

Environmental Analysis

National Audit Dept

Prof. Federico M. Macaranas
Asian Institute of Management
Senior Executive Training Programme
Office of the Auditor-General of Malaysia
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Course Objectives

- To broaden the knowledge of participants in strategic thinking for effective integration of different functions of Ketua Audit Negara
- To develop effective process managers who are capable of understanding situations, improving systems, and implementing projects
- TO further hone the decision-making skills of participants that will help in achieving organizational goals

Session Objectives for Environmental Analysis Module

- To provide a better understanding of the complex and chaotic landscape faced by Ketua Audit Negara given the high expectations from stakeholders, auditees and the public at large
 - Chaos theory → thinking skills (mind mapping, whole brain thinking based on individual MBTI preferences) → systems thinking, human behavior, leadership, negotiations, strategies
- To hone decision making-skills through both internal and external environment sensing
 - PESTE analysis → SWOT analysis
- To apply concepts in scenario planning and visioning exercises to the various divisions in Ketua Audit Negara
 - Preparing for ASEAN 2015

Learning Team Exercises (1)

(1 hr. and 20 mins. each Session, for presentation at Plenary)

Session 1: morning of first day

- Define a problem based on any of Ketua Audit Negara's priorities and identify the internal Strengths and Weaknesses within its control relevant to this problem.
- For the same problem, identify the external Opportunities and Threats from the IMD Road Map 2013-50 and Malaysia's own strengths and weaknesses in the economic performance, business efficiency, government efficiency and Infrastructure areas

Session 2: morning of second day

- Continuing Day One exercises, identify at least one strategy each for the S-O , S-T, W-O or W-T combinations, based on patterns from chaos theory analysis . Use thinking skills learned in day one.

COMPLEX AND CHAOTIC ENVIRONMENT OF AUDITING

Public Sector Auditors in Malaysia

1. High expectation from stakeholders, auditees and public as auditors are involved in higher level government meetings/committees as advisors to ADD VALUE TO GOVERNANCE PROCESS
2. Changing landscape: Developed nation status by 2020, adoption of International Public Sector Auditing Standards accrual-based accounting nby 2015 which is in line with outcomes-based budgeting
3. Developments in the National Audit Department: new areas of auditing in investigative/fraud, environment, etc.; use of ICT tools, adopt and implement international standards of INTOSAI (International Organization of Supreme Audit Institutions); 4 initiatives to transform audit process under the NKRA fight against corruption
4. Maintaining good reputation at the international level

INTOSAI's Professional Standards

- Necessary preconditions for proper functioning and professional conduct of Supreme Audit Institutions
 - Include principles and guidance on independence, transparency and accountability, ethics and quality control
 - May concern institution's mandate and further legislation, established procedures and daily practices of the organization and its staff
- INTOSAI's aim to advance sound principles for the effective functioning of public sector accounting on an international level
 - Financial audit
 - Performance audit
 - Compliance audit
 - management of public funds and publicly- funded activities

Basic Principles in Government Auditing (1)

1. Compliance with INTOSAI auditing standards in all matters that are deemed material (knowledge of it would be likely to influence the user of the financial statements or the performance audit report)
 - materiality based on value
 - materiality based by nature (law or regulation requires it to be disclosed)
 - materiality based on context in which it occurs (overall view given to the financial information, total of which it forms a part, associated terms, corresponding amount in previous years)

Basic Principles in Government Auditing (2)

Examples of SAIs non-audit activities

- gathering data without substantial analysis
 legal work
- examination of draft budgets – information mission
- investigations and consultations of SAI files
- administrative activities
- computer-processing functions

Not all auditing standards apply to all aspects of SAI work, e.g., collegial and judicial nature of review conducted by Courts of Account – SAI financial and performance audits are organized under a hierarchic system led by an Auditor-General or a Comptroller General

Each SAI should establish a policy which standards (INTOSIA or other specific standards) are to be carried out in various types of work

Basic Principles in Government Auditing (3)

2. SAI should apply its own judgment to the diverse situations that arise in the course of government auditing (requires THINKING SKILLS)
 - auditor's decision concerning the selection of issues and areas of audit
 - nature, timing and extent of audit tests and procedures
- INTOSAI audit standards (and any auditing standards external to the SAI) CANNOT BE PRESCRIPTIVE, or have a mandatory application to the SAI or members of its staff.
- SAI's mandate akin to the objective of audits in the private sector (e.g., audit of financial statements)
3. Need for an accountability process to be in place and operating effectively → jurisdictional actions should be seen as part of the logic of general objectives pursued by external audit and in particular those objectives which relate to accounting questions)
→ requires SYSTEMS THINKING
- Public enterprises also required to fulfill public accountability obligations.

Basic Principles in Government Auditing (4)

4. Correctness and sufficiency of the form and content of financial reports are responsibility of management.
5. Audited entities should develop specific and measurable objectives and performance targets.
6. Consistent application of acceptable accounting standards should result in the fair presentation of the financial position and results of operations → fairness is consistent application ++
7. Adequate system of internal control minimises the risk of errors and irregularities.
8. Audited entities should develop adequate control systems to protect its resources ; auditor may submit proposals and recommendations where controls are inadequate or missing.
9. SAI must have access to sources of information and data as well as access to officials and employees of the audited entity.

Example of complex and chaotic environment of Ketua Audit Negara

CHANGING WORLD OF INTERNAL AUDITING

Internal Auditing - Evolution

□ What precipitated it?



Globalization of
Business

Internal Auditing - Evolution

□ Growing Complexity of Business



Internal Auditing

□ Evolution



Manual



Computerized

Internal Auditing

□ Evolution



**Internal Police/
Adversary**



**Valued Advisor
Partner**



Internal Auditing

□ Definition

Internal Auditing is an independent, **objective assurance and consulting activity** designed to **add value** and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of **risk management, control and governance processes**

Internal Auditing

□ Definition

Internal Auditing is an independent, **objective assurance and consulting activity** designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes

Internal Auditing

□ Nature of Activity

Objective

ASSURANCE

* an objective examination of evidence for the purpose of providing an independent assessment of governance, risk management, and control processes

CONSULTING

* Objective advisory, facilitative, and training activities, the nature and scope of which are agreed to with the customer, intended to improve governance, risk management, and control processes.

Internal Auditing

□ Assurance vs Consulting

Primary aim of the engagement

ASSURANCE

- * To provide an independent assessment based on examination of evidence

CONSULTING

- * To provide and independent advice, facilitation, or training services at the request of the customer

Who determines the nature and scope

ASSURANCE

- * Internal audit function determines the nature and scope of the engagement

CONSULTING

- * The customer and the IA function agree on the nature and scope of the engagement

Parties involved

ASSURANCE

- * The process owner, the IA function, the users of the assessment

CONSULTING

- * The customer and the IA function

Internal Auditing

□ Assurance vs Consulting

The challenge is striking a balance and making a paradigm shift.



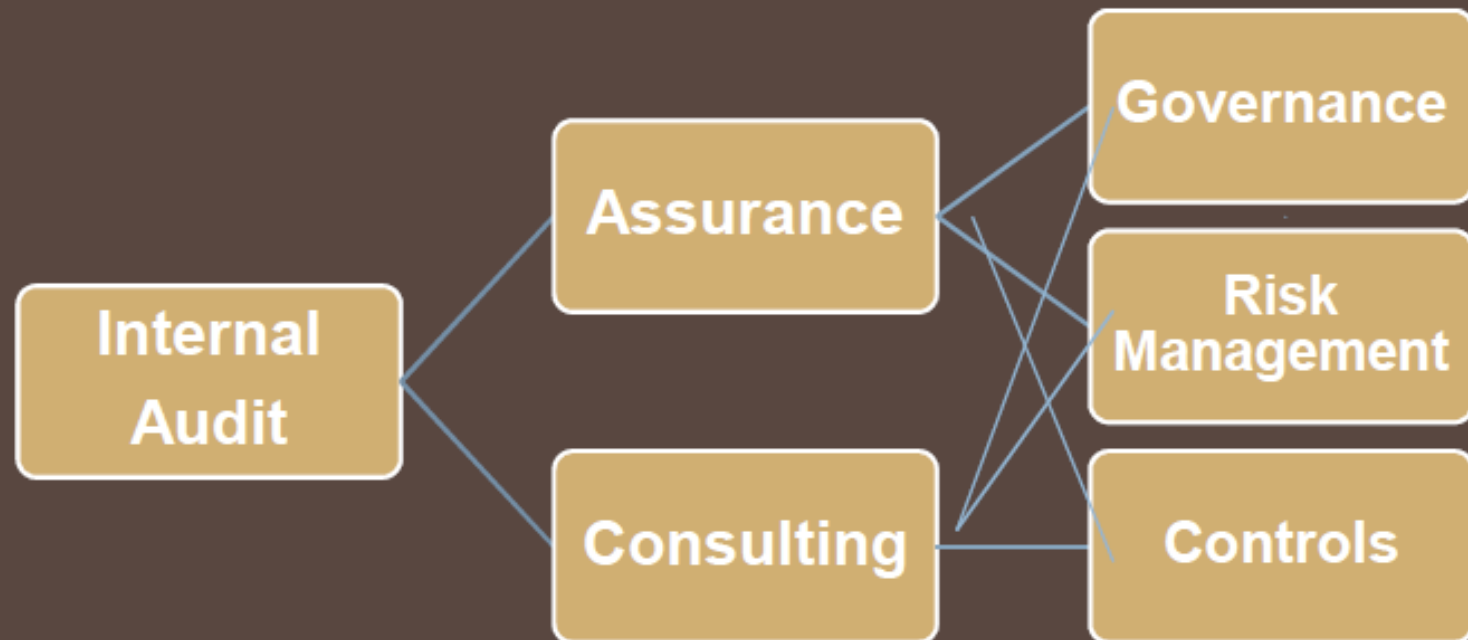
Internal Auditing

□ Definition

Internal Auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of ***risk management, control and governance processes***

Internal Auditing

□ Coverage



Internal Auditing on Risk Management

□ Consulting Role



Making available to management tools and techniques used by internal auditing to analyze risks and controls



Being a champion for introducing ERM into the organization, leveraging its expertise in risk management and control and its overall knowledge of the organization



Providing advice, facilitating workshops, coaching the organization on risk and control and promoting the development of a common language, framework and understanding



Acting as the central point for coordinating, monitoring and reporting on risks



Supporting managers as they work to identify the best way to mitigate a risk



2010 Global IA Survey

Core Competencies for Today's Internal Auditors

2010 Global IA Survey

□ Core competencies

➤ Behavioral

- ❖ Confidentiality
- ❖ Communication Skills

➤ Technical

- ❖ Understanding business
- ❖ Risk analysis & control assessment techniques

➤ Knowledge

- ❖ Auditing
- ❖ Internal audit standards

2010 Global Survey

□ Incremental Core Competencies

➤ IA Staff

- ❖ Accounting frameworks, tools and techniques
- ❖ IT/ICT frameworks, tools and techniques

➤ Management

- ❖ Organizational skills, including project and time management
- ❖ Conflict resolution and negotiation skills

➤ CAE

- ❖ Ability to promote the value of IA function within the organization
- ❖ Conflict resolution and negotiation skills

2010 Global Survey

□ Core Competencies – Common at all levels

- Communications skills (including oral, written, report writing and presentation)
- Problem identification and solution skills (including core, conceptual and analytical thinking)
- Keeping up to date with industry and regulatory changes and professional standards.

Defining a Problem

- **who** : internal vs. external stakeholders, clear definition of the national interest vs. INTOSAI professional standards
- **what**: relationship of the problem to other larger issues of ASEAN 2015 based on basic principles of government auditing
- **why** : asked several times (in the spirit of wise leadership of Nonaka), also helping frame the current issue in the context of value chains (application of thinking skills to national system)
- **when**: short, medium, and long-term time frames of the problem definition (Malaysia Vision 2020)
- **where**: venue of problems and affected publics, interrelationship with other publics elsewhere

Example of SWOT matrix for a hypothetical auditee

<p>Internal Factors</p> <p>→</p> <p>External Factors</p> <p>↓</p>	<p>Strengths (S)</p> <ol style="list-style-type: none"> 1. Best Technology across offices 2. Skilled professional and support staff 	<p>Weaknesses (W)</p> <ol style="list-style-type: none"> 1. No management depth (international benchmarks) 2. Spotty distribution of successes
<p>Opportunities (O)</p> <ol style="list-style-type: none"> 1. Goal of Malaysia as a developed nation by 2020 2. ASEAN embarks on a Community in 2015 	<p>SO Implications</p> <ol style="list-style-type: none"> 1-1 Keep Technology current 2-2 Share Malaysia's best practices in ASEAN 	<p>WO Implications</p> <ol style="list-style-type: none"> 2-1 Must satisfy other regions for equity goals 1-2 Train management in regional and global standards to address identified problem
<p>Threats (T)</p> <ol style="list-style-type: none"> 1. Private sector demands greater accountability 2. International standards applied to Malaysia 	<p>ST Implications</p> <ol style="list-style-type: none"> 1-1 Apply technology solutions for better governance 2-2 Keep current staff well informed 	<p>WT Implications</p> <ol style="list-style-type: none"> 1-1 Public Private partnership 2-2 Local leaders in lagging areas are assisted by global players

COMPLEXITY DUE TO HUMAN BEHAVIOR

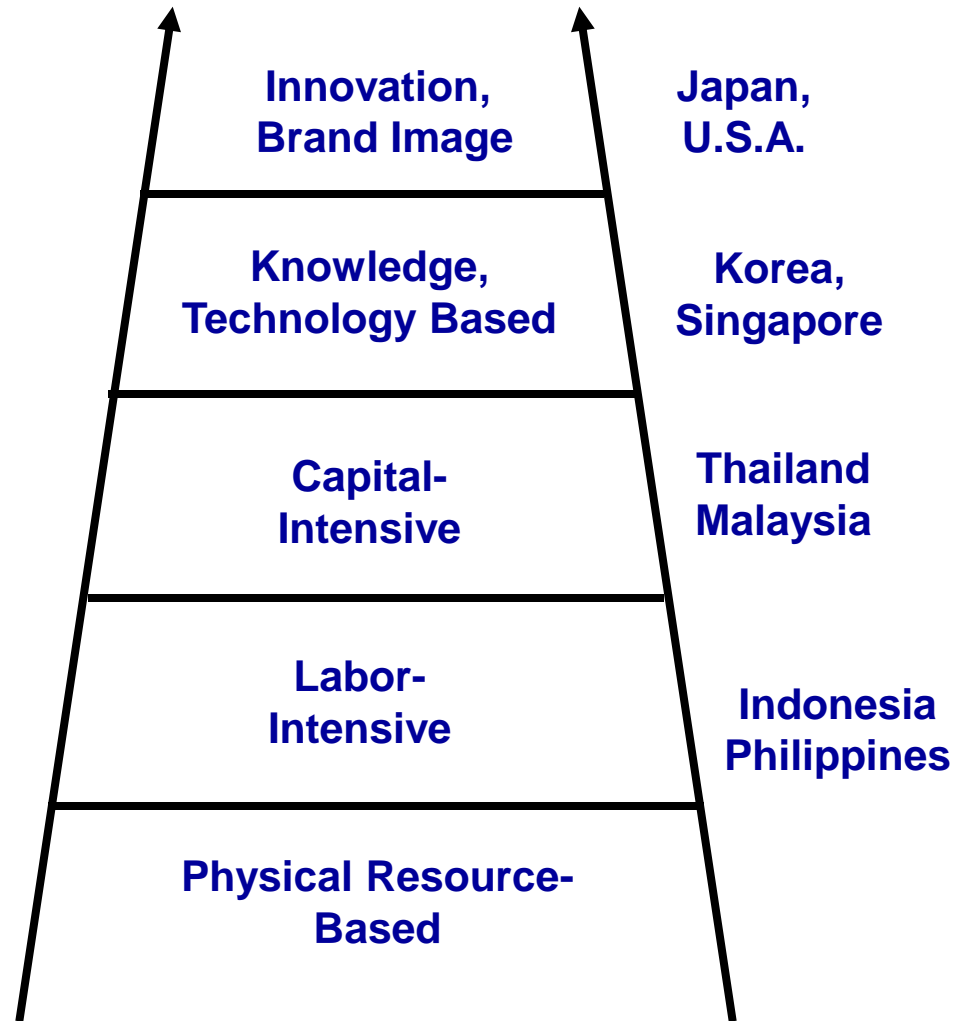
LEADERSHIP FRAMEWORK

AIM-FMM 2013

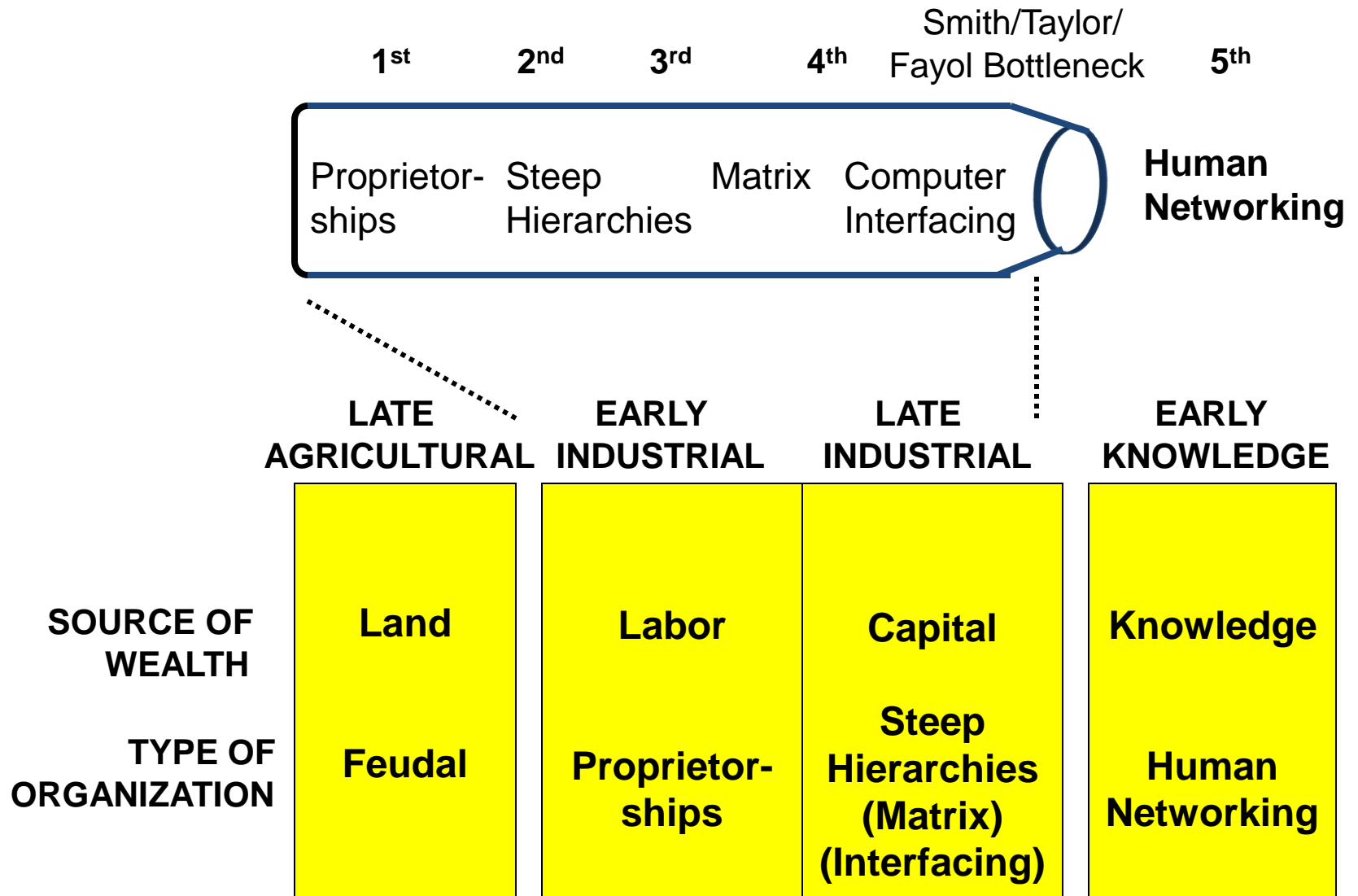


Source: Leonardo Silos, "The Power of the Leader: Mind and Meaning in Leadership",
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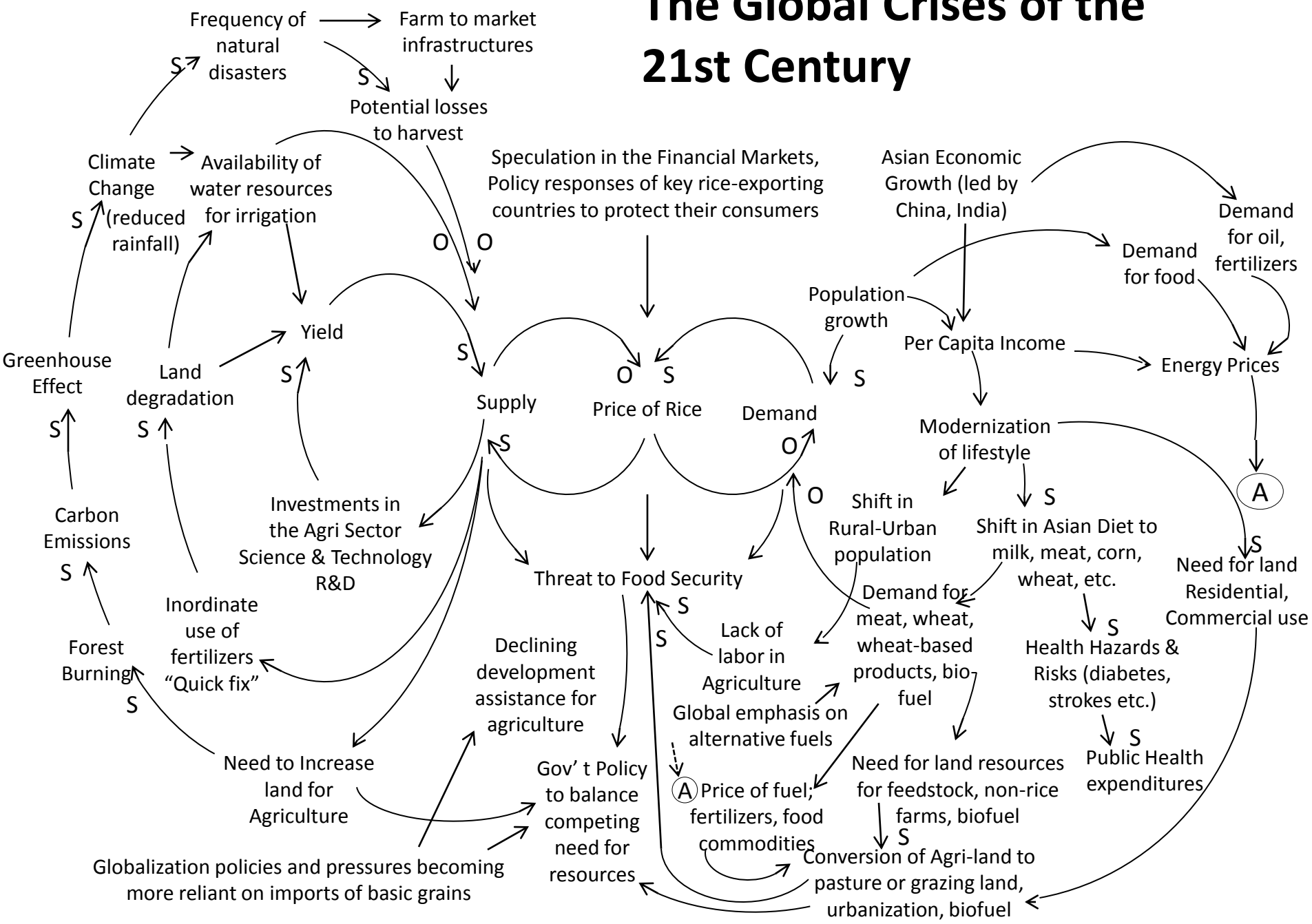
Moving Up the Value Ladder



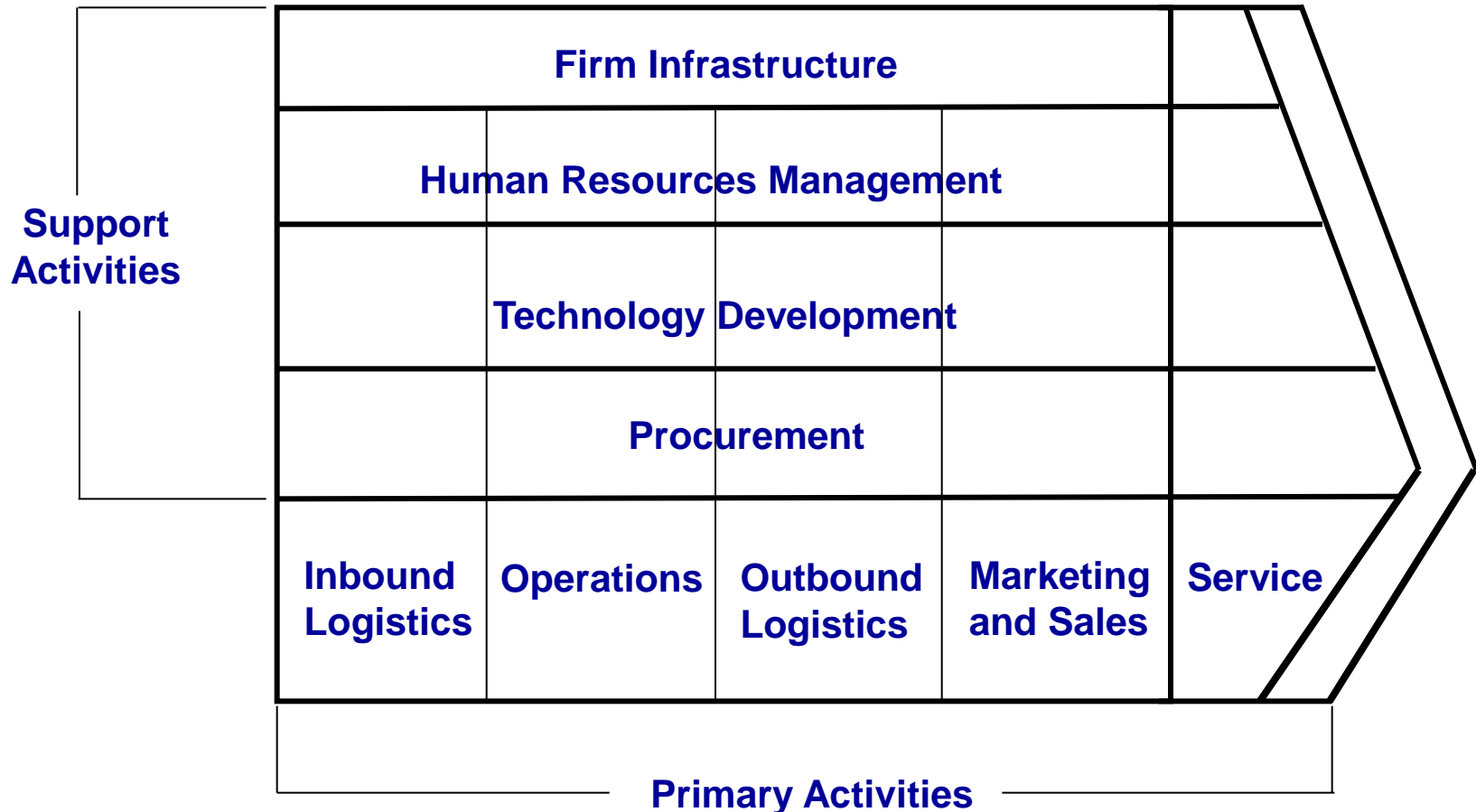
Interrelated Generations of Management and Historical Eras



The Global Crises of the 21st Century



Using the Concept of Value Chain



Following ideas have toppled the foundations of theory and practice:

- Man does not react solely on the basis of economic growth or gain.
- Man has a hierarchy of needs which change over time toward social and self-actualization and away from basic physical-economic needs. Quite often, management does not recognize this and hence incentives may be off-target and/or inappropriate.
- Man reacts in unanticipated ways to different forms of leadership.
- Man's interpersonal relationships are important, have regularities, are real in their effects, and cannot be subsumed or understood through conventional theory.
- Interpersonal relationships affect organizational effectiveness.
- Interpersonal relationships cannot be outlawed or ignored. If they are, they go underground and turn up in the damndest places.
- Groups can establish and enforce norms on their membership. These norms may or may not be congruent with management goals.
- Morale is a complex of variables and not necessarily correlated to productivity.
- Communication gets distorted, particularly as it goes up the hierarchy. Subordinates who hold views at variance with their superiors tend to withdraw or suppress their point of view, allowing their superiors to make mistakes even when they "know better".

- The validity and frequency of upward communication appears to be dependent upon the degree of interpersonal trust between superior and subordinate, the degree of power held by the subordinate, and the degree of the subordinate's ambition. None of these factors is taken into account explicitly in the theory and practice of bureaucracy.
- The formal organizational chart only rarely, if ever, resembles the power structure.
- Bureaucratic theory and practice do not possess adequate means for resolving conflict between ranks and between functional groups.
- Bureaucracy has no adequate judicial process to protect its incumbent.
- The control and authority systems of bureaucracy do not work.
- Bureaucracy cannot assimilate the influx of new technology or new professionals entering the organization.
- Bureaucracy does not adequately account or allow for personal growth of mature personalities.
- Bureaucracy seems unable to cope with rapid, unprogrammed changes.

Problem	Bureaucratic solutions	New twentieth-century conditions
<p><i>Integration</i></p> <p>The problem of how to integrate individual needs and management goals.</p>	<p>No solution because of no problem. Individual vastly oversimplified, regarded as passive instrument or disregarded.</p>	<p>Emergence of human sciences and understanding of man's complexity. Rising aspirations. Humanistic-democratic ethos.</p>
<p><i>Social Influence</i></p> <p>The problem of the distribution of power and sources of power and authority.</p>	<p>An explicit reliance on legal-rational power, but an implicit usage of coercive power. In any case, a confused, ambiguous, shifting complex of competence, coercion, and legal code.</p>	<p>Separation of management from ownership. Rise of trade unions and general education. Negative and unintended effects of authoritarian rule.</p>
<p><i>Collaboration</i></p> <p>The problem of managing and resolving conflicts.</p>	<p>The "rule of hierarchy" to resolve conflicts between ranks and the "rule of coordination" to resolve conflict between horizontal groups. "loyalty".</p>	<p>Specialization and professionalization and increased need for interdependence. Leadership too complex for one-man rule or omniscience.</p>
<p><i>Adaptation</i></p> <p>The problem of responding appropriately to changes induced by the environment of the firm.</p>	<p>Environment stable, simple, and predictable; tasks routine. Adapting to change occurs in haphazard and adventitious ways. Unanticipated consequences abound.</p>	<p>External environment of firm more "turbulent," less predictable. Unprecedented rate of technological change.</p>
<p><i>"Revitalization"</i></p> <p>The problem of growth and decay</p>		<p>Rapid changes in technologies, tasks, manpower, raw materials, norms and values of society, goals of enterprise and society all make constant attention to process of firm and revision imperative.</p>

THINKING SKILLS

Critical thinking is NOT enough!

- Edward de Bono suggests various thinking skills: lateral thinking, perceptual thinking, design thinking,
- Tim Brown: Design thinking is borne from rigor and discipline – we *design* solutions, we don't simply realize them.

Concept Fan

AIM-FMM 2013

Reducing Traffic

restrict the number of vehicles

discourage traffic

reduce the need to travel

multi-user vehicles

Improving Traffic Flow

deal with peak travel

remove junctions

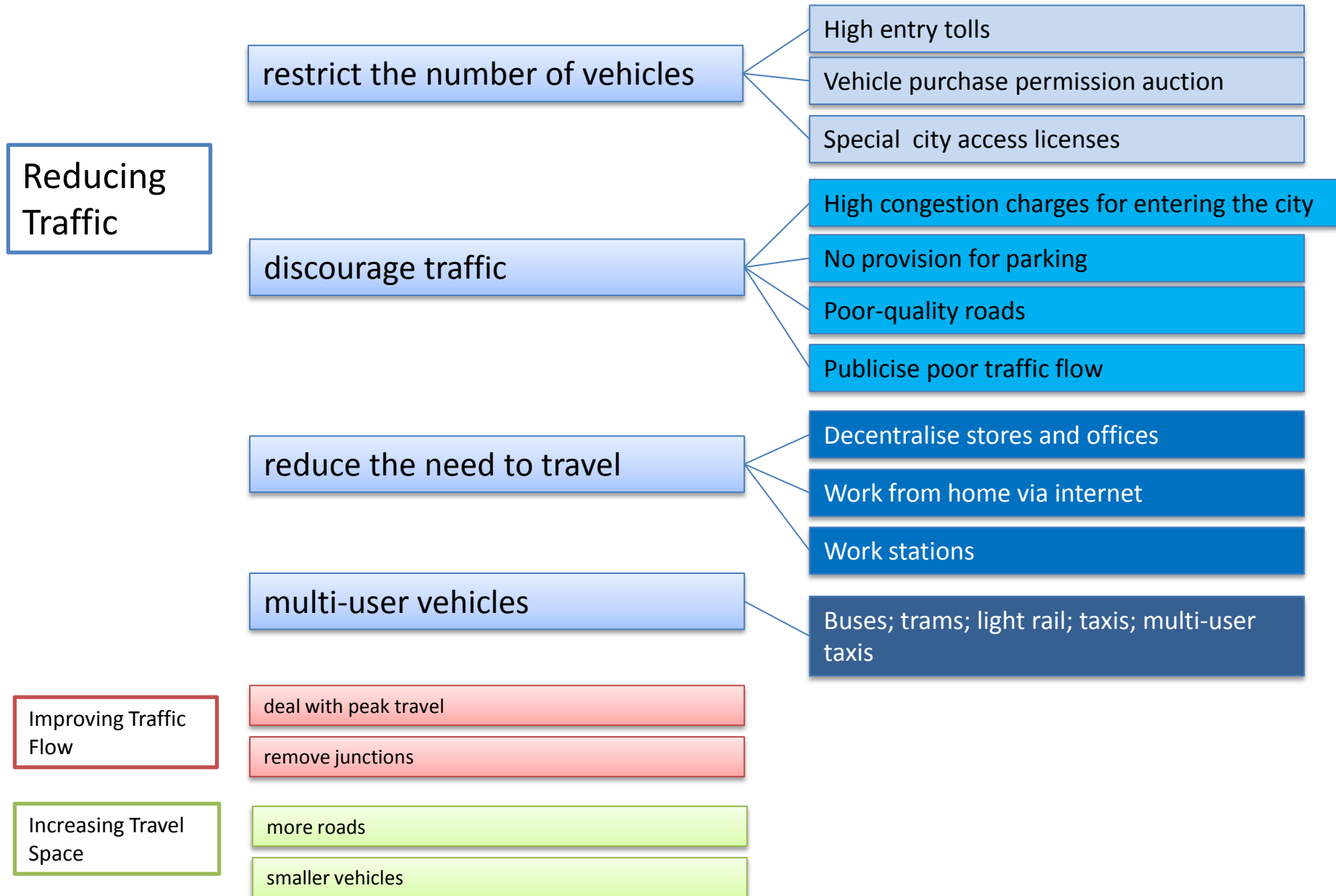
Increasing Travel Space

more roads

smaller vehicles

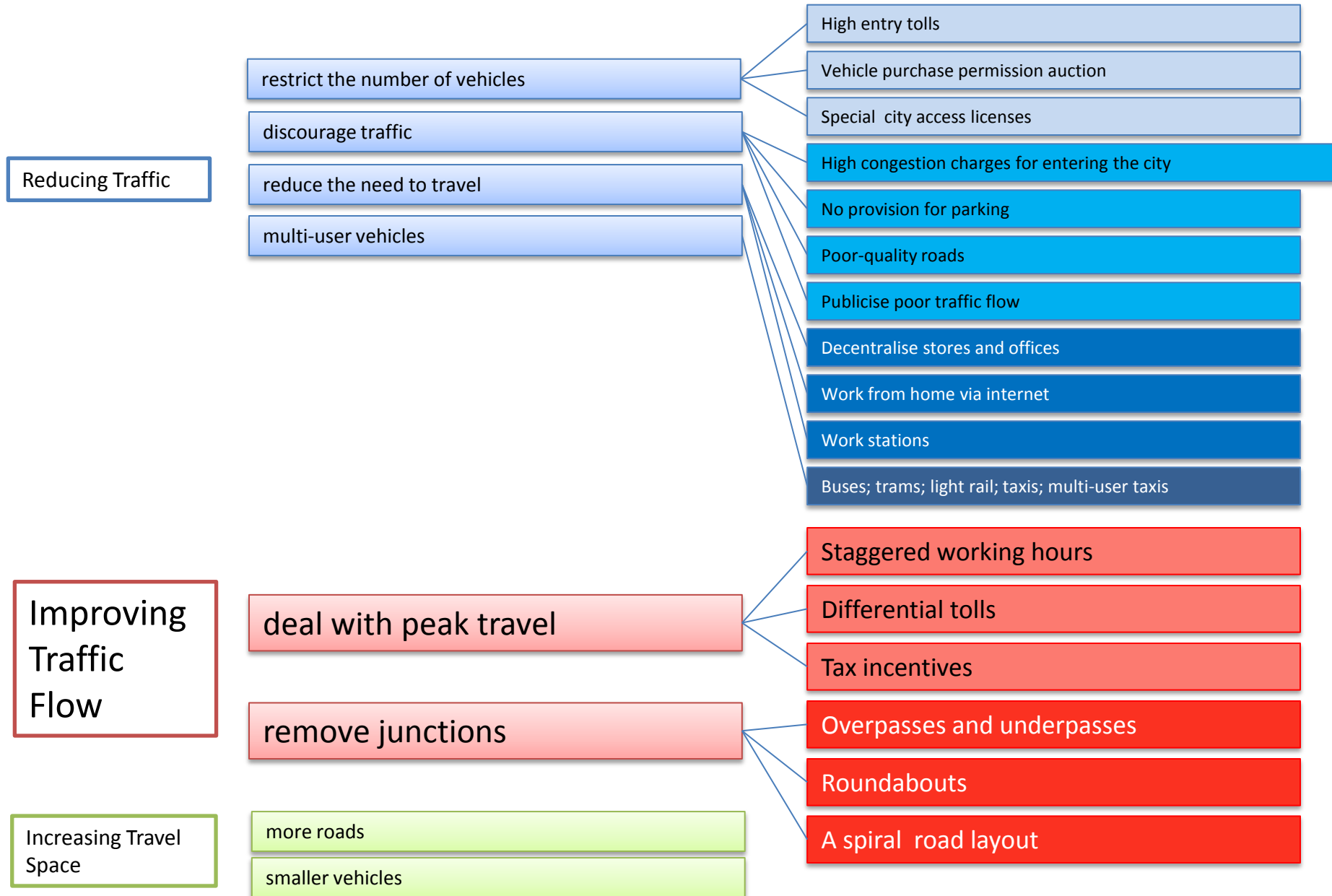
Concept Fan

AIM-FMM 2013



Concept Fan

AIM-FMM 2013



Concept Fan

AIM-FMM 2013

Reducing Traffic

restrict the number of vehicles
discourage traffic
reduce the need to travel
multi-user vehicles

High entry tolls
Vehicle purchase permission auction
Special city access licenses
High congestion charges for entering the city
No provision for parking
Poor-quality roads
Publicise poor traffic flow
Decentralise stores and offices
Work from home via internet
Work stations
Buses; trams; light rail; taxis; multi-user taxis

Improving Traffic Flow

deal with peak travel
remove junctions

Staggered working hours
Differential tolls
Tax incentives
Overpasses and underpasses
Roundabouts
A spiral road layout

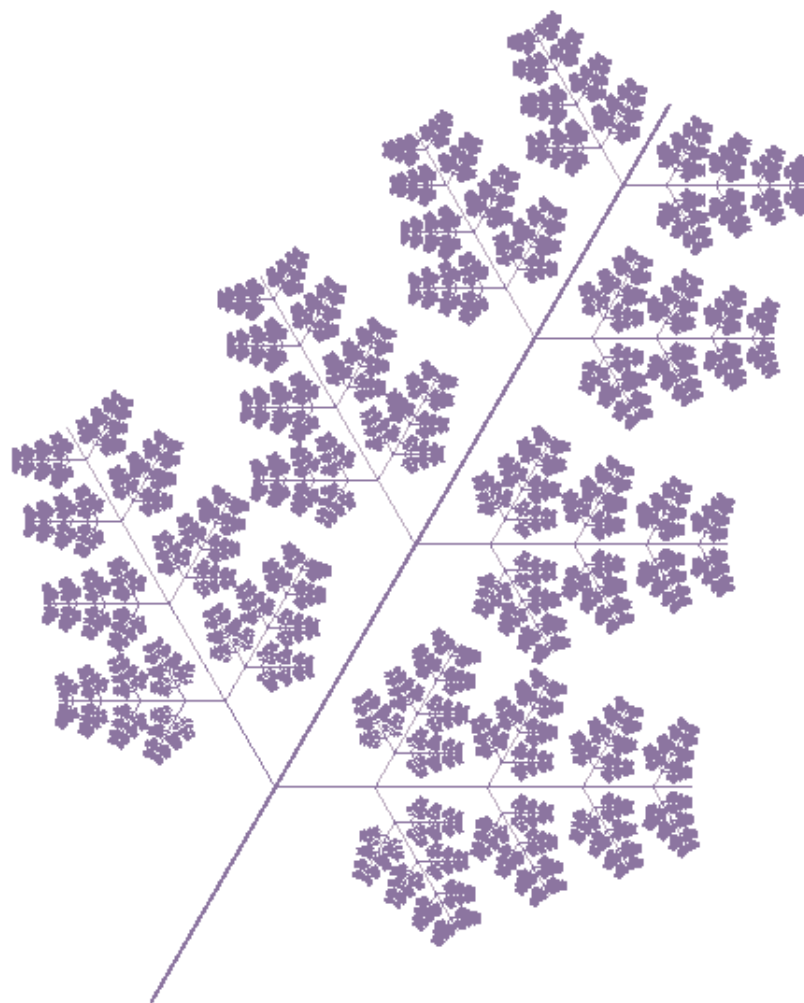
Increasing Travel Space

more roads
smaller vehicles

Underground roads
Elevated Roads
Using riverbanks
Bicycles
Lightweight motorcycles
Very small cars

CHAOS THEORY: LESSONS FOR THE ENVIRONMENT OF AUDITING

What do you see?

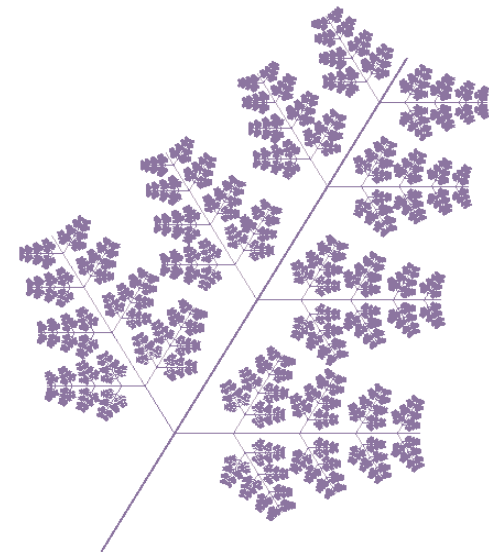


Definitions

Chaos theory

- science that determines order in the randomness and unpredictability that exist in the natural and social systems

Ex: coastlines, mountains, clouds, galaxy clusters, leaves, heart rhythms, etc.



Key Messages- SWOT Analysis

- Given a specific problem, SWOT is a tool to identify Strengths (S) and Weaknesses (W) that are internal to an organization, and the Opportunities (O) and Threats (T) that are external to it
- Strategies are formed by pairing off Strengths with O or T, and Weaknesses with O or T
 - S-O strategies
 - S-T strategies
 - W-O strategies
 - W-T strategies
- Cluster strategies according to some criteria
 - By shareholder, stakeholder, or systems component
 - By inputs, processes, outputs/outcomes
 - By stages of co-initiating, co-sensing, presencing, co-creating, co-evolving

Extensions to Chaos Theory-based SWOT

- Chaos theory-based SWOT modifies the standard SWOT tool by looking at how certain we are about each identified S, W, O, or T in the system that covers the problem you identified
 - Is the Strength 100% certain (orderly), not quite 100% certain (chaotic) or definitely not certain in terms of who, what, when, where, how, why (random)
 - Repeat the question for W, O, and T
 - Your strategies will now be different if the paired internal-external factors are not 100% certain
- W (random)-T (random) are hardest to strategize; this is like an organization with no contingency plan for a completely unpredictable event like natural disasters, or unforeseen political collapse of regimes
- S (orderly) – O (orderly) are easiest to strategize – just manage the issue well
- In between orderly and random systems are CHAOTIC conditions where expert guidance is needed – hence the call for leadership

When S, W, O or T are Random

- The extreme ends of strategy formulation are when internal and external environments are both random (both are surprises). Random forces are best studied by experts who see beyond one narrow discipline.
- Random S or W: from where is the surprise likely to come – Who? Why? How? When?, etc. Internal analysis requires deeper investigation of inputs, processes, and outputs of the entity being examined.
- Random O or T: same questions as above. External analysis requires expert advice based on their knowledge of global or regional or country-wide socio-cultural, economic, political, technological and environmental forces shaping trends affecting the entity (cf IMD Roadmap 2011-2050)
- Research by experts usually from think tanks, university-based research institutions, etc. are likely to anticipate these forces better than others

When S, W, O or T are Chaotic

- Here, **patterns** have to be created by experts familiar with the studies of academics as well as communities of practice.
- Not all of Who? How? What? When? and most likely the Why? can be answered at the same time, and hence these patterns are **partial** and not total systems views.
- The leader must explain the patterns to his stakeholders, and eventually to the larger communities.

Three Kinds of Systems for analyzing opportunity seeking

- Orderly System – clear predictable relations that repeat themselves
- Chaotic System – patterns can be made
- Random System – no patterns at all
 - What relationships are across variables
 - Who are affected, why, when, where, how

Apply to STEEP :

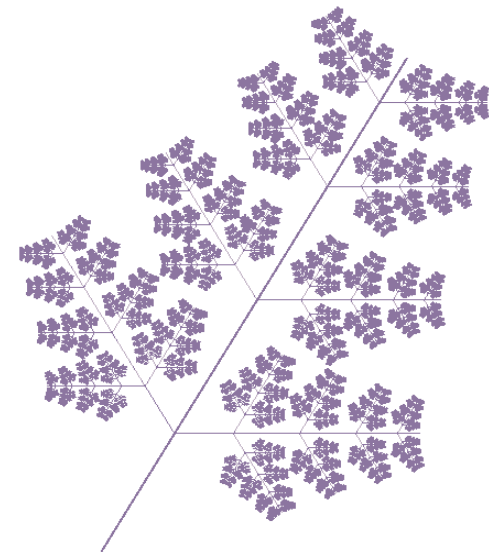
social, technological, economic, ecological
political environments of any system.

Definitions

Chaos theory

- science that determines order in the randomness and unpredictability that exist in the natural and social systems

Ex: coastlines, mountains, clouds, galaxy clusters, leaves, heart rhythms, etc.



Applications

Self-organization in public administration: citizens can co-create goals, plans, and outcome that can be sustained by them and communities

Dynamic evolution of industries and complex interactions among industry actors

Human interaction and leadership styles: business organizations as complex adaptive systems

Firms respond to changes in the environs more effectively if authentic relationships are valued at all levels of the companies

Monsanto experiment: overloading 22,000 people to find new and creative ways of adapting to new environ

Applications

Long-term strategies that are incremental and adaptive rather than prescriptive and rigid

Furnaces that burn hotter, metals that can be more stressed, cars that burn fuel without stalling out

Non-linear thinking in crisis management: real-time information provided by CNN during the Gulf War change political and military decisions unexpectedly

Underlying Principles

- Non-linearity
- Determinism
- Sensitivity to initial conditions
- Sustained irregularity in the behavior of the system
- Unpredictable long-term behavior
- Self-organization
- Positive feedback loops
- Qualitative character of systems rather than numerical predictions of future states
- Unstable
- Aperiodic – no periodic repetition of values

Characteristics of Systems

System	Order	Chaos	Randomness
Paradigmatic Example	Clocks, Planets	Clouds, Weather	Snow on TV Screen
Predictability	Very High	Finite, Short Term	None -> Simple Laws
Effect of Small Errors	Very Small	Explosive	Nothing BUT Errors
Spectrum	Pure	Yes!	Noisy, Broad
Dimension	Finite	Low	Infinite
Control	Easy	Tricky, Very Effective	Poor
Attractor	Point, Cycle, Torus	Strange, Fractal	No!

Six Thinking Hats: de Bono's Thinking Strategy

Hats are directions of thinking, not
description of an idea used to
categorize people ; everyone in a group
must think on the same aspect.

Blue Hat

- Used at the beginning and end of every session
- Beginning blue hat: why are we here, what are we thinking about, definition of the situation, alternative definitions, what we want to achieve, where we want to end up, background to the thinking, plan for the sequence of hats to be used
- Ending blue hat: what we have achieved, outcomes, conclusions, design, solution, next steps

White Hat

- White is neutral and objective –imitate a computer
- Everyone is looking at facts and figures
- Tier one: first class facts (proven)
- Second tier: facts believed to be true but not yet fully proven

Red Hat

- Red suggests anger, rage, emotions; red gives emotional point of view, allows to see other people's opinion or feelings.
- Ordinary emotions: dislike, fear, suspicion
- Complex judgments: hunches, intuition, sense, taste, aesthetic feeling and other types of feeling not visibly justified

Black Hat

- Black is somber and serious; wearing this hat means being cautious and careful.
- Consider risks, dangers, obstacles, potential problems, and downside of an idea – weak and harmful points of the subject.
- Focuses directly on the “caution” aspect
- Point out procedural errors in the thinking itself, but not to the extent of rejecting the concept of six hats

Yellow Hat

- Yellow is sunny and positive; yellow hat is optimistic and covers hopes and positive thinking
- Covers positive point of subject ranging from logical to practical dreams, visions, and hopes
- Allows us to search for benefits and opportunities and also suggestions on how to achieve higher goals

Green Hat

- Green is grass, vegetation, and abundant, fertile growth; green hat indicates creativity and ideas (mind experiments)
- Search for alternatives → provocation to take us out of our usual thinking patterns
- Lateral thinking requires not accepting or rejecting an idea but look at the idea in order to “see where you can move to” – one technique is to set up provocations: cars have square wheels, planes should land upside down (pp. 59-60, de Bono, Think! Before It's Too Late)

Ways of Setting Up Provocations (p.1)

- Arising: in addition to judgment, a remark arises in the course of discussion and can be deliberately set to provoke
- Escape: Pick up something that we usually take for granted: Watchdogs do not bark, restaurants have no chairs (pp. 61-62)
- Reversal: Take a normal relationship and reverse it — instead of filters to remove tar in cigarettes, add something -- add air with a tiny pinhole so that when you draw in smoke you dilute it with air, thus reducing the harmful particles deposited in the lungs)

Ways of Setting Up Provocations (p.2)

- Distortion: change sequence or change relationships – speak before you dial (voice-activated dialing, build a simple tape recorder into the phone (practise before you complain to customer service))
- Exaggeration: scale up or down – telephone calls that last only two minutes – compression; voters have a hundred vote each –for elections and referendum issues
- Wishful thinking: in the form of “wouldn’t it be nice if” – all telephone calls are friendly (green light for calls from certain numbers)
- More unlikely provocations – more powerful: life insurance that benefits not only the beneficiaries but also the insurer who is terminally ill (25% paid on death but 75% paid in hospital and other expenses) – LIVING NEEDS BENEFITS INSURANCE in Canada

Lateral Thinking: de Bono's Thinking Strategy

De Bono: Moving Across Patterns

- Edward de Bono is the major proponent of lateral thinking – moving laterally across patterns rather than just moving along them (see expansion of the definition below in item 3).
- He designed new thinking methods as practical ways to solve human problems creatively through ideas, using techniques of provocation (dismissing ideas, escaping ideas, reversing ideas, distorting ideas, exaggerating ideas, wishful thinking); successfully showed how new thinking has worked—

Ways of defining Lateral Thinking (1)

- a. **"You cannot dig a hole in a different place by digging the same hole deeper"**

This means that trying harder in the same direction may not be as useful as changing direction. Effort in the same direction (approach) will not necessarily succeed.

- b. **"Lateral Thinking is for changing concepts and perceptions"**

With logic you start out with certain ingredients just as in playing chess you start out with given pieces. But what are those pieces? In most real life situations the pieces are not given, we just assume they are there. We assume certain perceptions, certain concepts and certain boundaries. Lateral thinking is concerned not with playing with the existing pieces but with seeking to change those very pieces. Lateral thinking is concerned with the perception part of thinking. This is where we organise the external world into the pieces we can then 'process'.

Ways of defining Lateral Thinking (2)

- c. **"The brain as a self-organising information system forms asymmetric patterns. In such systems there is a mathematical need for moving across patterns. The tools and processes of lateral thinking are designed to achieve such 'lateral' movement. The tools are based on an understanding of self-organising information systems."**

This is a technical definition which depends on an understanding of self-organising information systems.

- d. **"In any self-organising system there is a need to escape from a local optimum in order to move towards a more global optimum. The techniques of lateral thinking, such as provocation, are designed to help that change."**

- This is another technical definition. It is important because it also defines the mathematical need for creativity.

Design Thinking

- “The whole emphasis of our intellectual culture and education is on judgment and analysis. Design is almost totally neglected.” (p. 69) . “Judgment is connected with ‘what is’. DESIGN IS CONCERNED WITH ‘WHAT COULD BE’.” (p. 70)
- “Design is putting together what we have in order to deliver the values we want.” (p. 69)
- “We badly need to BROADEN the meaning of the word ‘DESIGN’ to COVER ALL THOSE SITUATIONS WHERE WE PUT THINGS TOGETHER TO ACHIEVE SOME EFFECT. Whenever standard ROUTINE IS NOT ENOUGH, we need ‘design’.” (p. 73)
- “Design is the basis of action.”(p. 74)

Perceptual Thinking

- “Instead of accepting or rejecting an idea, you LOOK AT AN IDEA IN ORDER TO ‘SEE WHERE YOU CAN MOVE TO.’” (p. 71) “Problem-solving, like critical thinking is excellent – but it is not enough. Excellent but not enough is the theme in many sections of this book. .. The danger is that all other activity is blocked by our reverence for these things.” (p. 163)...
- PERCEPTION (chapter 10, “the most important section in this whole book”) is a key part of thinking. Prof. David Perkins of Harvard : 90% of errors in think are errors of perception. Logic plays only a small part... Goedel’s Theorem: from within any system, you can never logically prove the starting points – no matter how logical you might be. (FMM: the chicken vs. the egg issue) “ The starting points are arbitrary perceptions and assumptions that cannot be proved logically. So no matter how logical you think you are, your conclusion will be determined by your starting points, not the excellence of your logic.” (p. 137)

Perceptual Thinking (2)

- “If perception is indeed so very important in thinking, why have we totally neglected it?...
- The main reason is that the thinking determined by the Church in the early Middle Ages did not need perception. What was needed was truth, logic, argument to prove the heretics wrong.
- There was no need for perception because you were not dealing with the real world...
- Another reason why we have neglected perception is that we did not know what to do about it. “

Creative Thinking (1)

- “The human brain is not designed to be creative. It is designed to set up routine patterns and to use and follow these patterns. That is why life is practical and possible.” (p. 21)
- “Creativity is needed to offer new values through new products and new services.” (p. 23) “I am writing about IDEA CREATIVITY and LATERAL THINKING rather than artistic talent.” (p. 27)
- BRAINSTORMING does have value, but it is a VERY WEAK process COMPARED WITH some FORMAL TOOLS OF LATERAL THINKING.” (p. 26)
- “Creativity is indeed logical, but it is a different sort of logic... With CREATIVITY, the UNIVERSE is that of a SELF-ORGANIZING PATTERNING SYSTEM THAT MAKES ASYMMETRIC PATTERNS. Logic defines the rules of behavior within this rather special universe.” (pp. 29-30)

Creative Thinking (2)

- “We exist because the brain is a self-organizing information system that allows patterns to form from incoming information.” (p. 30)
- “There is a pattern whenever the change from one state to the next has a higher chance of happening in one direction than in any other... Patterning systems tend to be asymmetric though... Asymmetry is the logical basis for both humour and creativity.... Sudden switch in perception eventually makes sense” (passim 31-35) – “You suddenly see something differently and it makes sense in hindsight.” (p. 35)

Training Exercise

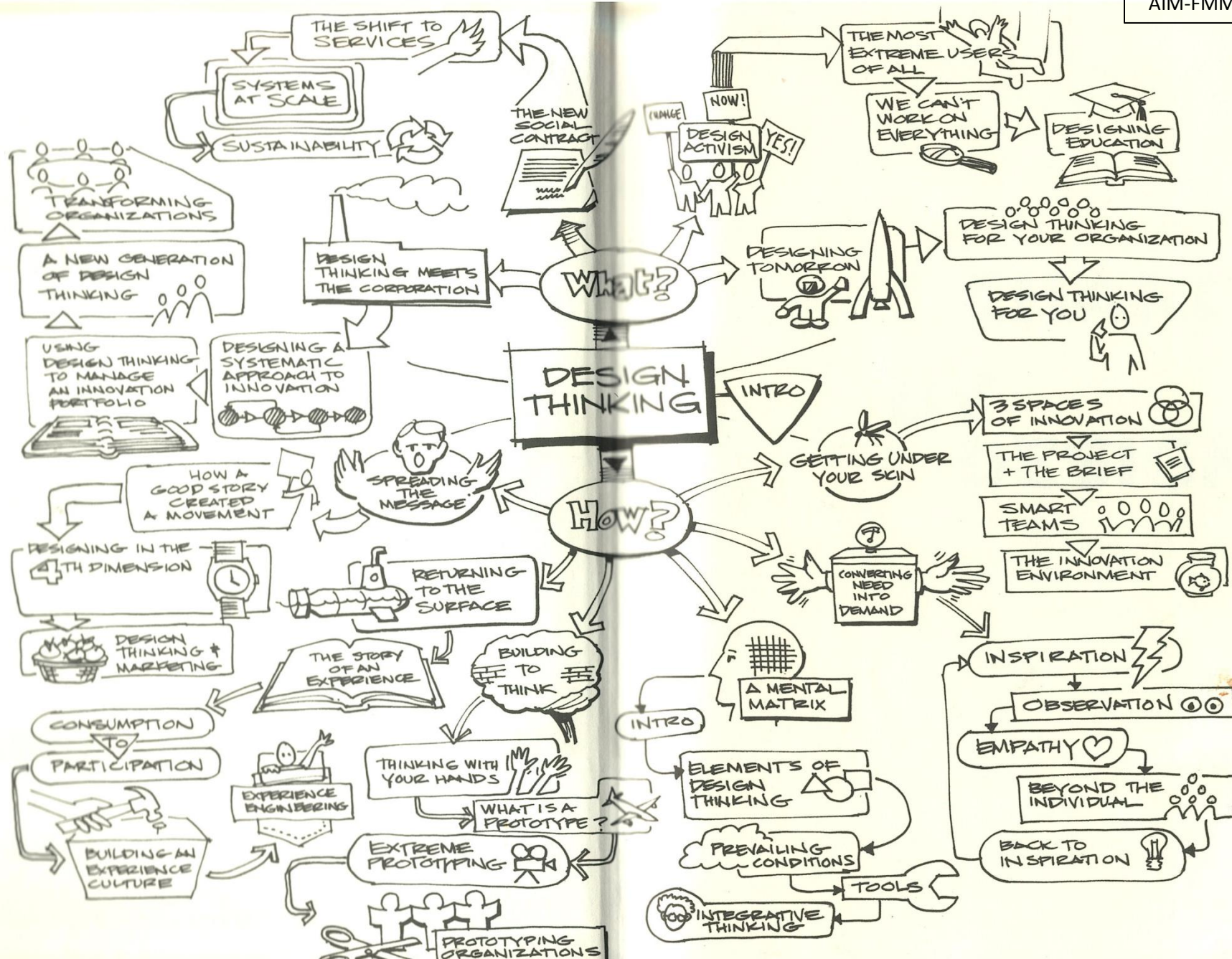
- Step 1. Divide the participants into those who answered Extravert vs. Introvert
- Step 2. Divide the two groups further into those who answered Sensing or iNtuition
- Step 3. Divide those in Step 2 further into those who answered Thinking vs. Feeling
- Step 4. Divide those in Step 3 further into those who answered Judging vs. Perceiving

Team Analysis Exercise

Step 1. Identify each member's name in the appropriate Team Type table

Step 2. Enter the number and percentages of each of the 8 preferences of your team.

Step 3. Enter the Team Leadership's Type Preferences at the bottom of the MBTI Tool Team Analysis Grid



IV. FINANCIAL CRISIS INQUIRY COMMISSION SUMMARY REPORT

Financial Crisis Inquiry Commission Summary Points

• **We conclude this financial crisis was avoidable.** The crisis was the result of human action and inaction, not of Mother Nature or computer models gone haywire. The **captains of finance and the public stewards of our financial system ignored warnings and failed to question, understand, and manage evolving risks** within a system essential to the well-being of the American public. Theirs was a big miss, not a stumble. While the business cycle cannot be repealed, a crisis of this magnitude need not have occurred. To paraphrase Shakespeare, the fault lies not in the stars, but in us.



Financial Crisis Inquiry Commission Summary Points



- We conclude widespread failures in financial regulation and supervision proved devastating to the stability of the nation's financial markets. The sentries were not at their posts, in no small part due to the widely accepted **faith in the self correcting nature of the markets** and the ability of financial institutions to effectively police themselves. More than 30 years of deregulation and reliance on self-regulation by financial institutions, **championed by** former Federal Reserve chairman **Alan Greenspan** and others, supported by successive administrations and Congresses, and **actively pushed by the powerful financial industry at every turn, had stripped away key safeguards, which could have helped avoid catastrophe.**

Financial Crisis Inquiry Commission Summary Points

- **We conclude dramatic failures of corporate governance and risk management at many systemically important financial institutions were a key cause of this crisis.** There was a view that instincts for self-preservation inside **major financial firms** would shield them from fatal risk-taking without the need for a steady regulatory hand, which, the firms argued, would stifle innovation. Too many of these institutions **acted recklessly, taking on too much risk, with too little capital, and with too much dependence on short-term funding.** In many respects, this reflected a fundamental change in these institutions, particularly the **large investment banks and bank holding companies**, which focused their activities increasingly on risky trading activities that produced hefty profits. They **took on enormous exposures in acquiring and supporting subprime lenders and creating, packaging, repackaging, and selling trillions of dollars in mortgage-related securities, including synthetic financial products.** Like Icarus, they never feared flying ever closer to the sun

Financial Crisis Inquiry Commission Summary Points

- We conclude a combination of excessive borrowing, risky investments, and lack of transparency put the financial system on a collision course with crisis... In the years leading up to the crisis, **too many financial institutions, as well as too many households, borrowed to the hilt**, leaving them vulnerable to financial distress or ruin if the value of their investments declined even modestly.



- **We conclude the government was ill prepared for the crisis, and its inconsistent response added to the uncertainty and panic in the financial markets.** As our report shows, key policy makers—the **Treasury Department, the Federal Reserve Board, and the Federal Reserve Bank of New York**—who were best positioned to watch over our markets **were ill prepared for the events of 2007 and 2008.**



Financial Crisis Inquiry Commission Summary Points

- **We conclude there was a systemic breakdown in accountability and ethics.** The integrity of our financial markets and the public's trust in those markets are essential to the economic well-being of our nation... Unfortunately—as has been the case in past speculative booms and busts—we witnessed an erosion of standards of responsibility and ethics that exacerbated the financial crisis. This was not universal, but these breaches stretched from the ground level to the corporate suites. They resulted not only in significant financial consequences but also in damage to the trust of investors, businesses, and the public in the financial system.



Financial Crisis Inquiry Commission Summary Points

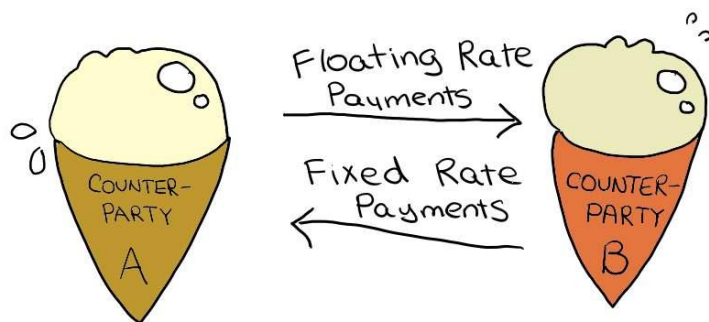
- We conclude collapsing mortgage-lending standards and the mortgage securitization pipeline lit and spread the flame of contagion and crisis. When housing prices fell and mortgage borrowers defaulted, the lights began to dim on Wall Street. This report catalogues the corrosion of mortgage-lending standards and the securitization pipeline that transported toxic mortgages from neighborhoods across America to investors around the globe.



Financial Crisis Inquiry Commission Summary Points

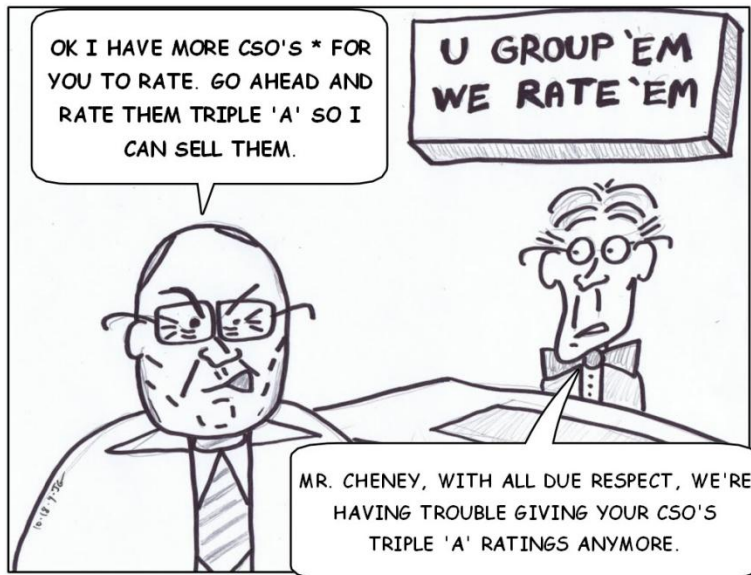
- **We conclude over-the-counter derivatives contributed significantly to this crisis.** The enactment of legislation in 2000 to **ban the regulation by both the federal and state governments of over-the-counter (OTC) derivatives** was a **key turning point in the march toward the financial crisis.**

PLAIN VANILLA SWAP



Financial Crisis Inquiry Commission Summary Points

- **We conclude the failures of credit rating agencies were essential cogs in the wheel of financial destruction.** The three credit rating agencies were key enablers of the financial meltdown. The mortgage-related securities at the heart of the crisis could not have been marketed and sold without their seal of approval. Investors relied on them, often blindly. In some cases, they were obligated to use them, or regulatory capital standards were hinged on them. **This crisis could not have happened without the rating agencies.** Their ratings helped the market soar and their downgrades through 2007 and 2008 wreaked havoc across markets and firms.



Chaotics

The Business of Managing and
Marketing in the Age of Turbulence

By Philip Kotler and John A. Caslione
American Management Association, 2009

Three Underlying principles of strategy execution amidst chaos:

- a. Disorientation and confusion reign
- b. Communication in imperative
- c. Achieving the ultimate objective guides all actions

Pragmatic steps that business executives can take:

- a. Make strategic planning more dynamic, interactive and compressed into shorter time cycles --- sequenced in three-month intervals, rather than reviewed and adjusted once a year.

In these shorter cycles, responsibilities, authorities, accountabilities, and performance measurements may be realigned as needed.

- b. Facilitate cross-functional decision making at key levels to drive better, faster decisions.
- Key decision makers must be in closer physical proximity and connected with more frequent and faster interactive communication channels.
 - More stakeholder representatives should be included in the discussion and decision-making process.

- c. Break large organizations down into smaller, flatter groups and subgroups to facilitate and achieve faster reaction times.
- Responsibilities, authorities, and accountabilities should be driven down to the lowest possible level.
 - Hard and soft skills must be raised significantly to improve the quality of decision.
 - The smaller groups must be able to reach other relevant groups on a global basis.

Planning for Today

- a. Clearly defining the business
- b. Shaping the business to meet the needs of today's customers
- c. Improving alignment between functional activities and business definition
- d. Mirroring current business activities
- e. Optimizing current operations to achieve excellence

Planning for tomorrow

- a. Redefining the business
- b. Reshaping the business to compete with future customers and markets
- c. Making bold moves away from the existing ways of doing business
- d. Reorganizing for future business challenges
- e. Managing change to create future operations and process

Short Term

The short-term box is about managing the present. It should include projects related to improving the core business.

Most of the projects have to do with filling the performance gap in the core business. It may be striving to reach six sigma performance; it may be rightsizing or copying the best practices of competitors.

Most of these projects are operational and aimed at gaining more efficiency.

Triple Planning

Mid-Term

The mid-term box is about selectively forgetting the past. It should include projects aimed at entering adjacent spaces next to the core business.

These projects are not about performance improvement as much as filling the opportunity gap.

The company needs to exploit nonlinear, discontinuous changes such as the internet, new media, customer empowerment, and the rise of emerging countries such as China and India.

Triple Planning

Long Term

The long-term box is entirely new space. It should include concepts for the future --- say, for the year 2020 --- that may or may not be possible.

Examples: going to the moon, unraveling the human genome, a \$2,000 car, a \$100 computer, and other dream projects.

Projects of this kind are characterized by a high ratio of assumptions to knowledge. But by working slowly on these concepts and learning more, the ratio of assumptions to knowledge will fall over time.

Common Characteristics of Firms of Endearment

- a. They align the interests of all stakeholder groups.
- b. Their executive salaries are relatively modest.
- c. They operate an open-door policy that allows access to top management.
- d. Their employee compensation and benefits are high for the category; their employee training is longer; and their employee turnover is lower.
- e. They hire people who are passionate about customers.
- f. They view suppliers as true partners who collaborate in improving productivity and quality and lowering costs.
- g. They believe that their corporate culture is their greatest asset and primary source of competitive advantage.
- h. Their marketing costs are much lower than their peers while customer satisfaction and retention is much higher.

Characteristics of companies that have lived a long life

Arie de Geus – line manager at Royal Dutch Shell, initiated a study of companies that have enjoyed long lives. He wrote , “The natural average lifespan of a corporation should be as long as two or three centuries”.

Average corporate life expectancy

in Japan and Europe: 12.5 years

vs. multinational : between 40 and 50 years.

Thirty companies have been around for at least 100 years.

He published his findings in the book The Living Company.

His contention is simple: that companies can survive and thrive for centuries, provided they focus on selected aspects as their character and operations.

Characteristics of companies that have lived a long life:

- a. Sensitivity to the world around them. Long-lived companies sample, learn, and adapt to what is going on around them.
- b. Awareness of their identity. They are cohesive and have a strong sense of identity based on the ability to build a shared community.
- c. Tolerance to new ideas. They are patient, generally decentralized, with widespread decision-making authority, and tolerant of “noncore” activities on their periphery (which may well become tomorrow’s core).
- d. Conservatism in financing. They are conservative with their money, which they use to govern their own and to give them options.

De Geus also found that the thirty long-lived companies he identified gave high priority to the following practices:

- a. Valuing people, not assets
- b. Loosening steering and control
- c. Organizing for learning
- d. Shaping the human community