods of Qualitative Research

Observation

It provides a structure for the research
Much of the interaction is missed

Interviews

to develop empathy with interviewees
and win their confidence;
not to impose one's own influence on the interviewee

Sampling

Focus group
Statistical analysis

Interpersonal and Organisational Communication and Skills

Strategic Communication

Role

Diffusion of corporate strategies and guiding values,
Analysis and interpretation of the organisational context,
Activation of symmetric relationships with company stakeholders

Enabling role of communication

communication facilitates the implementation of company decisions.
influence on the ways in which decisions are communicated and carried out.

Constitutive role of communication

communication becomes something more than an infrastructural component of the business. It feeds the decisional process, influencing it through reflective activities of analysis

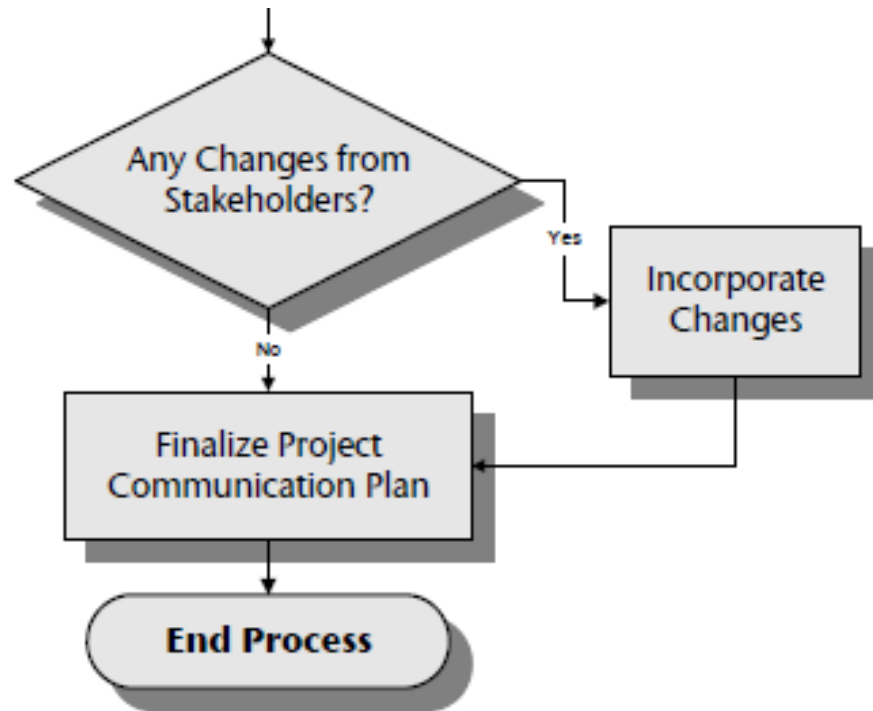
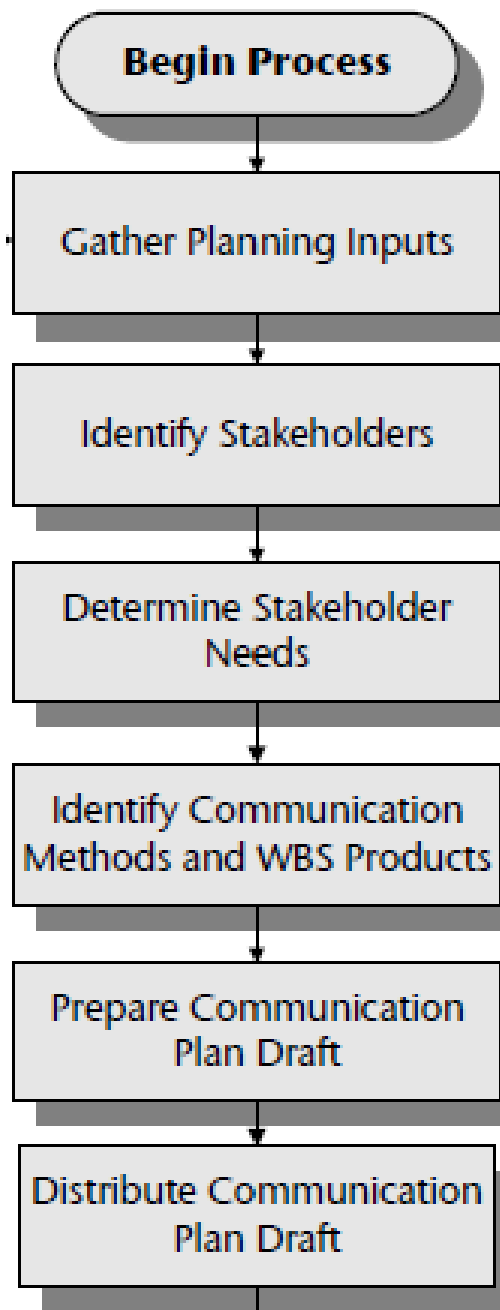
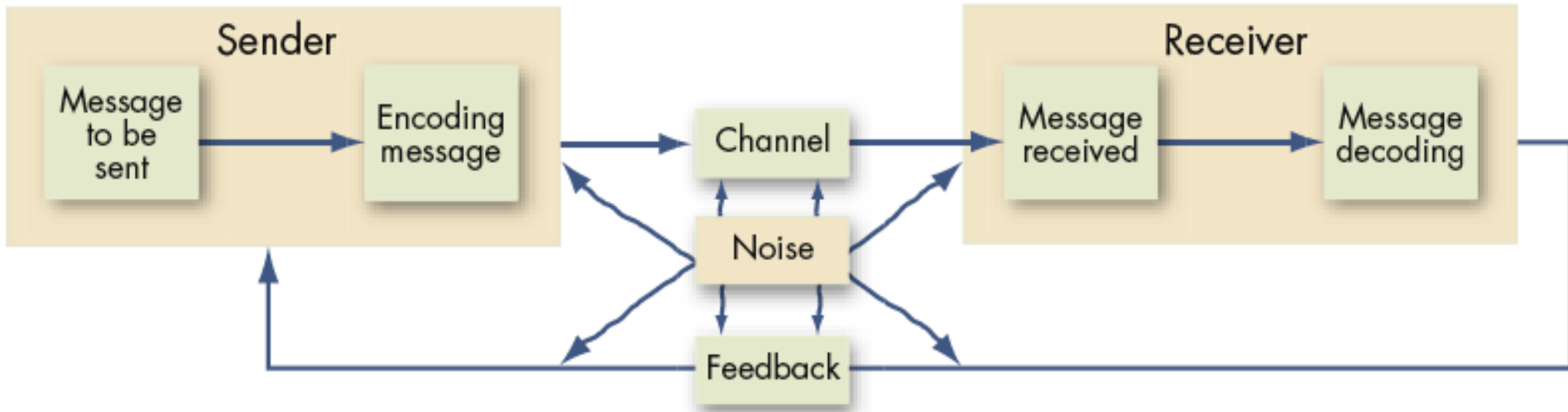
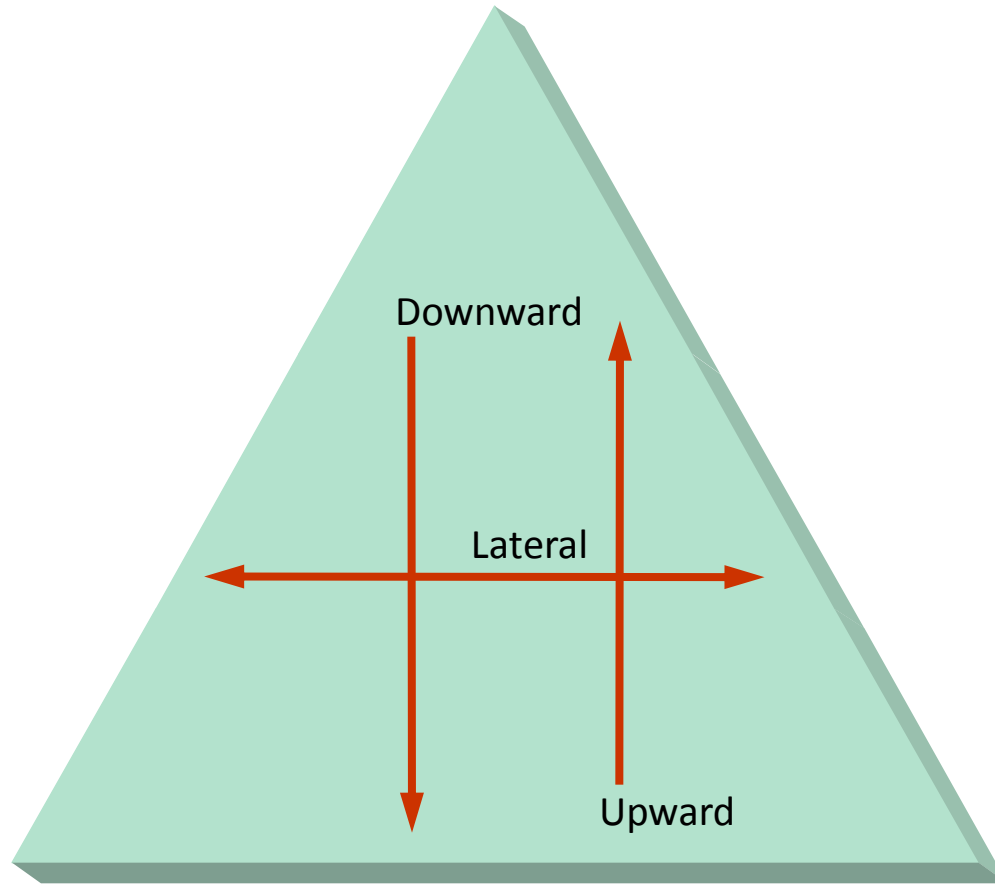


Figure 2. Communication plan flowchart

Communication Process



Direction of Communication



Interpersonal Communication

- Oral Communication
 - Advantages: Speed and feedback.
 - Disadvantage: Distortion of the message.
- Written Communication
 - Advantages: Tangible and verifiable.
 - Disadvantages: Time consuming and lacks feedback.
 - Misperception of body language.

Communication and Conflict Management

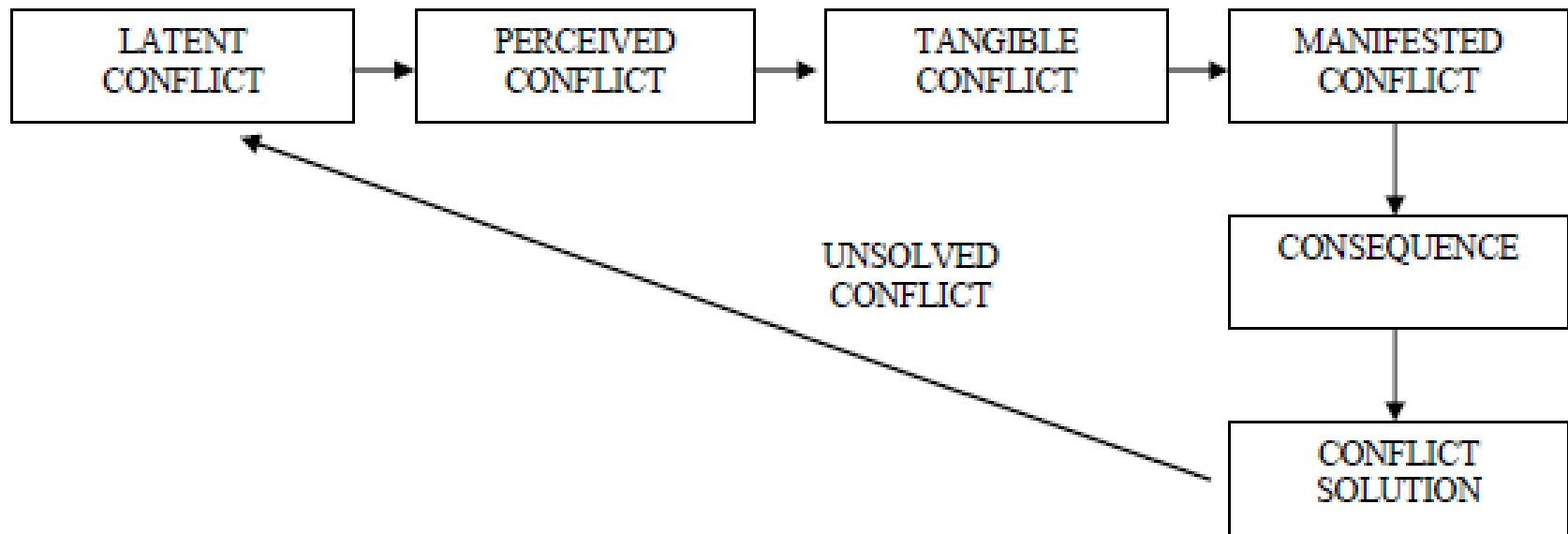
Kenan Spaho*

Management, Vol. 18, 2013, 1, pp. 103-118

External communication that is directed to the actors in the business environment,

Internal communication or organizational communication that is directed to employees.

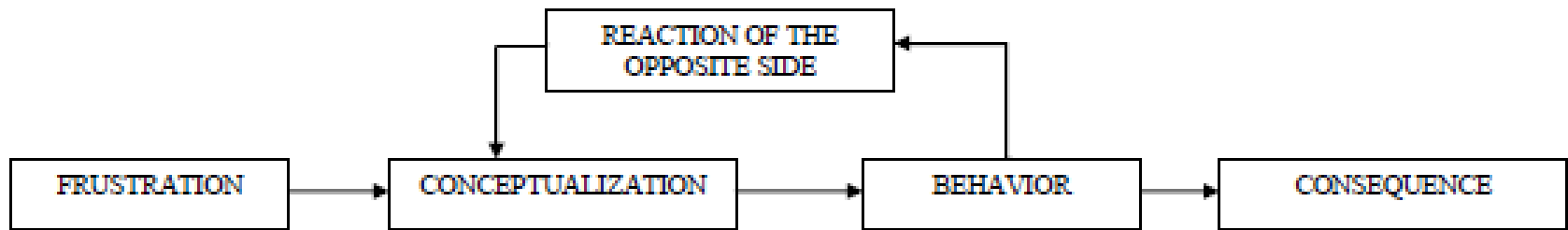
Figure 2. Conflict process according to Pondy's model



Source: Adapted from Gonan Božac et al, 2008

Thomas, K.W., and Pondy, L.R. (1977) 'Toward an 'Intent' Model of Conflict Management among Principal Parties', Human Relations, Vol. 30, pp. 1089-1102.

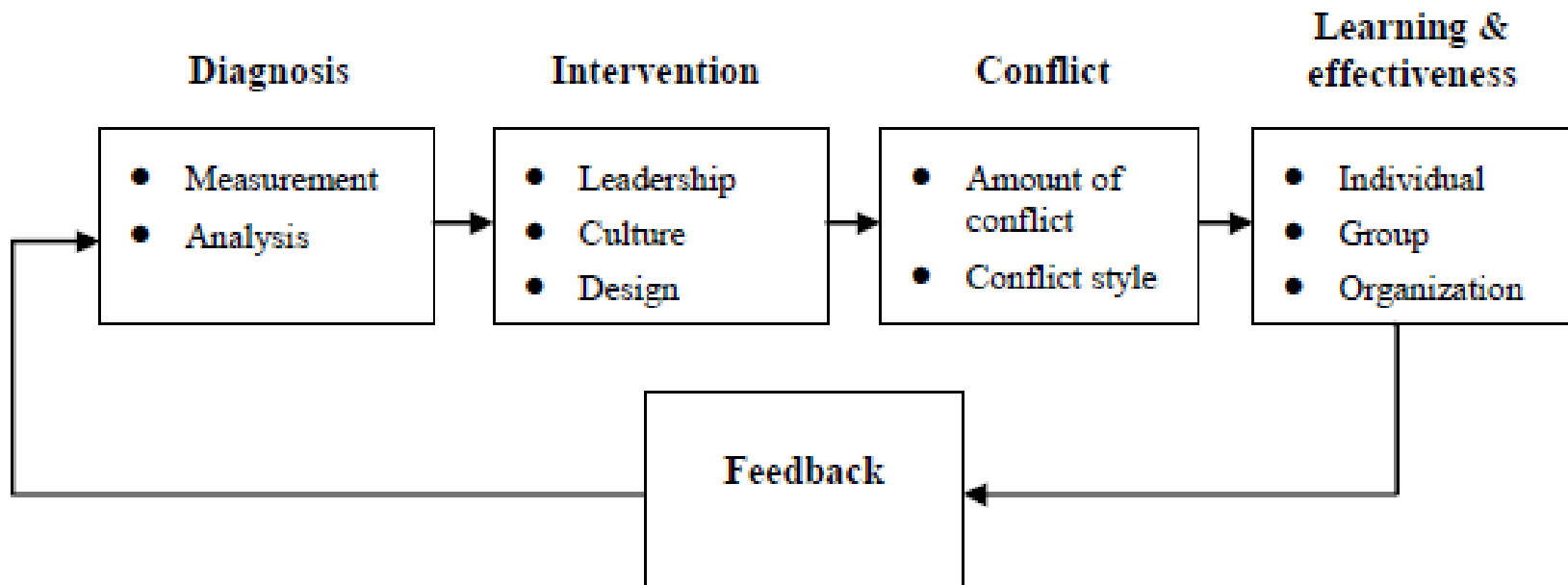
Figure 3. Conflict process according to Thomas's model



Source: Adapted from Gonan Božac et al, 2008

Thomas, K.W., and Pondy, L.R. (1977) 'Toward an 'Intent' Model of Conflict Management among Principal Parties', Human Relations, Vol. 30, pp. 1089-1102.

Figure 4. Conflict management process



Source: (Rahim, 2002)

Rahim, A, (2002): Toward theory of managing organizational conflict, *The International Journal of Conflict Management*, 13 (3), pp. 206-235.

SKILLS: ENTREPRENEURIAL REFLECTION

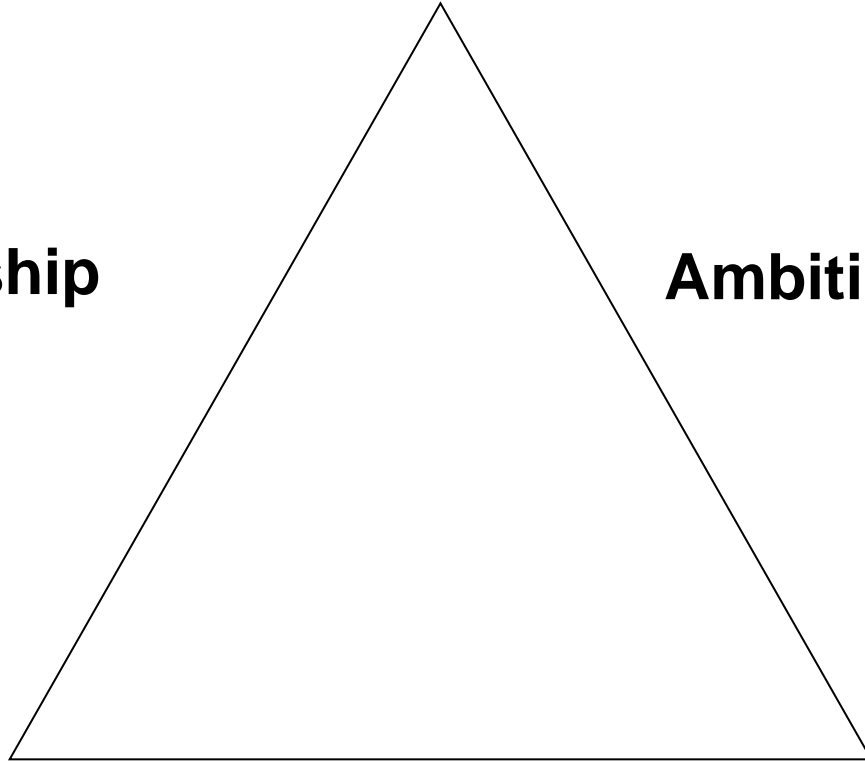
- Creativity and curiosity
- Motivated by the success
- Ready to take risk
- Ready to cooperate
- Able to identify opportunities

Entrepreneurial Drivers

Leadership

Ambition

Cooperation



Ambition

- ***Factors of energy***

Born with it

- ***Orientation, ways and horizons:***

Curiosity and will, ways-knowledge, horizons – objectives

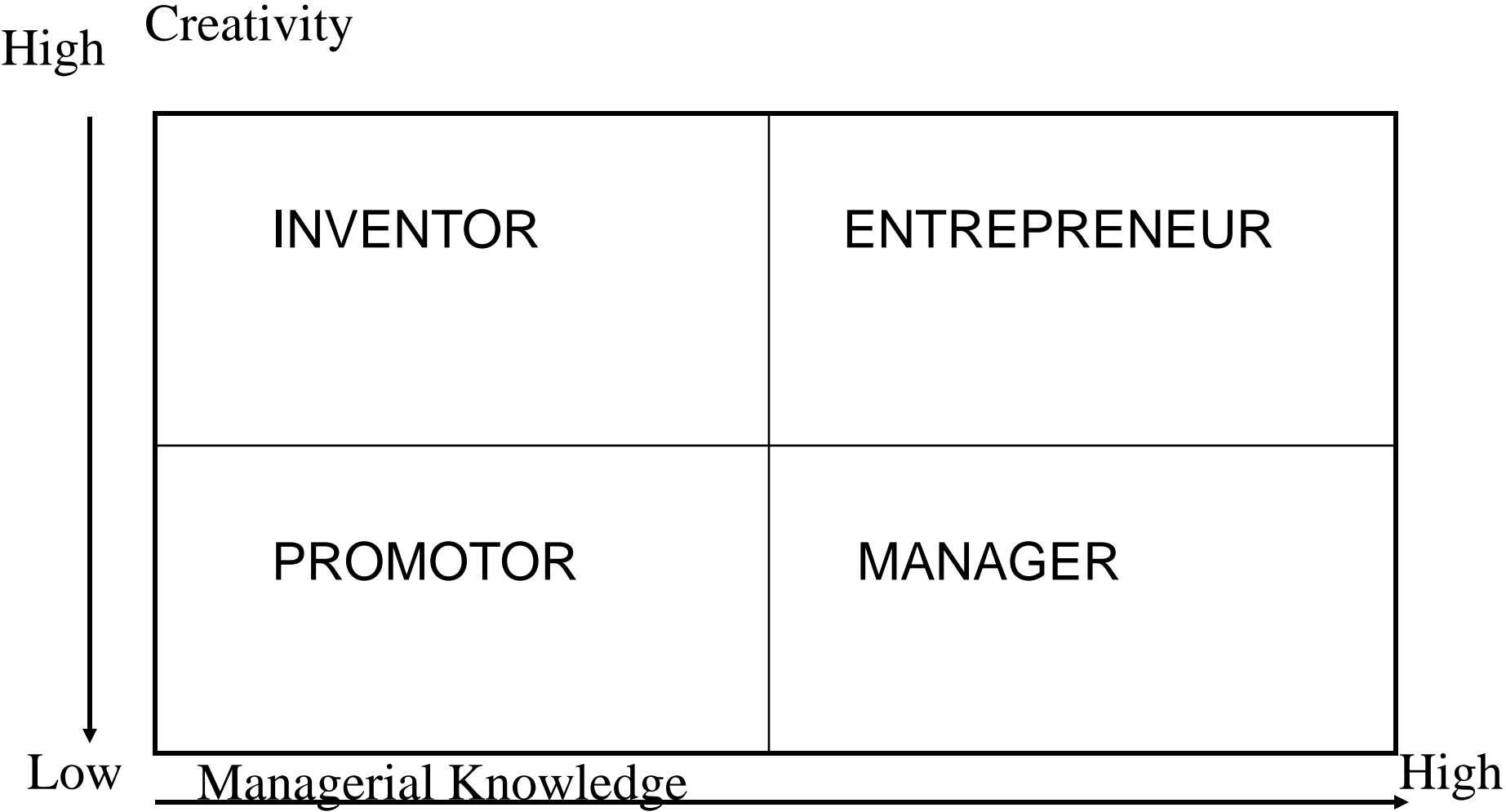
- ***Persistence - long term***

Attraction by employment security, step by step

Maclelland's Learning Needs Theory

- **Need for Achievement:** Personal responsibility, calculated risks, performance feedback. Task accomplishment
- **Need for Affiliation:** approval, conform to wishes and norms, interest in the feeling of others
- **Need for Power:** Influence, exercise control, lead follower relations. Personal and social power

The Entrepreneurial Staff



Innovative versus executive

- (1) *questioning*, and ask *what if* about the future;
- (2) *observing*, paying attention to everyday experiences to find new ideas;
- (3) *experimenting*, and explore the world with a hypothesis-testing mindset: visiting new places, trying new things, seeking new information, and experimenting to learn new things,
- (4) *idea networking*, refer to one or more of these behavior patterns as an important habit or technique that was used to increase the probability of generating an innovative idea.

The two cognitive patterns

associational thinking (or pattern recognition)

a desire to change the status quo.

Questioning

if we did this, what would happen?'

Michael Dell

\$600 worth of parts were sold for \$3,000.

why it cost five times more to buy the darn thing than the parts cost.'

Pierre Omidyar (eBay founder)

Well what if it really didn't work this way?

What would happen?

taking the opposite position and pushing and asking questions

Observation

Howard Shultz Starbucks observing the characteristics of espresso bars in Italy.

During a trip to Milan, Italy, to attend an international housewares trade show, Schultz decided to walk to the trade show, which was 15 minutes from his hotel.

After drinking an espresso, he continued on and a block later he saw another espresso bar. This one was even more crowded. Schultz noticed that the gray-haired man behind the counter greeted each customer by name. He and his customers were laughing, talking, and enjoying the moment. He could tell that the customers were regulars and that the espresso bar 'offered comfort, community, and a sense of extended family.'

Experimenting

Bezos (Amazon) explained that 'if you're trying to build a better customer-facing experience, you need to know what consumers think about your invention and so the thing that we've tried to do as a company, to keep Amazon innovative, is we're constantly trying to figure out what the lowest cost of experiments is.

Idea Networking

Ingvar Kamprad (founder IKEA) regularly met with teenagers, even in his 70s and 80s, to get different perspectives on potential innovation at IKEA.

Ideas and ways of viewing the world are more similar within social groups (e.g., within the same family, business function, organization, industry, etc.) than they are across groups.

Associational thinking/pattern recognition

Steve Jobs (founder and CEO Apple) appears to be strong at associational thinking and recognizes its importance to creativity. He connected calligraphy to computers, based on his college experience:

'Reed College at that time offered perhaps the best calligraphy instruction in the country.

Throughout the campus every poster, every label on every drawer, was beautifully hand calligraphed.

Because I had dropped out and didn't have to take the normal classes, I decided to take a calligraphy class to learn how to do this.

10 years later, when we were designing the first Macintosh computer, it all came back to me. And we designed it all into the Mac. It was the first computer with beautiful typography.

(Stanford University, 2005)

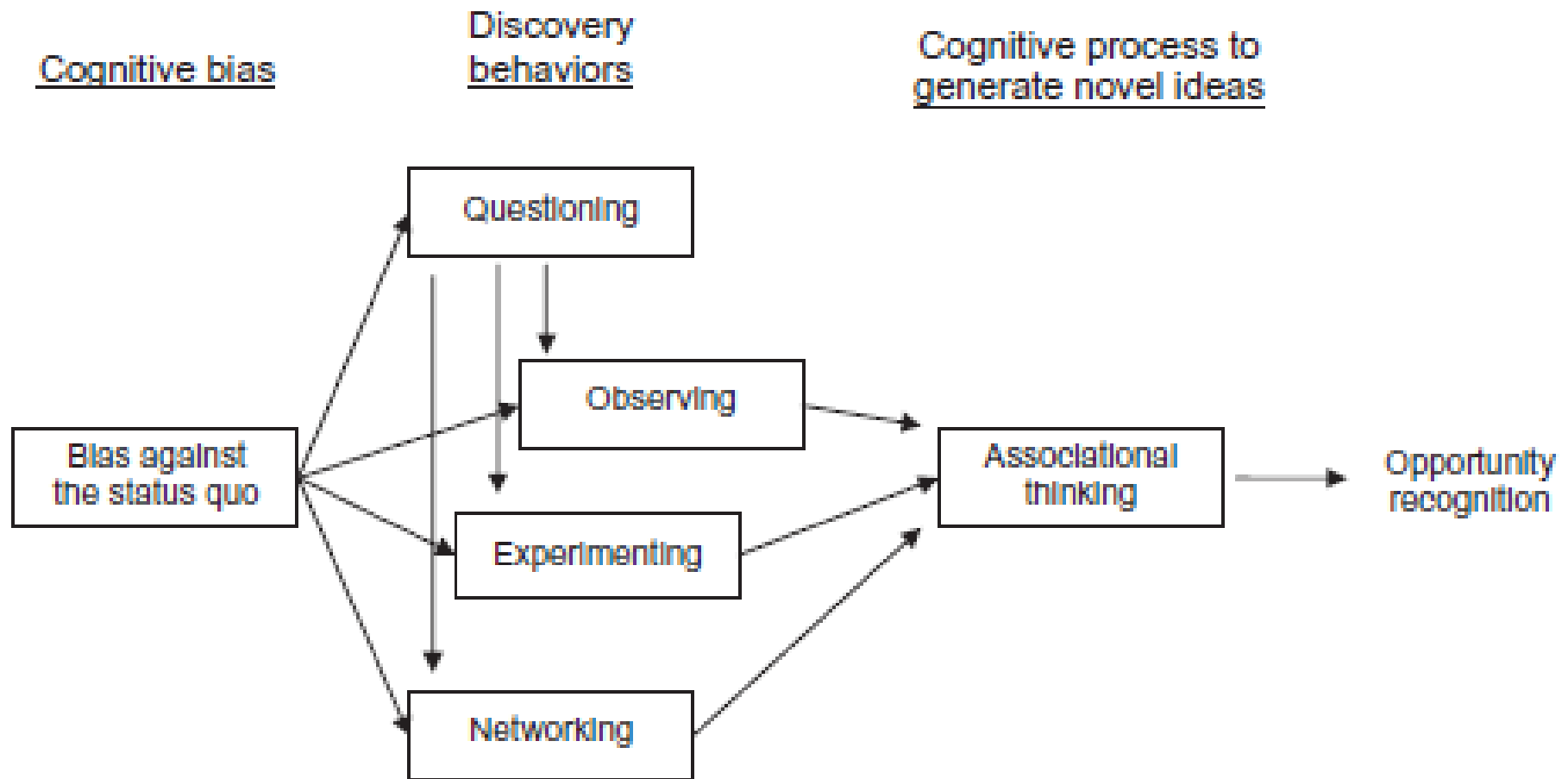


Figure 1. A model of entrepreneurial opportunity recognition

Qualitative Data Analysis and Evaluation Techniques and Capabilities

Information Sources

Internal

Support Activities

Primary Activities

External

Secondary sources

Statistics

Literature

Reports

Primary sources

Delphi

Focus groups

Research

Information System

Transaction Processing System (TPS)

collecting and processing the daily transactions

Office Automation System

Expert System (Specialist) (ESS)

captures and reproduces the knowledge and expertise of experts and then simulates the thinking or actions of that expert to help users with less expertise. These applications are implemented with Artificial Intelligence (AI) technology.

Management Information System (MIS)

provides the information to support the operations, the management and the decision making function in the organization (Bendoly, 2008
Computer based Information System (Bresfelean, 2009).

Decision Support System (DSS)

describes information systems that provide analytical modelling and information to support semi structured and unstructured making
Communications driven DSS, data driven DSS, document driven DSS, knowledge driven DSS and model driven DSS

Management Information System MIS

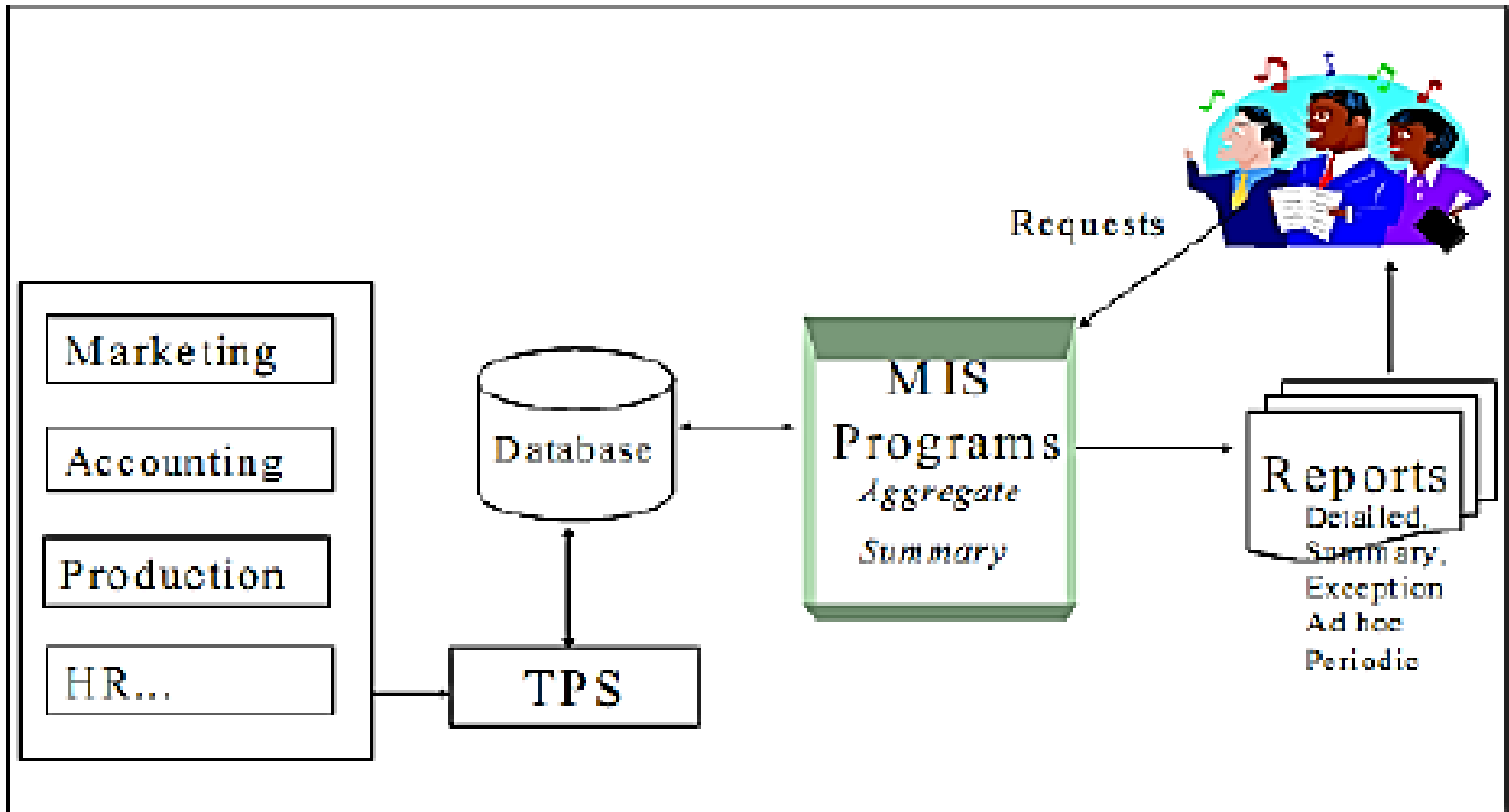


Figure 1. Simple View of MIS (Kumar, 2006, 45)

Kumar PK (2006): Information Systems Decision-Making, Indian MBA.

Retrieved October 2, 2010 from <http://www.indianmba.com/Faculty> column/FC307/fc307.html.

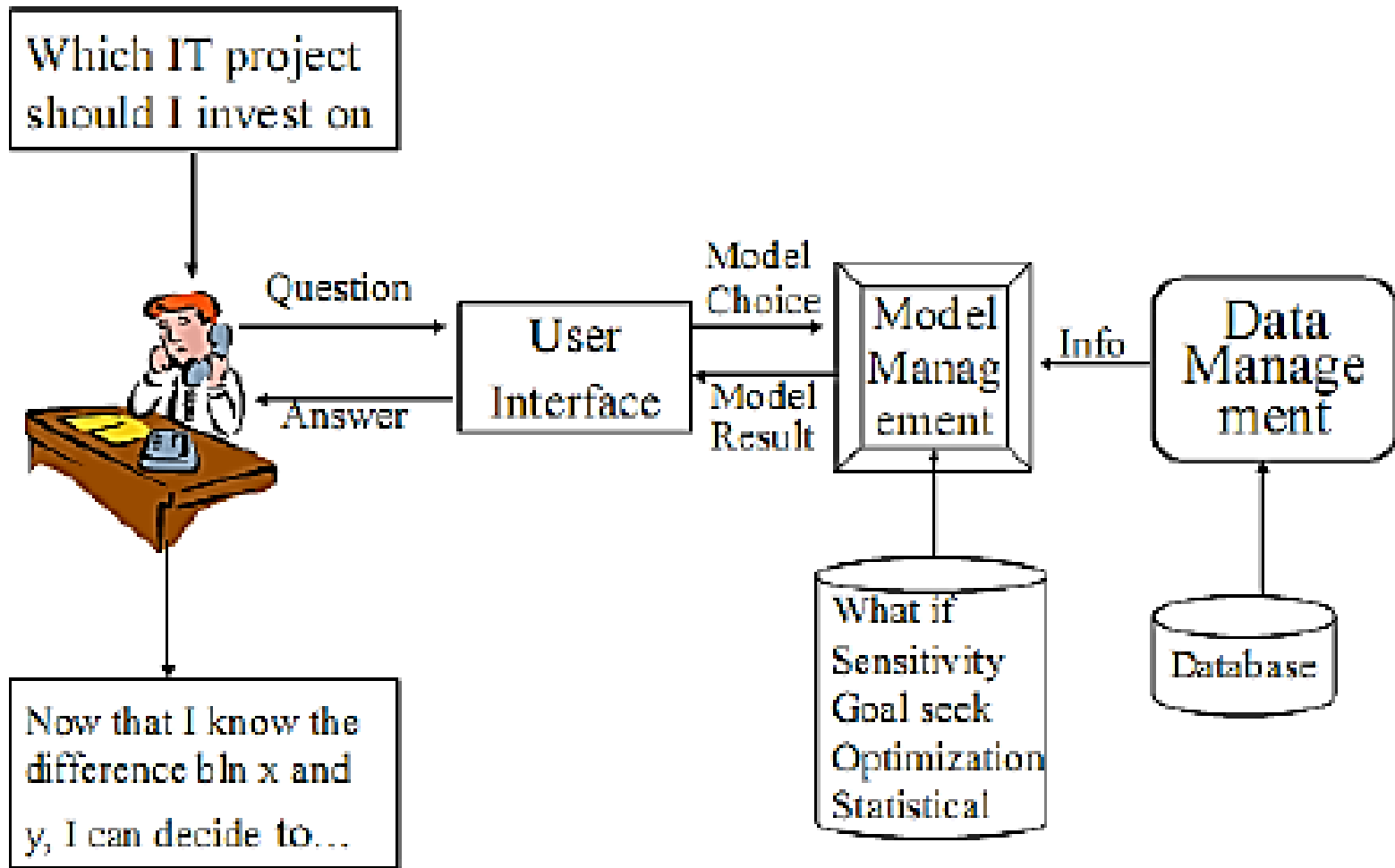


Figure 2. A Simple View of DSS ((Kumar, 2006, 75)

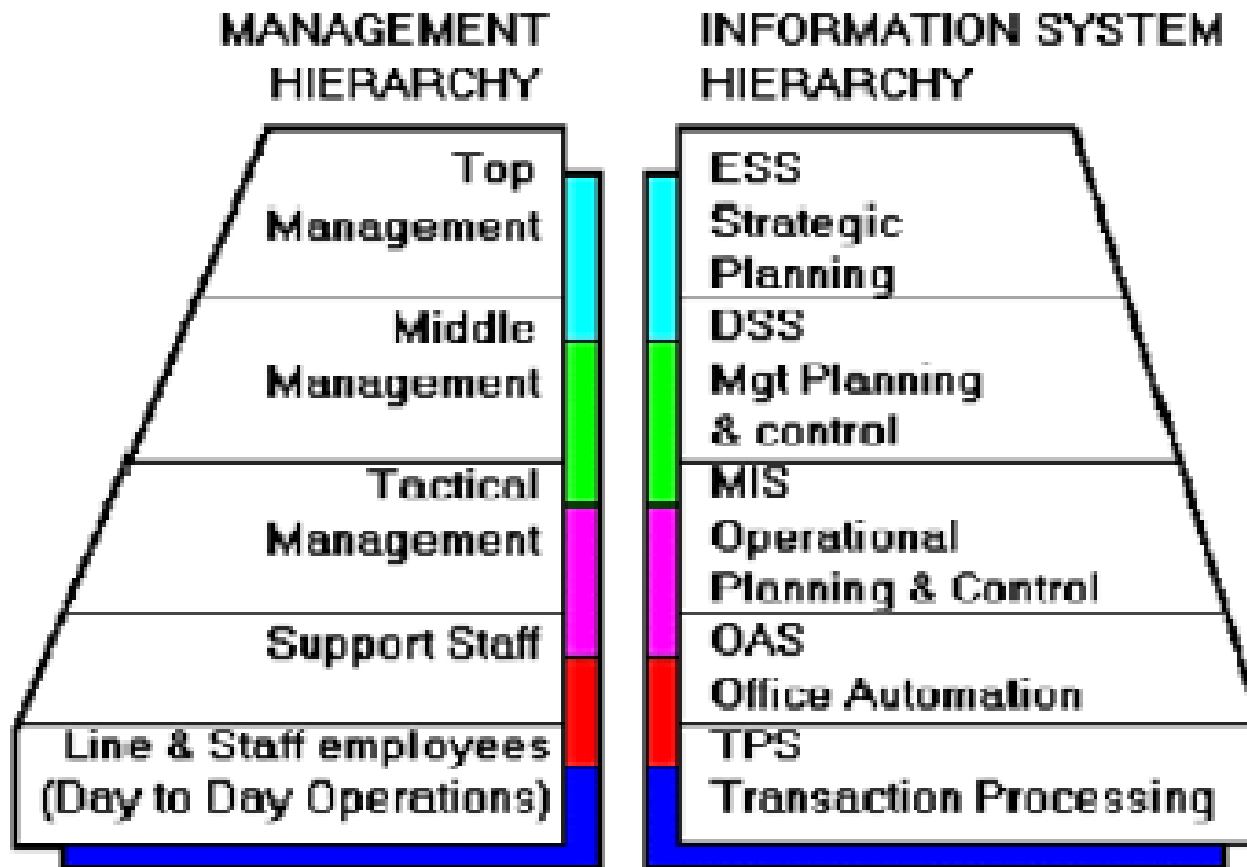


Figure 3. Types of Information systems and organizational hierarchy (Gabriel, 2012, 89)

Gabriel JMO (2013): The Systems Concept. An unpublished lecture note given to B.Sc Year 3 Students of Faculty of Management Sciences, Rivers State University of Science and Technology, Port Harcourt

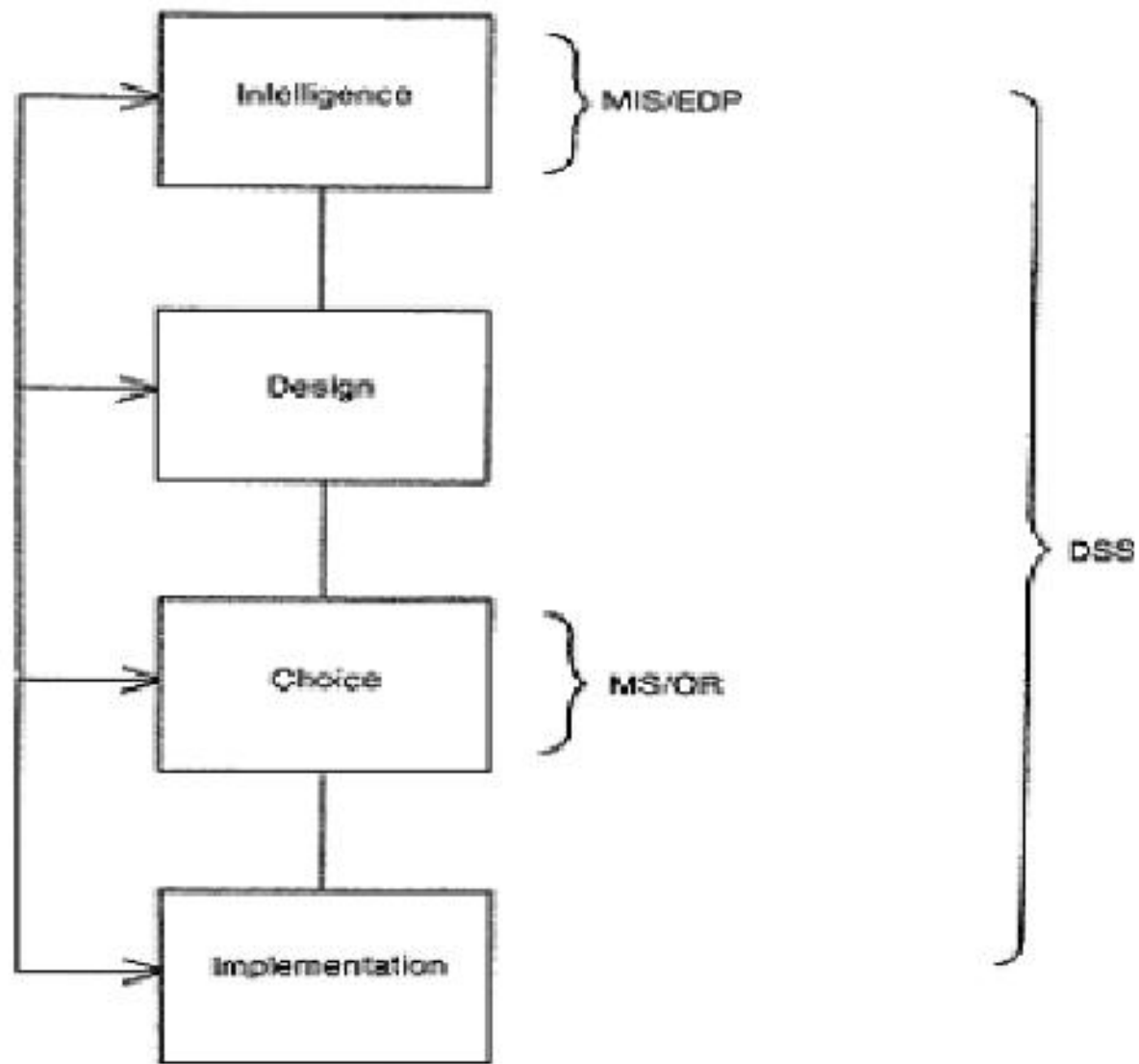


Figure 6. Phases of Decision Making and IS (Ajayi, 2007, 45)

Risk Management

- Risk Identification
- Risk Quantification
- Risk Response Development
- Risk Response Control

Risk can be defined as the combination of the probability of an event and its consequences (ISO/IEC Guide 73).

Risk management should be a continuous and developing process which runs throughout the organisation's strategy and the implementation of that strategy.

It must translate the strategy into tactical and operational objectives, assigning responsibility throughout the organisation with each manager and employee responsible for the management of risk as part of their job description

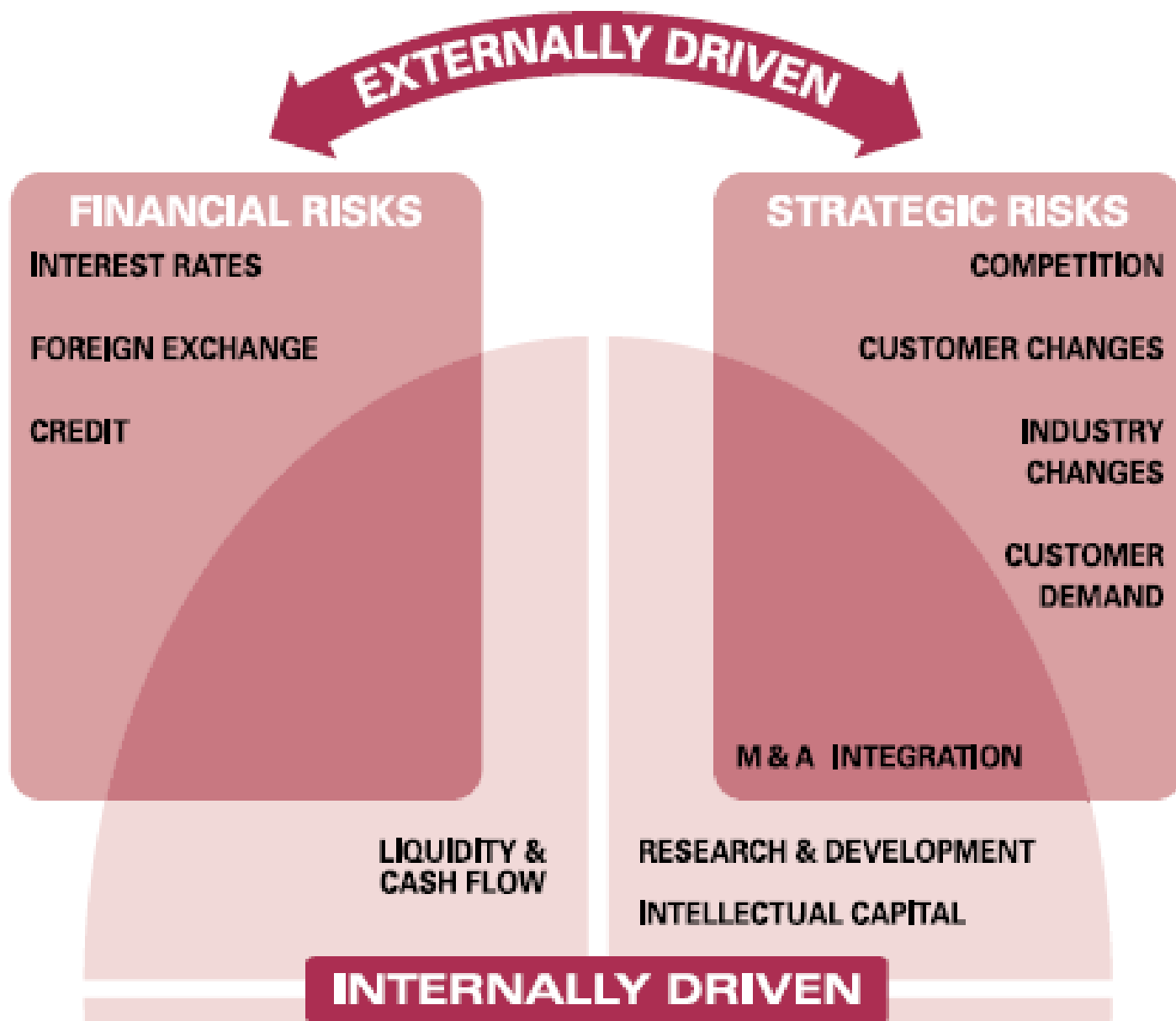
A Risk Management Standard Published by AIRMIC, ALARM, IRM: 2002

The Risk Management Process



The Association of Insurance and Risk Managers
www.airmic.com
www.alarm-uk.com

Drivers of Key Risks



INTERNALLY DRIVEN

ACCOUNTING CONTROLS

INFORMATION SYSTEMS

RECRUITMENT

SUPPLY CHAIN

REGULATIONS

CULTURE

BOARD
COMPOSITION

OPERATIONAL RISKS

PUBLIC ACCESS

EMPLOYEES

PROPERTIES

PRODUCTS &
SERVICES

CONTRACTS

NATURAL
EVENTS

SUPPLIERS

ENVIRONMENT

HAZARD RISKS

EXTERNALLY DRIVEN

TYPES OF INNOVATION

Product Innovation:

The creative development and commercialization of radically new products, often grounded in new technology and linked to unmet customer needs

Process Innovation:

The development of new ways of producing products that lead to advantage in cost.

•Business Innovation:

The development of new business and new way of conducting business that provides unbeatable competitive advantage

TYPES OF INNOVATION

Position Innovation:

Changes in the context in which they are created or delivered. (Ford, Lucozade drink from children convalescence to performance drink)

Paradigm Innovation:

Changes in the underlying mental models which frame that the organization does, (low cost airlines)

INNOVATION AXES

Market

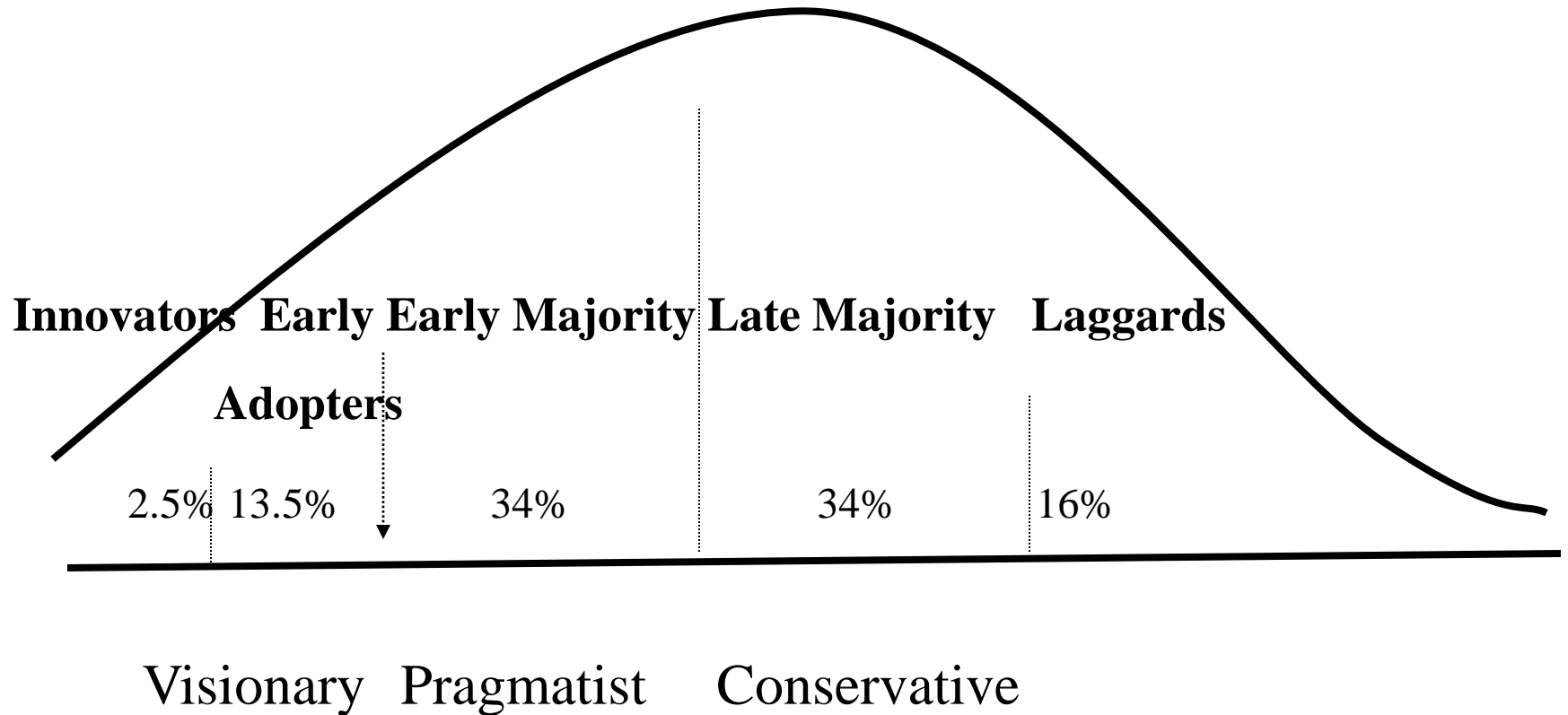
**Manufacturing
Technology (Process)**



Embedded Technology

Product

Innovation Cycles Customers-Products



Demand Evaluation

Feasibility Study

Focus Group

Questionnaire

Beta Site

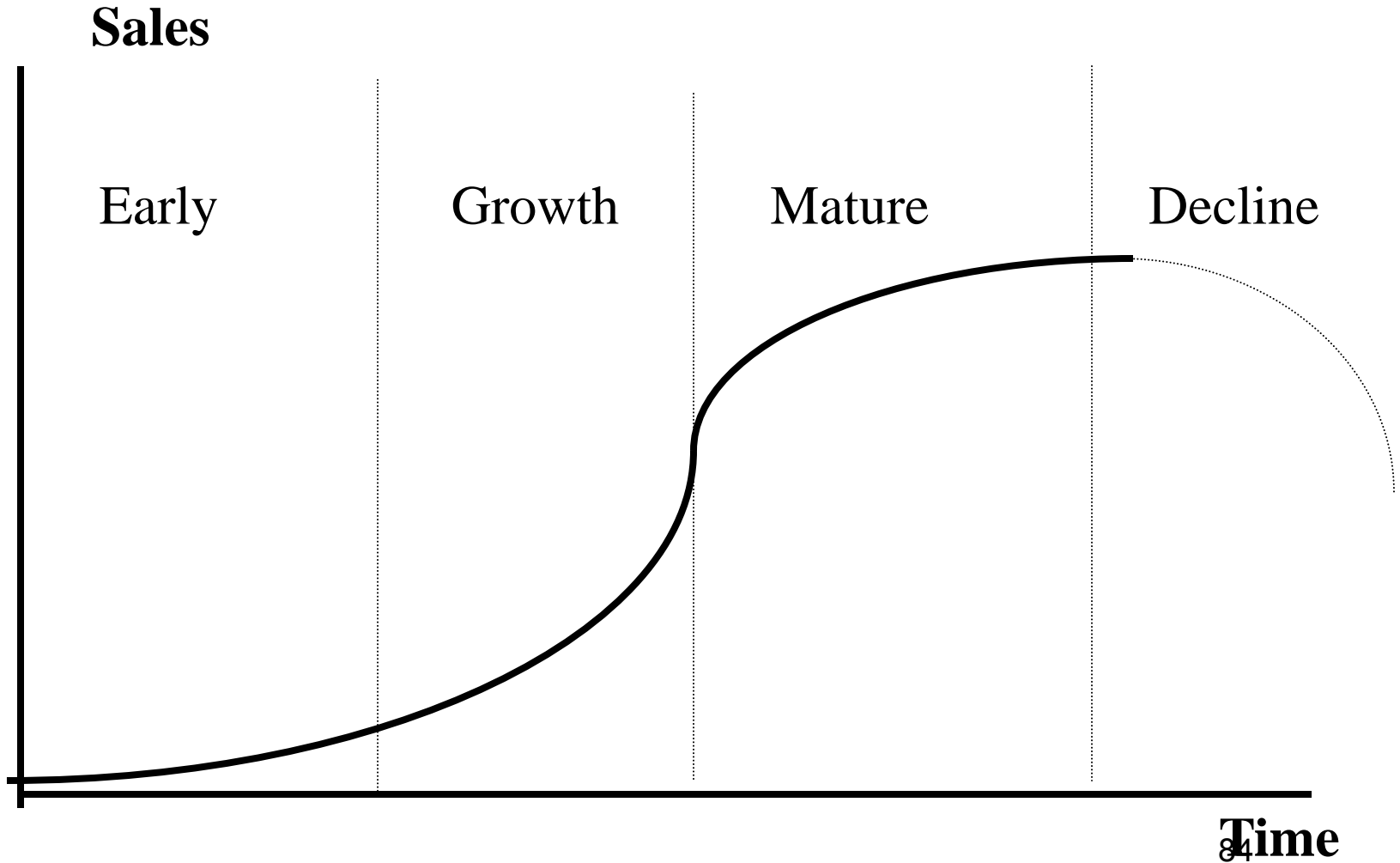
Xerox Docutech System
Program, 25

Boeing with United Airlines
(Jet 777)

Microsoft Windows 95-
25000 tests

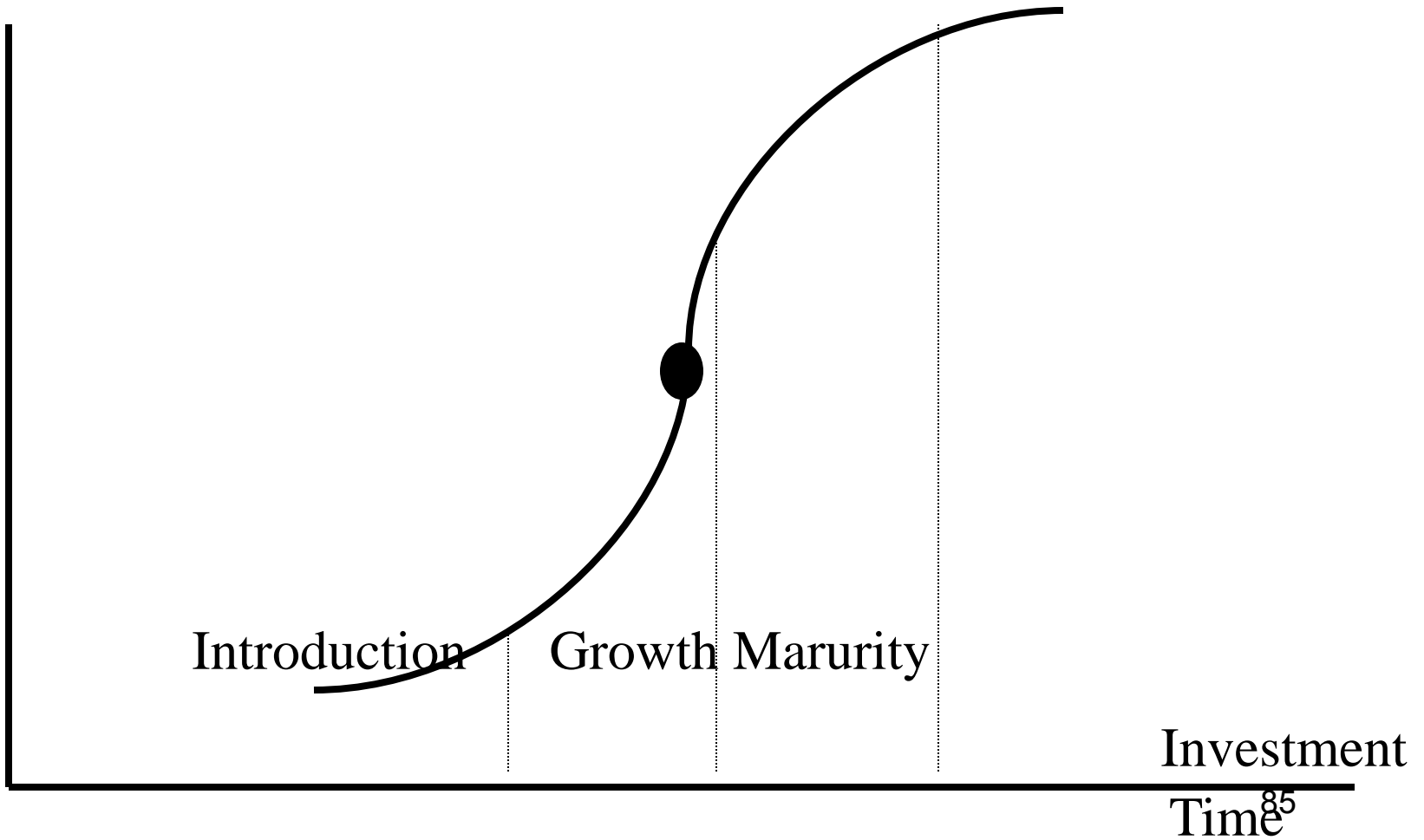
Delphi Model

Product Life Cycle



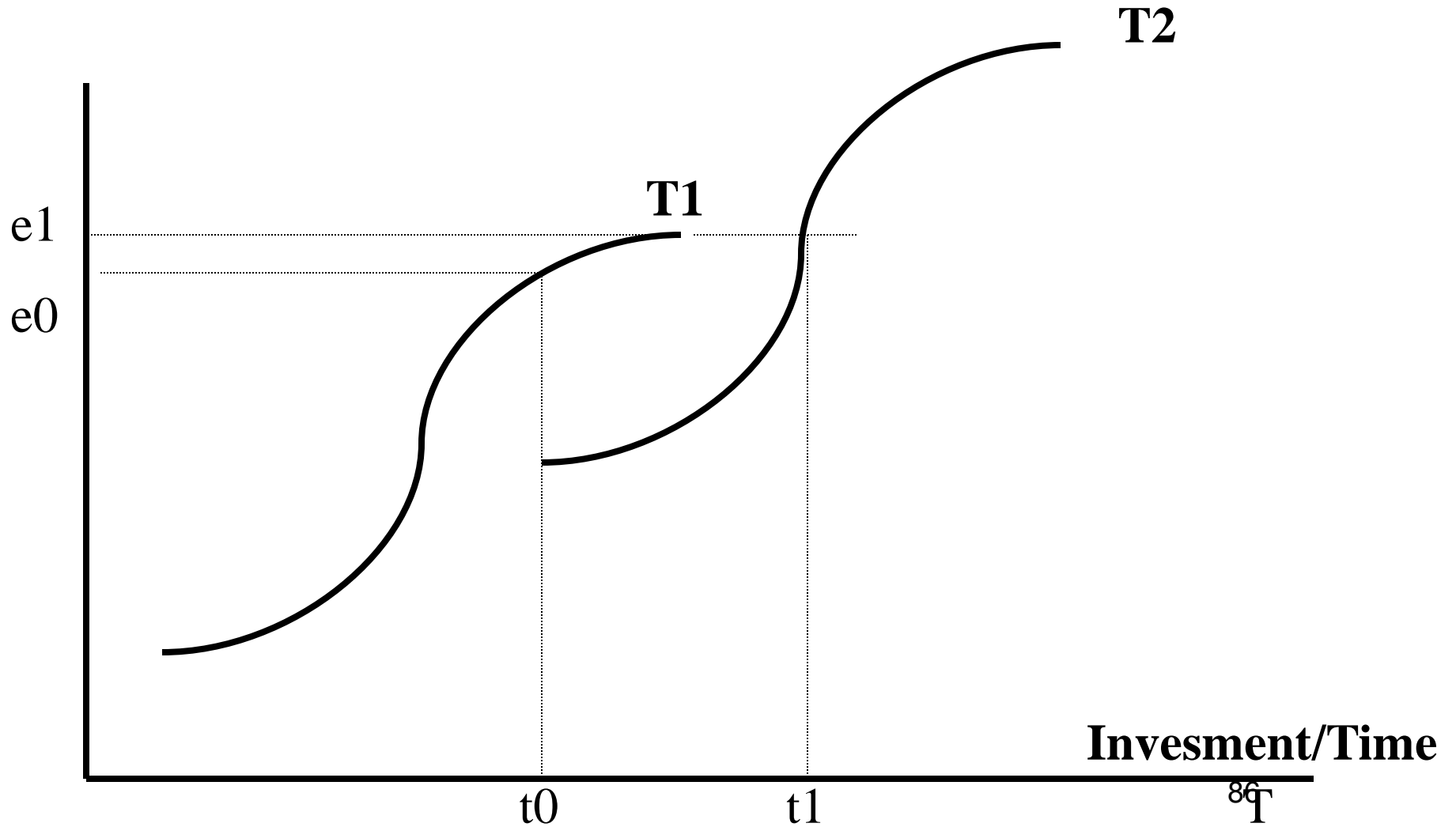
Technology Life Cycle

Efficiency



Technology Change

Efficiency



WHY CONTINUOUS/DISCONTINUOUS INNOVATION?

Continuous Innovation

- Existing infrastructures
- Existing knowledge
- Existing markets
- Incremental
- Convergent thinking-
progressive refinements
- Increasing specialization

Discontinuous Innovation

- Discovery of new knowledge related to market need or technological capabilities
- From horse to car
- Business reshaping:
kerosene for lighting; ice for cooling; IT+telecom and airline, banking, entertainment

3rd GENERATION & CONTINUOUS INNOVATION

Market Knowledge

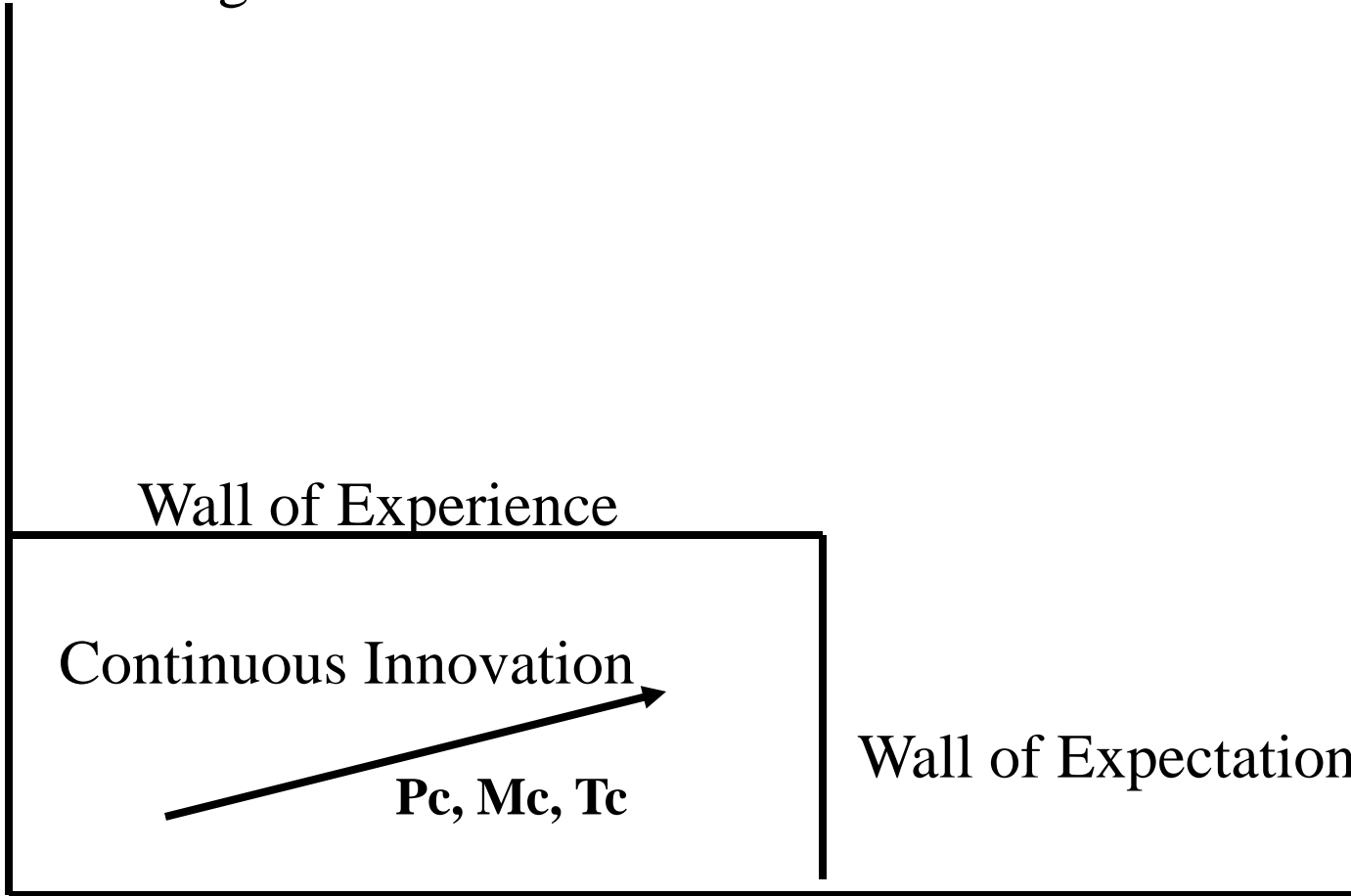
Wall of Experience

Continuous Innovation

P_c, M_c, T_c

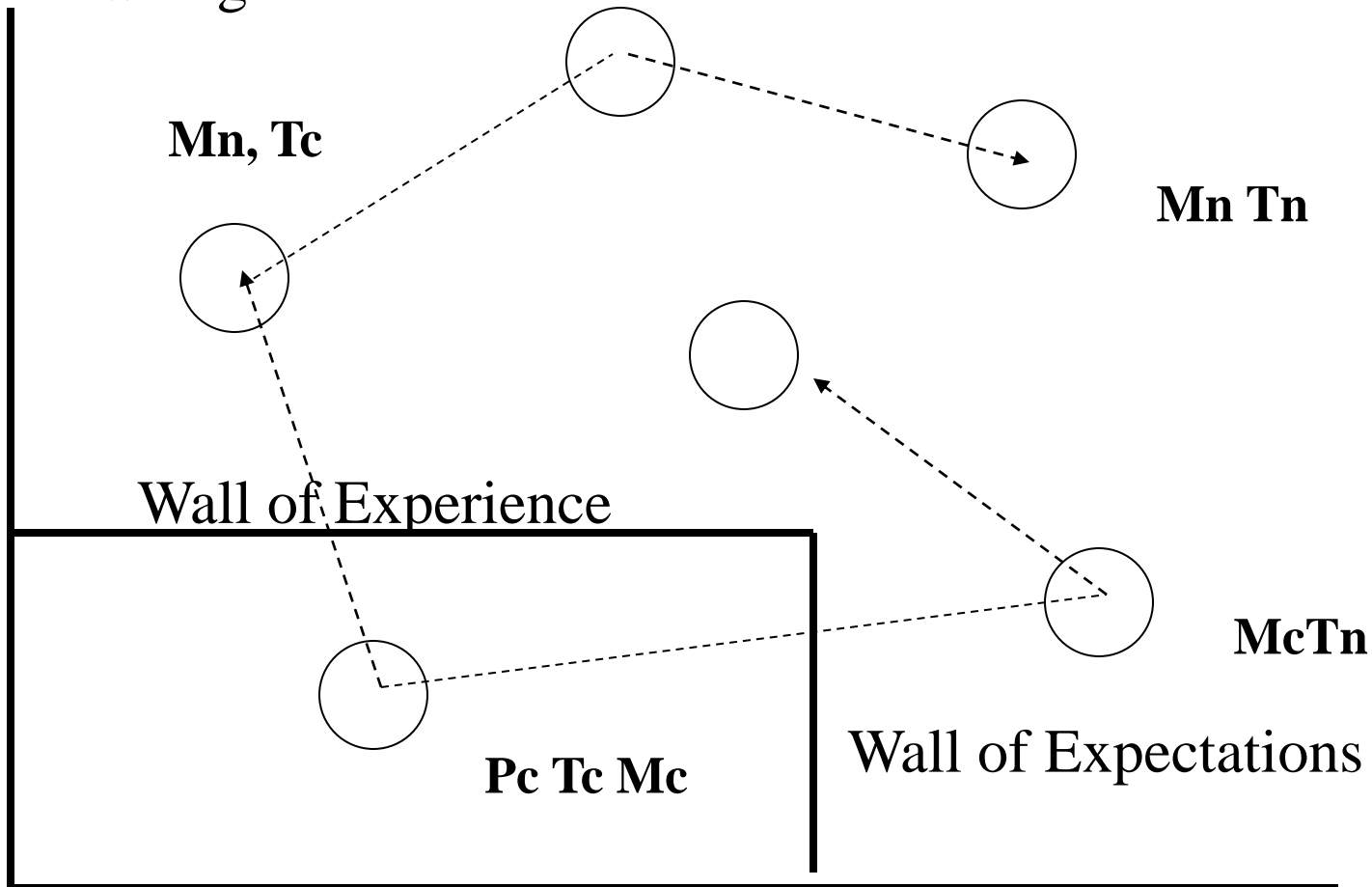
Wall of Expectations

Scientific & Technical Knowledge



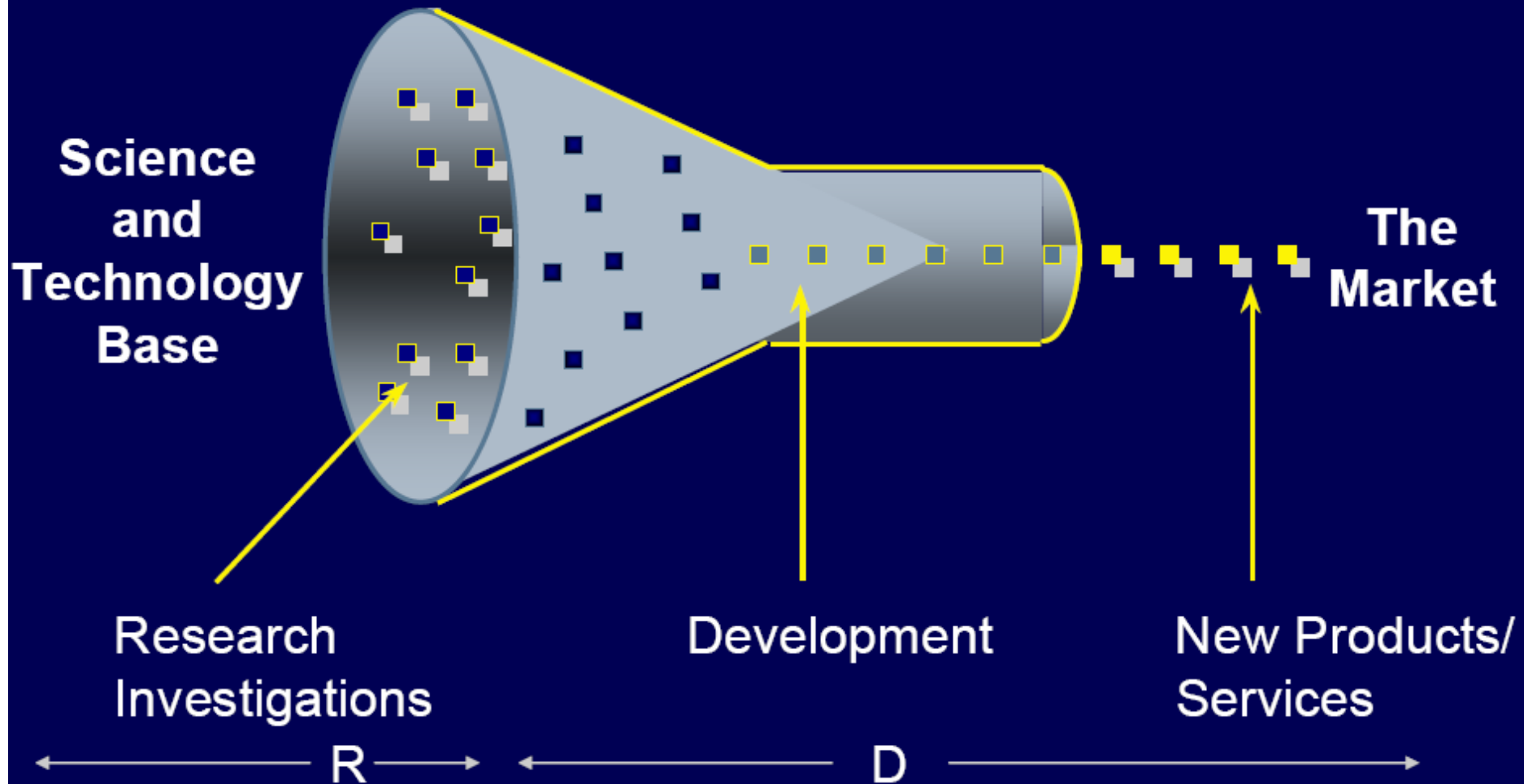
DISCONTINUOUS INNOVATION

Market Knowledge

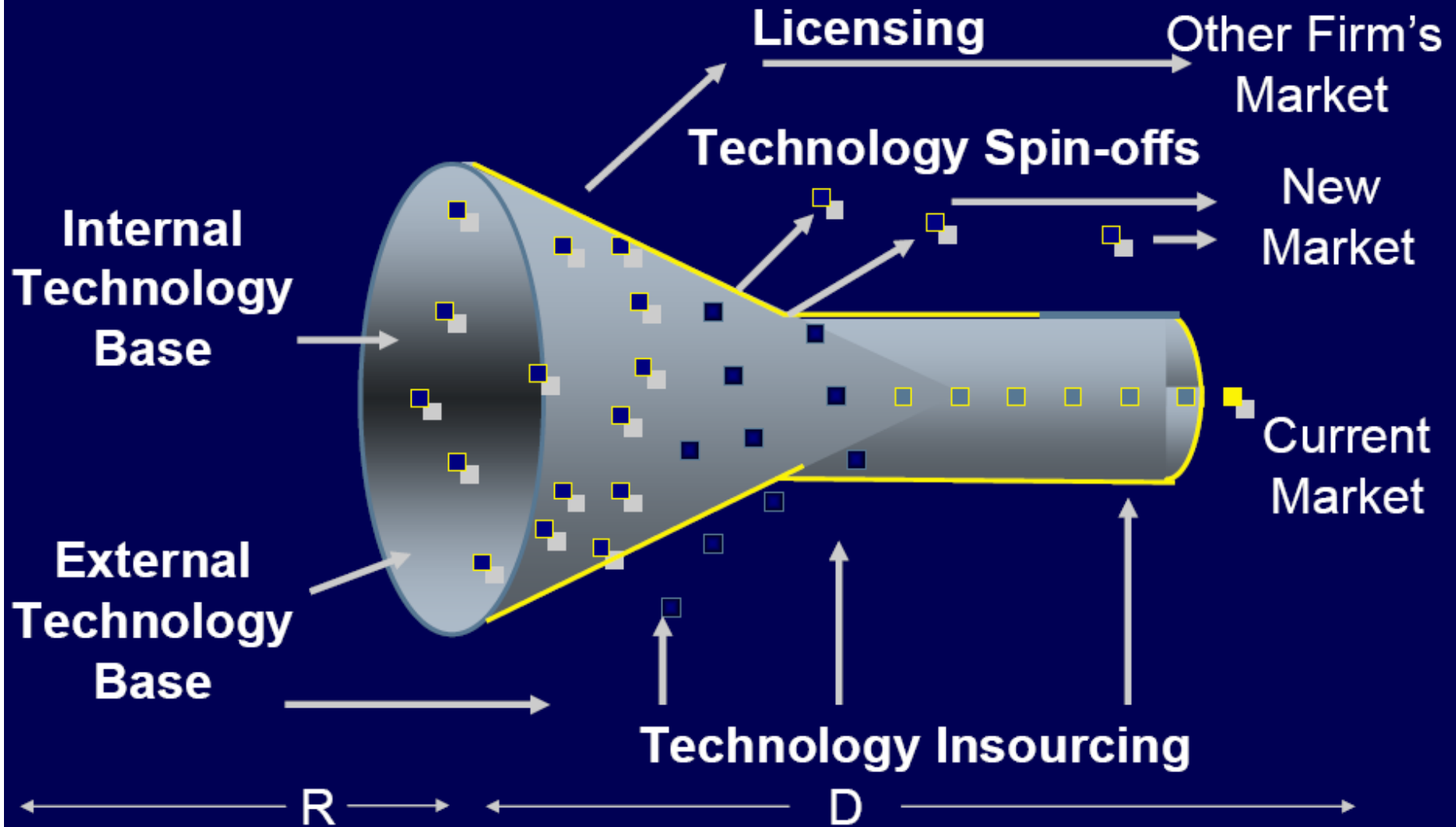


Scientific & Technical Knowledge

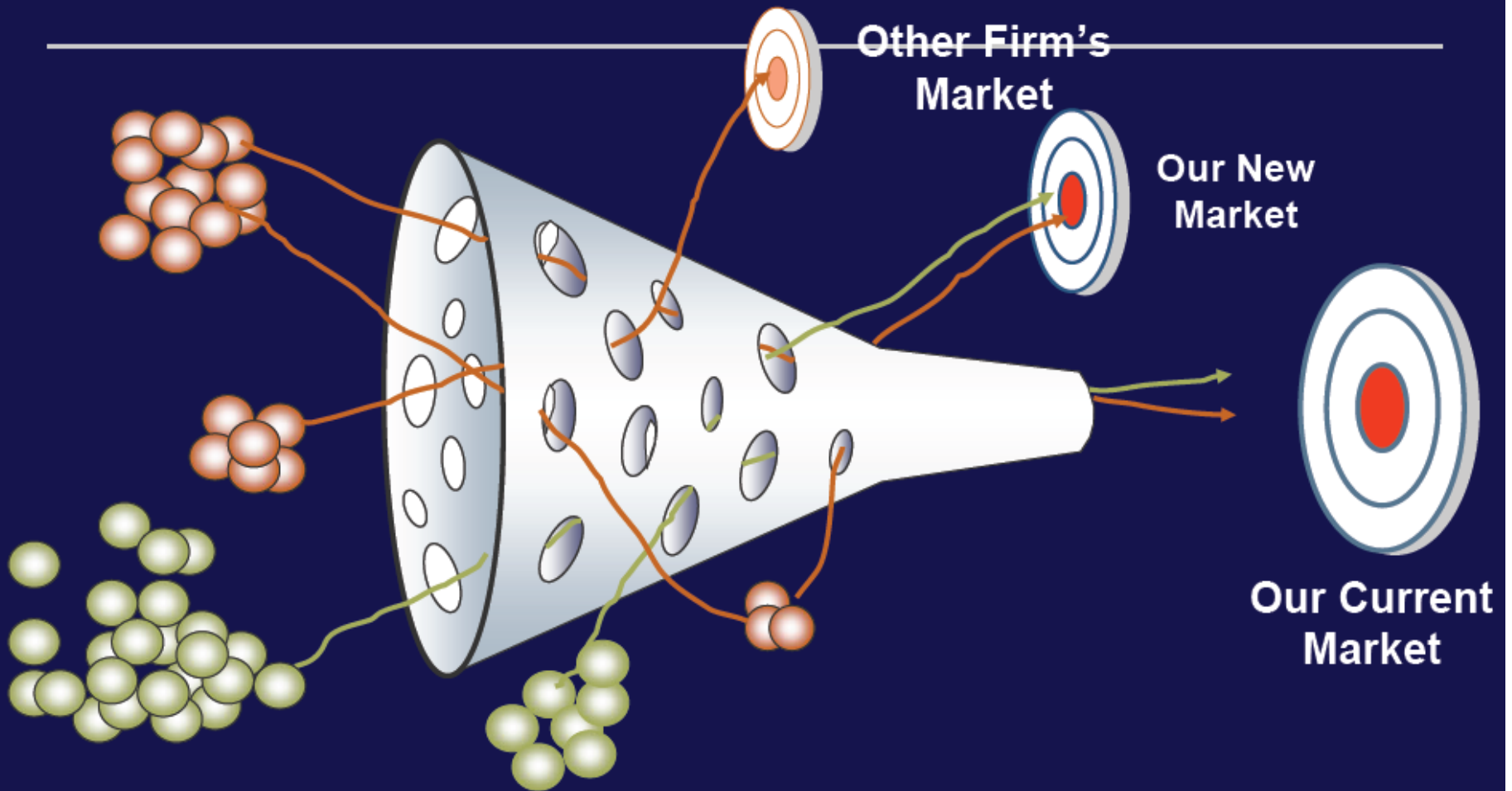
The Current Paradigm: A Closed Innovation System



The Open Innovation Paradigm



Open Innovation



Source: SCA presentation for "Renewing Growth from Industrial R&D," 10th Annual Innovation Convergence, Minneapolis, September 27, 2004;
stolen with pride from Prof. Henry Chesbrough UC Berkeley

The Open Innovation Promise in Action: The iPod—An Example of Collaborative Innovation

An entrepreneur with an idea comes to Apple

Independent contractor Tony Fadell develops iPod/iTunes product solution in eight weeks



Steve Jobs takes personal interest

Apple hires Tony to create and lead 35-person team from Philips, IDEO, General Magic, Apple, Connectix, and WebTV
Apple developed the user interface and design

PortalPlayer manages technical design



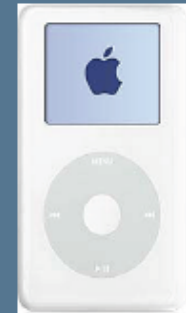
PortalPlayer provided platform and produced reference design in collaboration with Apple and manages the design process

PortalPlayer makes \$15/iPod sold



6 months!!!

iPod



Critical success factors:

- Openness of development process
- Fast decision making
- Iterative collaborative relationship with PortalPlayer and other partners

Sources: *Electronics Design Chain* magazine, August 17, 2004; *Wired* magazine, July 21, 2004; *Forbes* magazine, February 16, 2004; and interview with Tony Fadell

morflora
Trait Delivery Innovation



Fast, Non-transgenic

Trait Delivery Platform



Red Microalga Polysaccharide

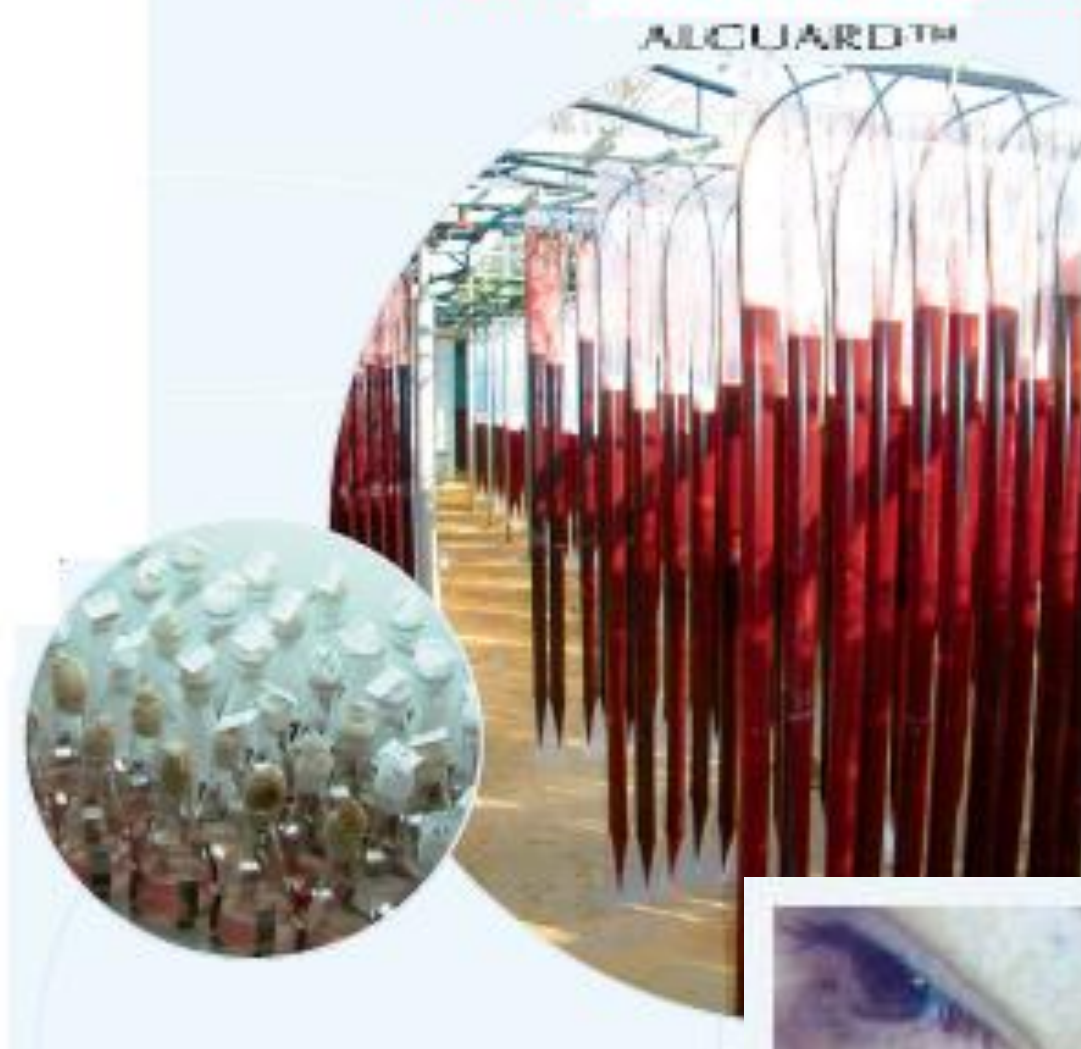


figure 6.
Immediate effect of Alguard™ in improving wrinkle appearance

Grain storage facilities









Irrigation Systems



Vegetables orchard flowers



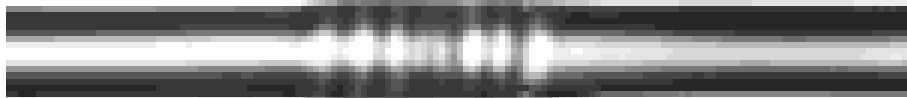
1.6 l/h

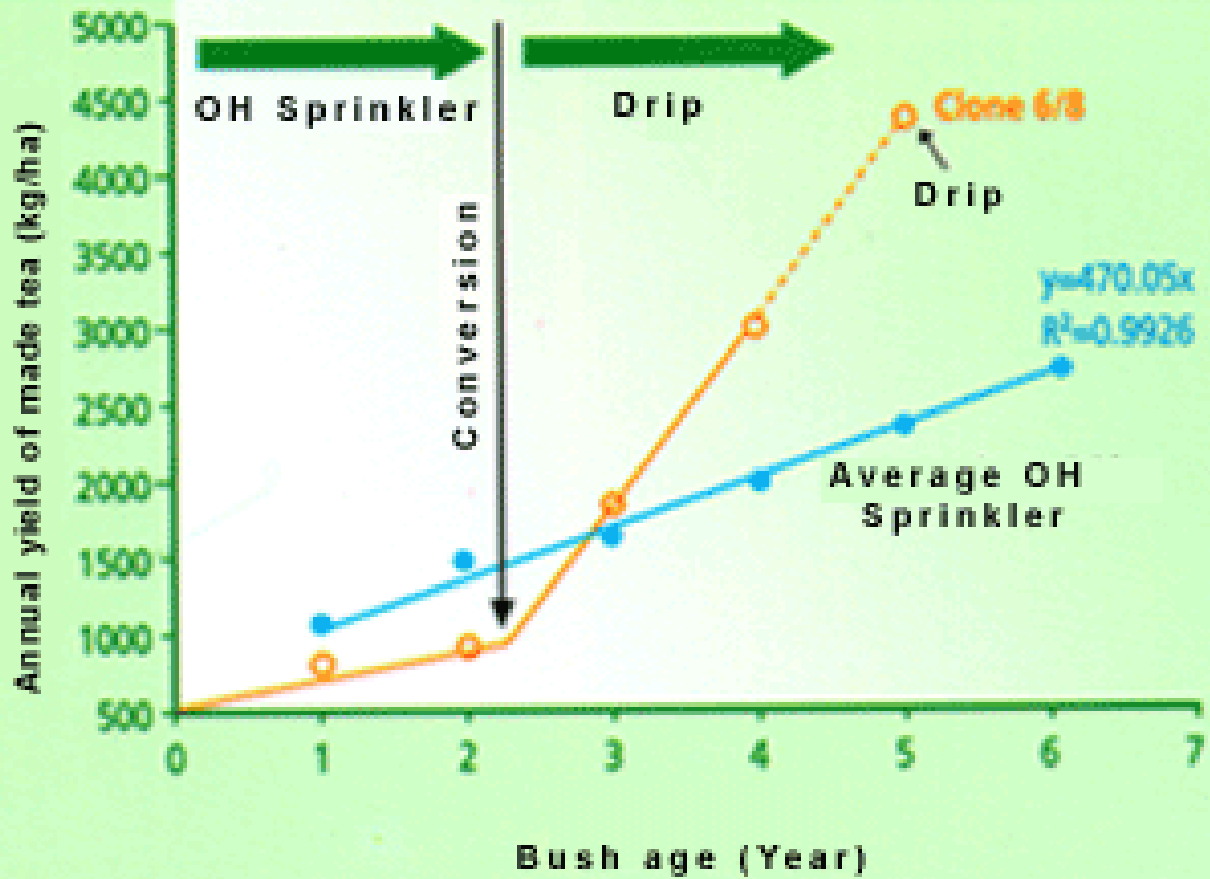


2.1 l/h



3.8 l/h





Drip Vs Overhead sprinklers irrigated immature tea clone 6/8 in South tanzania

Big Seedles[™] Sagi

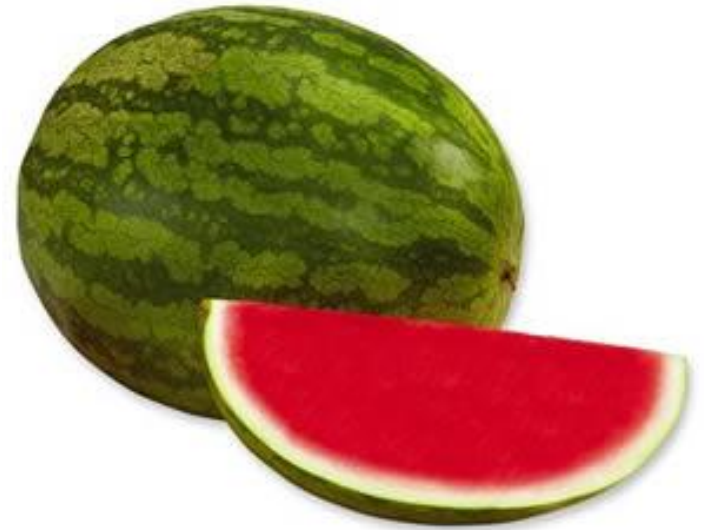
Good shelf life

Shape Oval

Av. Weight (Kg.) 7.5-8.5

Rind:Light green with dark green stripes

Brix: High



Seeds' Weight/Number Ratio

Variety

Approx. Weight of 1,000 Seeds

Approx. No. of Seeds/Gram

Big Size 35-40

25-28

Mini 55-65

17-20

Mini Seedless Extazy

Excellent shelf life

Shape Round

Av. Weight (Kg.) 1.5-2.5

Rind: Dark green with lighter stripes

Brix: Very High



Seeds' Weight/Number Ratio

Variety

Approx. Weight of 1,000 Seeds

Approx. No. of Seeds/Gram

Big Size 35-40

25-28

Mini 55-65

17-20



It's EASY TO CARRY





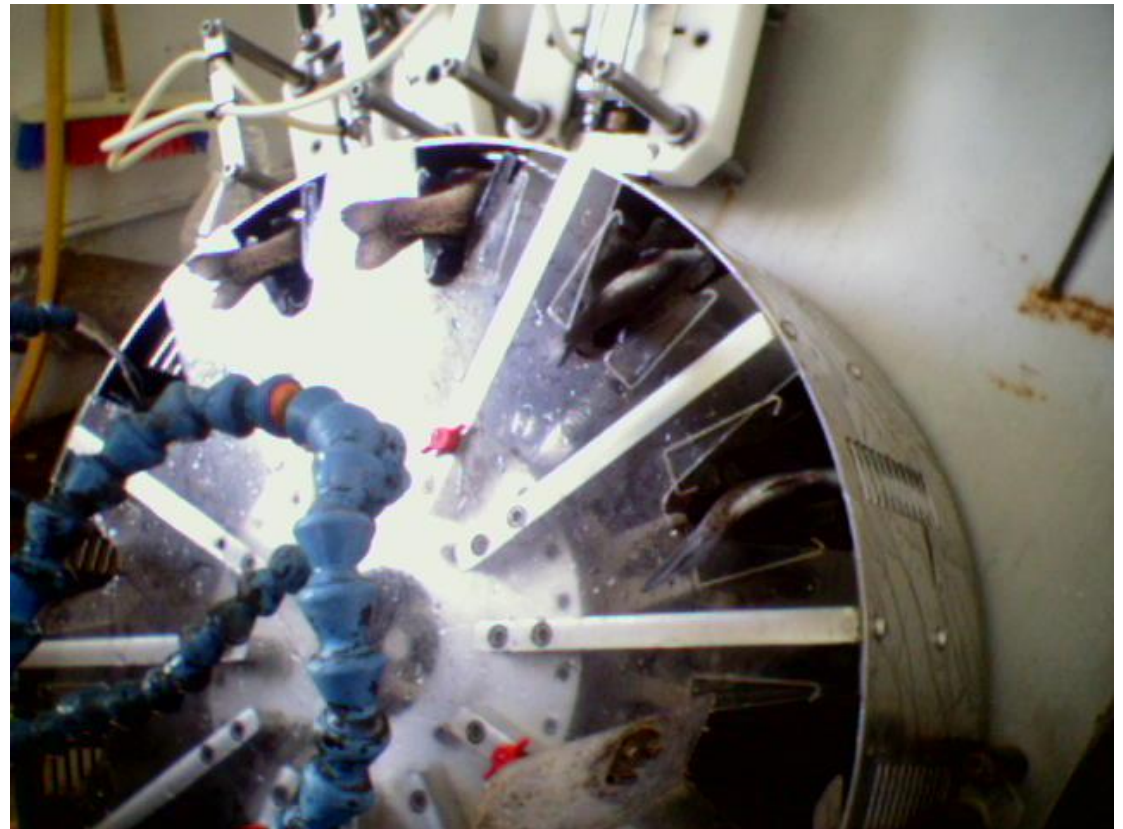
Trout farm – bird's view



דגרי הסדן



When trout reach the weight of 30-35 grams they are vaccinated.



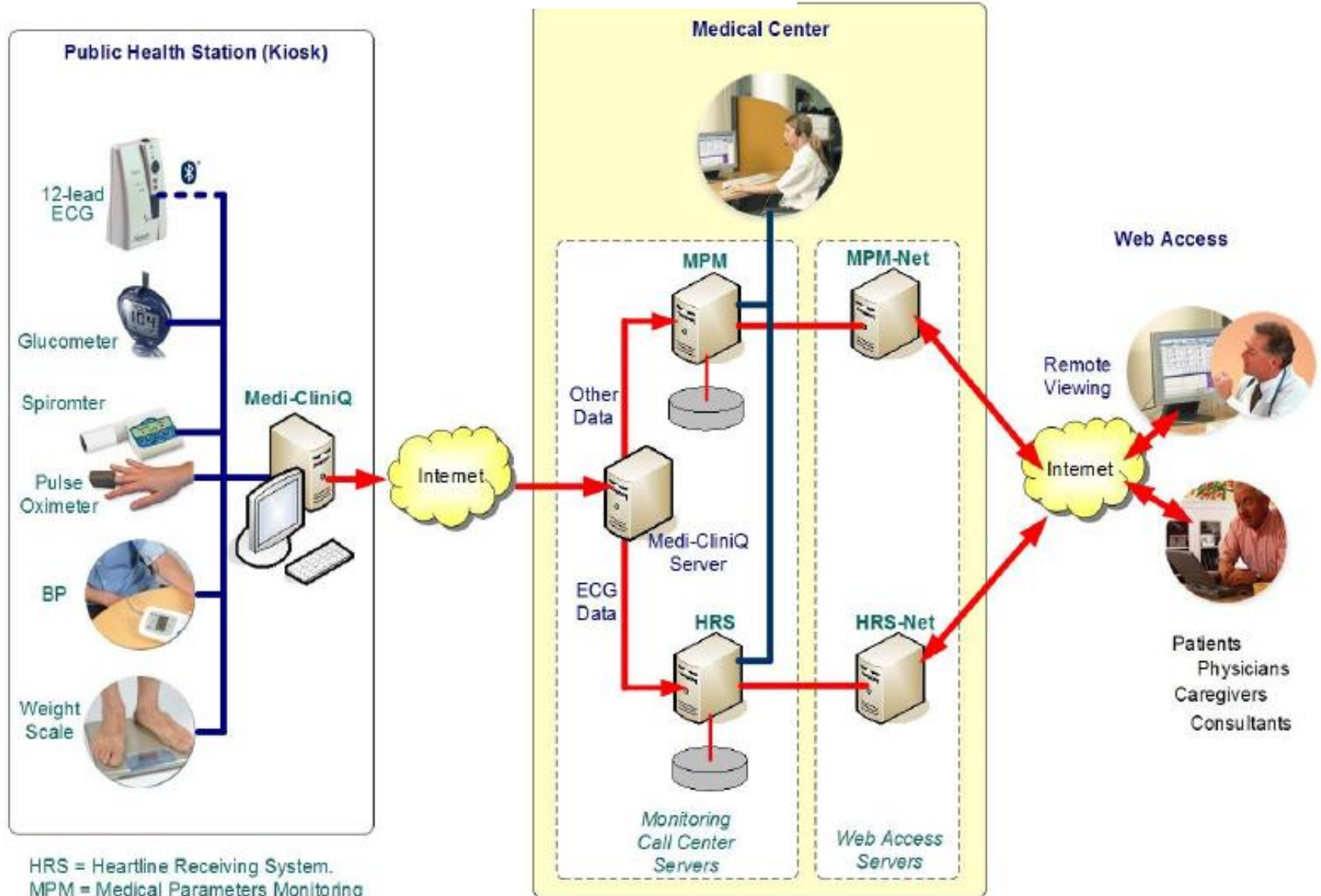
דגרי הסדן



Duration from egg to market size of 350-550 grams is 10-12 months which is half the time period needed in natural Environment.

דג'י הסדן





Systeme diagnostique ambulatoire



<http://www.aerotel.co.il/index.php?language=eng>

<http://www.wimp.com/functionaltools/>

[Meet the Mini Metal Maker: A basic, sub-\\$1,000 3D printer that prints metal](#)
by [Signe Brewster](#)

NOV. 12, 2013 - 3:09 PM PST
<http://vimeo.com/78961565#at=0>

<http://www.stratasys.com/industries/medical>

<http://www.healthcareglobal.com/video/video-3d-printers-produce-microscope-parts-to-fight-malaria-in-africa>

<https://www.youtube.com/watch?v=ffXsCCo8OCw#t=16>

Togo



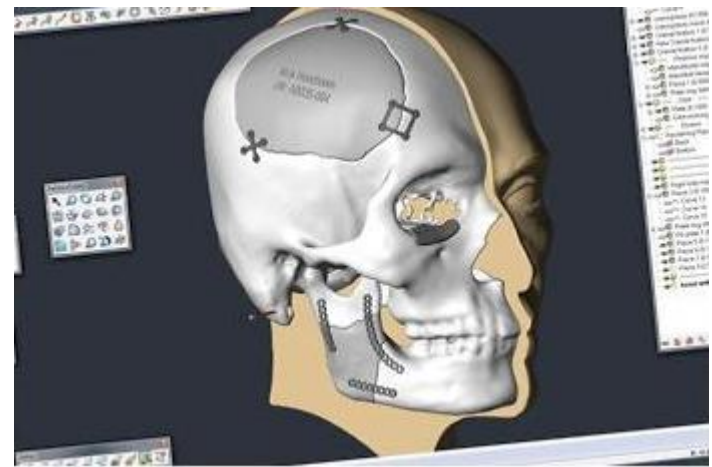
MARKETPLACE POSITIONING



	3DSYSTEMS	Stratasys	ExOne	v-xeljet	LAM TO METAL	SLM Solutions	proto labs	eNS	Materialise
DESIGN 设计	Direct prototypes plastic	✓	✓	✓			✓		✓
	Direct prototypes metal	✓		✓		✓	✓	✓	
	Indirect prototypes	✓	✓	✓	✓		✓		✓
	Cloud Printing	✓	✓				✓		✓
MANUFACTURING 生产	Medical parts	✓			✓				✓
	Direct parts	✓	✓	✓					✓
	Indirect parts	✓	✓	✓	✓				✓
SOFTWARE 软件	Perceptual devices	✓							
	Cloud platforms	✓	✓						✓
	Digital threading	✓							✓
HARDWARE 硬件	Consumer printers	✓	✓						
	Industrial printers	✓	✓	✓	✓	✓		✓	✓
	Materials	✓	✓	✓	✓	✓		✓	✓



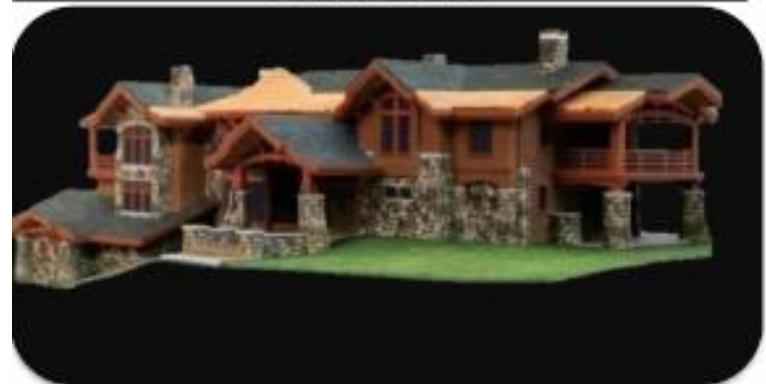
Elastomeric | Flexible



Durable | High-Temperature



Full Color



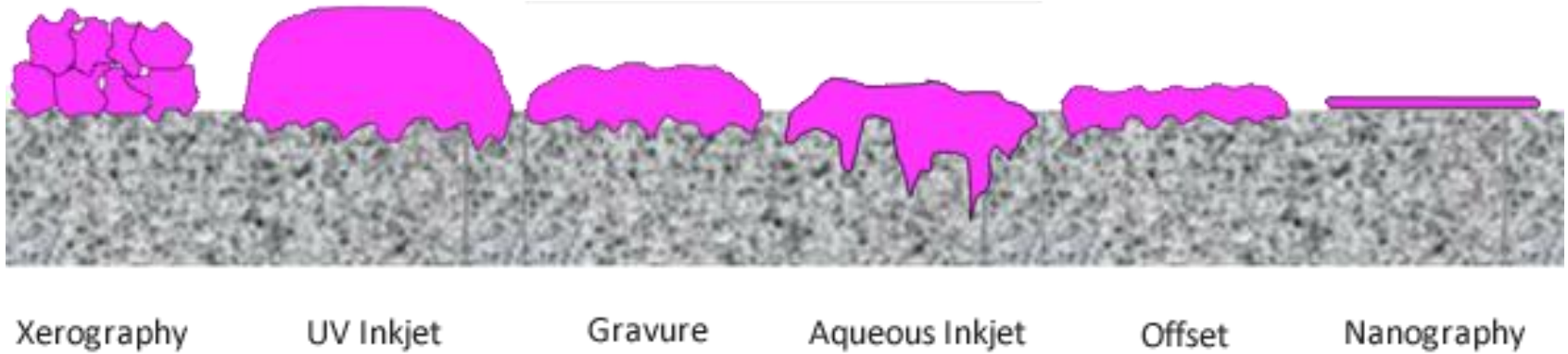


<http://www.landano.com/>

<https://www.youtube.com/watch?v=EVRcvoCyC2o#action=share>



<http://landanano.com/nanography/nanography-nano-what>





Nanography



Inkjet