Presentation on

Knowledge Management

By Jaap Pels
For

RCD Workshop 17 Dec 2002

The Knowledge Iceberg
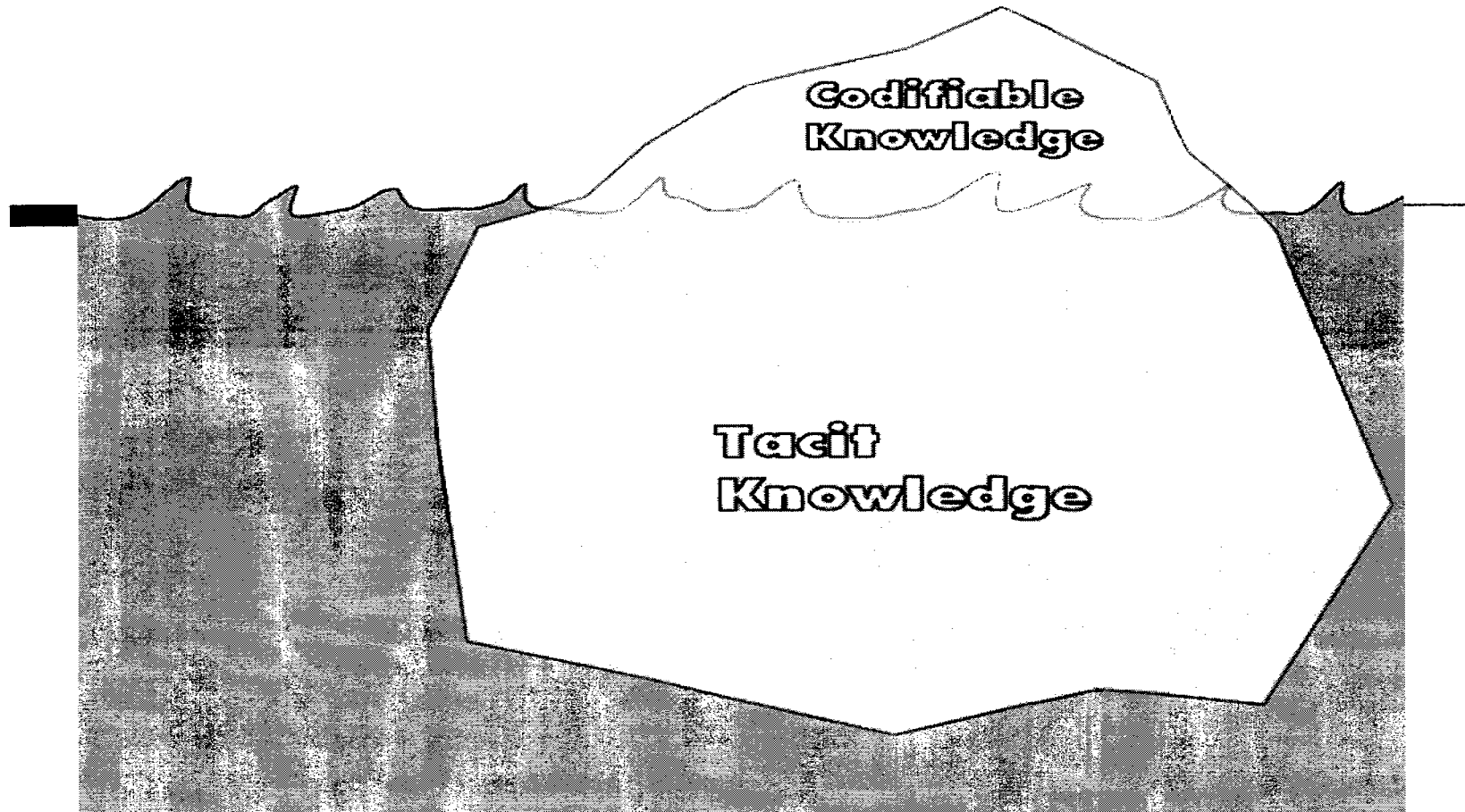

Codifiable Knowledge

Tacit Knowledge

Knowledge Management
Program of this presentation

⚑ 3 Definitions and backgrounds

Σ 33 Knowledge Value Chain The Model

   √ KVC Mission, Vision and Goal (s)

   √ KVC Description chain / Close the loop

   √ Organisational Design Variables

☠ 47 KVC by column and 'Harvard style'

💣 100 Knowledge Value Chain IRC

☺ 142 Loose ends and ... links to RCD

Definitions and backgrounds

explicit knowledge
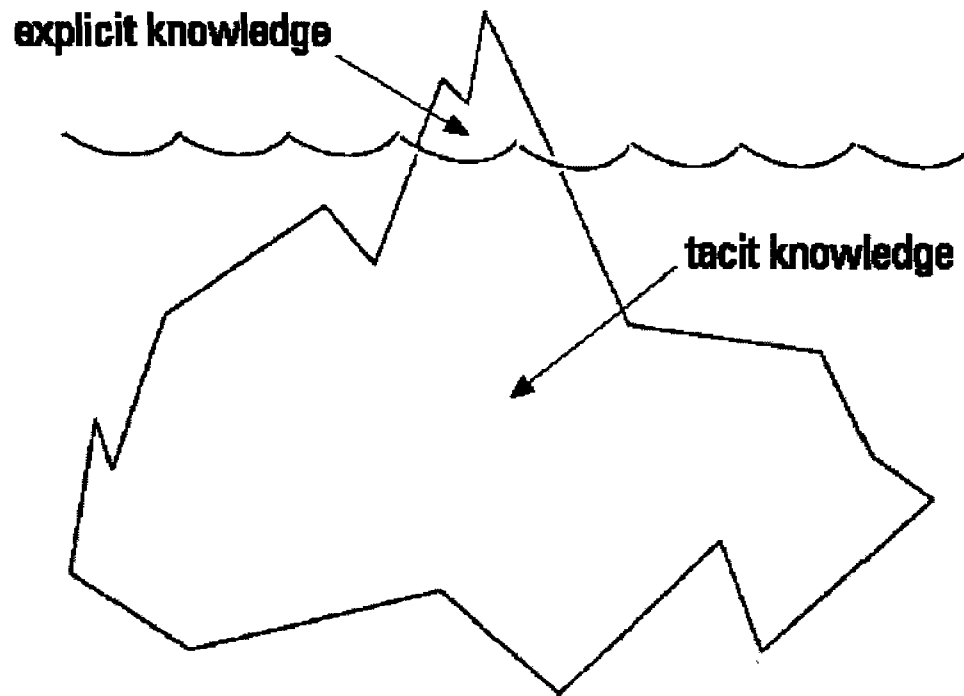
tacit knowledge

Knowledge and Music

Information Is Not Knowledge...

Knowledge Is Not Wisdom...

Wisdom Is Not Truth...

Truth Is Not Beauty...

Beauty Is Not Love...

Love Is Not Music...

Music Is The Best...

Frank Zappa, 1940-1993

Knowledge Management

- ☐ <u>Google on KM</u>
- ☐ <u>KM4DEV community</u>
  - ■ Resources Documents Org. KM Profiles
- ☐ *<u>Knowledge Transformation® Int.</u>* (FAQ)
- ☐ I chose the Weggeman Knowledge Value Chain as a working model

There is nothing so practical as good theory

Kurt Lewin

Knowledge Management in Math

- ☐ Weggeman: $K = I \times f(e_x s_x a)$
    - K = knowledge
    - I = information
    - e = experience
    - s = skills
    - a = attitude

- ☐ Kathleen:
    - knowledge is information in use

Knowledge Management in SNV

- Knowledge is a conscious or unconscious personal capacity that enables someone to execute a particular task. As such, knowledge is a product of the information, the experience, the skills and the attitude available to that person at that moment

- Knowledge management is seen as a process that has to have direct and concrete benefits in our performance: that is in the quality of the service to the client and of the individual advisor's performance

Knowledge Management definition Weggeman

- [ ] Knowledge management is set up the Knowledge Value Chain in such a way that the **return** **o**n **i**nvestment and **pleasure** from the <u>production</u> <u>factor</u> Knowledge increases.
- [ ] De Knowledge Value Chain as **cyclic process** is based on the organisations mission, vision, goals and strategy.
- [ ] The value chain **can** form a good basis for developing a plan related to KM.

Knowledge Management
and Water Cooler Technology

☐ A majority of knowledge sharing
takes place during informal
conversation around the water cooler
(Nancy C. Shaw)

SCHOOL OF MANAGEMENT

George Mason University

Knowledge Management versus Information Management

Informatiecyclus   **Kenniscyclus**

Verzamelen / Absorptie ←············· informatie ··· **Delen** ⟶ **Toepassen**[1]

Evaluatie / Onderhoud   Opslag / Verwerping

Distributie ←············ informatie ············→ **Generatie** ← **Evalueren**

[1] hier gaat de kennisvergelijking K=I.eva op

Knowledge Management versus Information Management

Information cycle

Knowledge cycle

Gather / Absorb ← Information | Share — Apply *

Evaluate / Maintain | Store / Dump

Distribute — Information → Generate — Evaluate
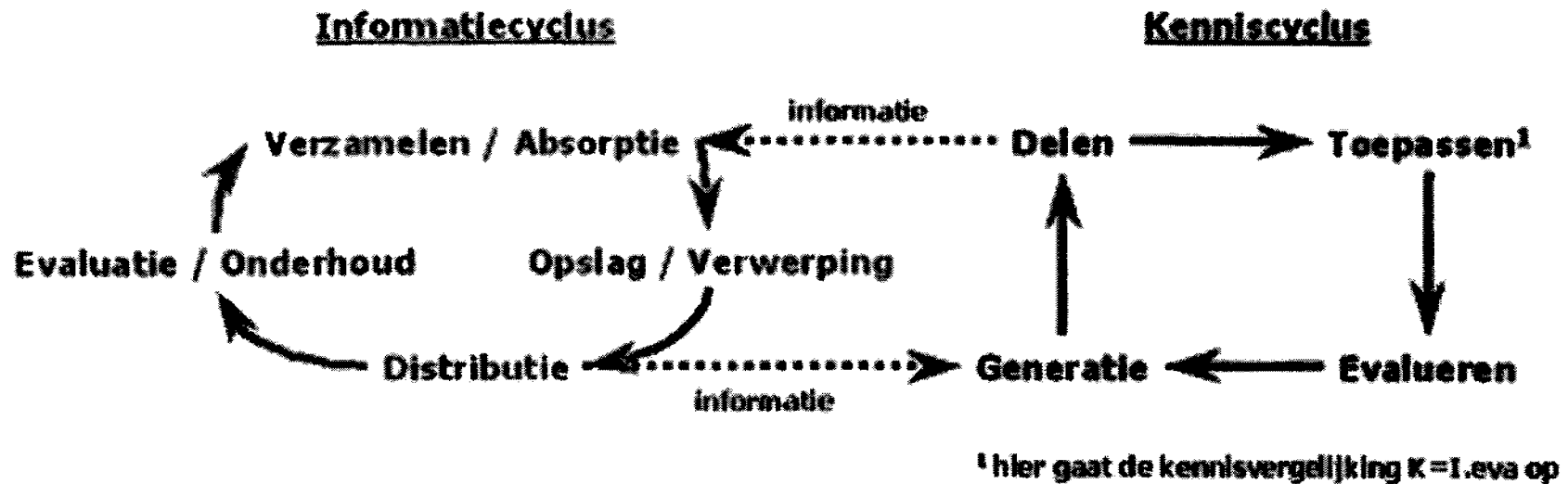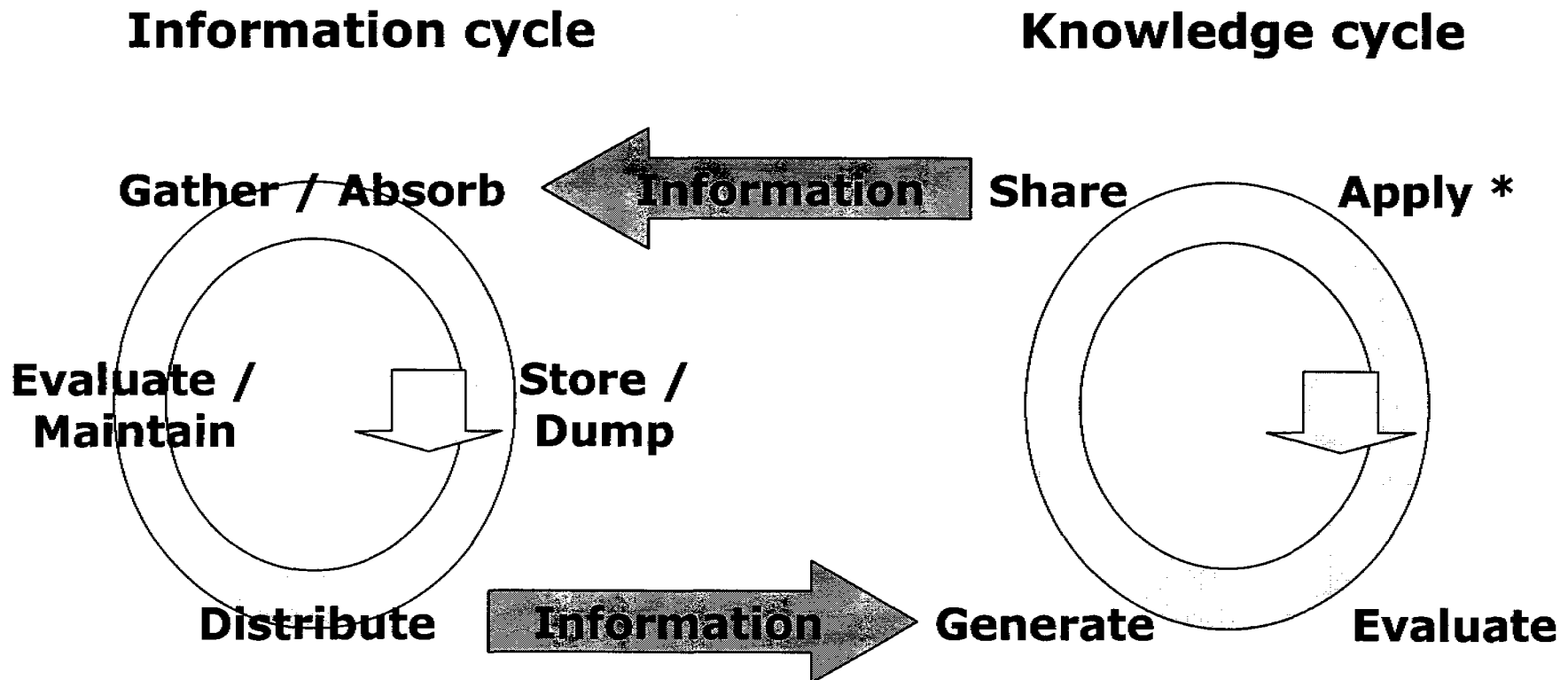
* Here: K = I*f(esa)

Knowledge Management versus Information Management

- **IM = process / operational**
  - Structured data
  - Clear task repetition
  - Low impact / activity
  - Products, orders, bills, stock, requests, scheme's etc
  - **Internal processes**

  - Structured administrative and logistic processes
  - Administration, planning, data warehousing, EDI
  - Emphasis on **data processing and task automation**
  - Formal info-exchange, management reports

  - **Individual access** to organizational data
  - Added value: **efficiency**, quality avoid mistakes

- **KM = policy / managerial**
  - **Un**structured processes
  - Complex unique tasks
  - **High impact** / activity
  - Analysis, views, logic, conclusions, procedures, methods and techniques
  - **External (f) actors** (competitor, market, politics
  - Management, policy, planning, design, research, sales
  - DIS, multimedia, intra/internet

  - Emphasis on **doc-info-systems Knowledge exchange**
  - **In**formal exchange of knowledge, information and advocacy, background information
  - **Organization wide access to knowledge of individuals**
  - Added value: **effectively** policy, design quality, capitalize chances

From KM-handbook by J. Mackenzie Owen

Knowledge Management versus Information Management

☐ **Data / information management**

- ■ Processing large volumes of facts with little human interaction
- ■ Puts data into organized frameworks

☐ **Knowledge Management**

- ■ Requires human interaction – material must be organized to facilitate human access to it.
- ■ KM provides links between organized frameworks.

Knowledge Management Definitions of Data

☐ Unorganized facts, static's, opinions and predictions gathered from various sources inside and outside the company [Gate1995]

☐ Symbolical reflection of numbers, quantities, magnitudes or facts [Weggeman1997]

☐ Statements or facts that are raw material and have no tangible meaning until used [leman1998]

Knowledge Management Definitions of Information

- ☐ Interpreted data. [SF00]
- ☐ Data that is relevant for a specific purpose [Gate1995]
- ☐ Data where a meaning can be recognized [VSS1997]
- ☐ Data that has been interpreted and has a meaning for the individual who has interpreted the data [Weggeman1997]
- ☐ The of the comparison of data which are situation ally structured in order to arrive at a message that is significant in the given context [Weggeman1996]
- ☐ The raw material of knowledge [Kemp1999

Knowledge Management
Definitions of Knowledge 1

- ☐ Information in action [SF00]
- ☐ Information transformed into capability for effective action. [SF00]
- ☐ What we know and what we can do [Tecs1999]
- ☐ Use of information [Csuisse2000]
- ☐ A personal ability to perform a certain task [Weggeman1997]
- ☐ Experience, intuition and judgment [Pimsleur]
- ☐ The opportunity to give a meaning to data and to convert it into information [Leman1998]

Knowledge Management Definitions of Knowledge 2

- ☐ Knowledge is what people know [Daven1997]
- ☐ Knowledge is the capacity that enables someone to perform a particular task and it is obtained with the aid of information [Kemp1999]
- ☐ The overwhelmingly important productive resource in terms of its contribution to value added and its strategic significance [Grant1997]
- ☐ The primary production factor [Kemp1999]
- ☐ A crucial factor in providing organizations with lasting competitive advantage [Kemp1999]
- ☐ A product of information, experience, skills and attitude [Kemp1999]

But what is knowledge? S. Song
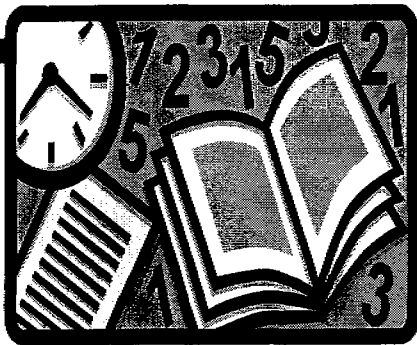
Data
A record of a change of state
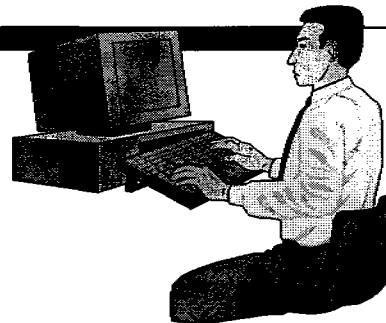
A Music Note

Information
Data organized with a purpose.
A message
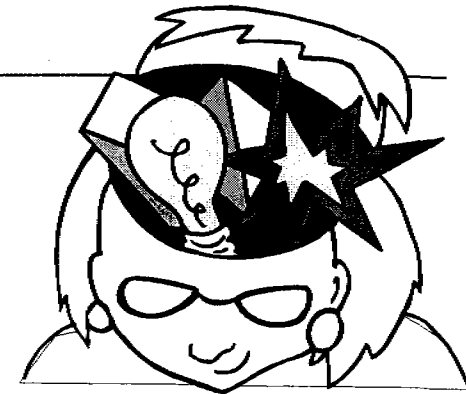
A Music Score

Knowledge
Literally... what people know.
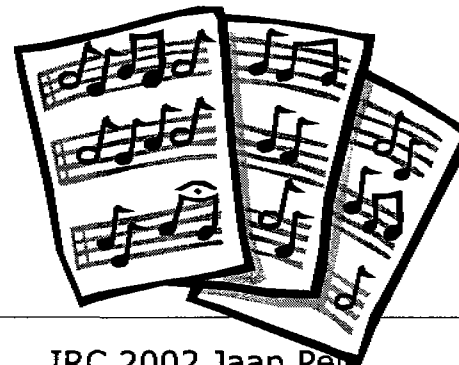
A Performance

IRC 2002 Jaap Pels

Knowledge Management Definitions of Competence

- ☐ A set of intellectual capabilities, which enable an organizational entity to act [Kemp1999]
- ☐ A product of information, experience, skills and attitude [Weggeman1997]
- ☐ A personal mastery and mental models: ability to discover, invent, produce and observe [Senge]
- ☐ Ability to create new knowledge through a dynamic interplay of tacit and explicit knowledge [Nota1995]
- ☐ Ability to perform knowledge work [Prieto1998]
- ☐ Human capital [Hackett1997]

Knowledge Management Process

- ☐ "The process through witch firms create and use their institutional and collective knowledge".[Msarv1999]
- ☐ "KM deals with organizing and controlling the operational processes in the knowledge value chain in the most efficient way" [Weggeman19997]
- ☐ "KM focuses on facilitating and managing knowledge related activities such as creation, capture, transformation and use" [Wiig1997a]
- ☐ KM is the systematic, explicit, and deliberate building, renewal, and application of knowledge to maximize an enterprise's knowledge-related effectiveness and returns from its knowledge assets. [Wiig 1997b]

Knowledge Management
Learning Organization

- ☐ "Firms that purposefully construct structures and strategies so as to enhance and maximize organizational learning "[Dodgson1993]

- ☐ "Organizations that continually expand their ability to shape the future" [Senge1992]

- ☐ "Firms that make continual learning a way of organizational life, especially improving the performance of the organization as a total system" [kemp1999]

Knowledge Management
Knowledge intensive organization

- "An organization where knowledge is a competitive production factor and where knowledge is of primary importance for the achievement of the business objectives" [leman1998]

- "An organization where humans with high degree of knowledge are critical for the primary work of the organization" [kemp1999]

- "An organization with mainly knowledge workers in the primary process or at least in the technical staff when this has a dominant influence on the functioning of the <u>primary process</u>" [Weggeman1996]

Knowledge Management The primary process hor. & vert. governance

Time ──────────────────────────────►

Questions
Problems
Cases

Knowledge workers
Protocols, standards, 'how to' plans
effort

Answers
solutions
Decisions

Horizontal

Vertical

Plan (**what to do**)   Facilitate *   Check (**result**)

Managers

* Planning & control
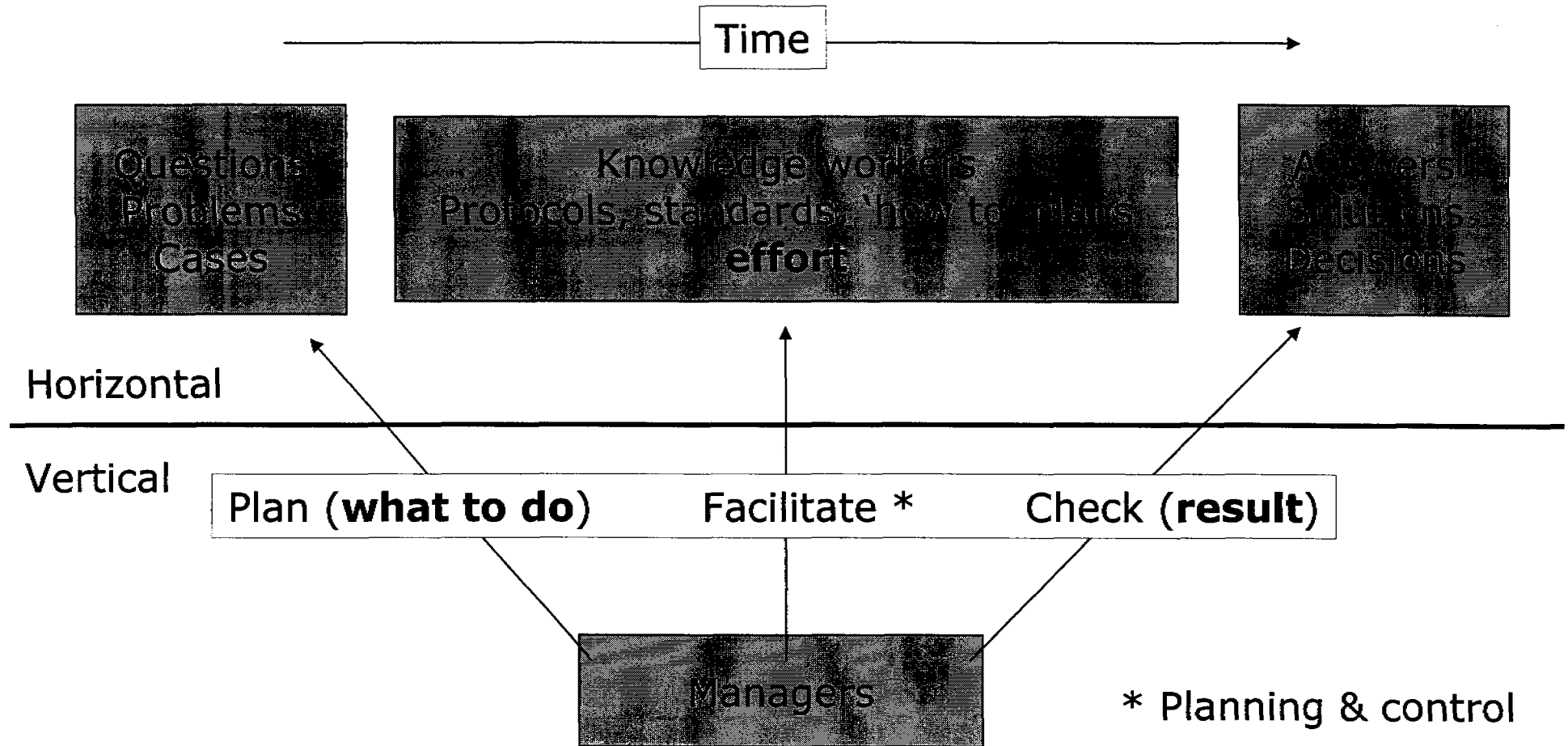
Vertical governance:
Some cycles to setup:

- ☐ Cycle 5 year plan Strategy / BP
- ☐ Cycle year plan BP / plan money
- ☐ Planning, mid year an End year talks personnel
- ☐ Meetings MT / ICT group / sections
- ☐ Meetings / presentations Board / Sponsor / internal
- ☐ Annual reports (social, financial and content)
- ☐ Events to attend / present projects / score
- ☐ PR / press conferences / press releases

KVC in organizational context
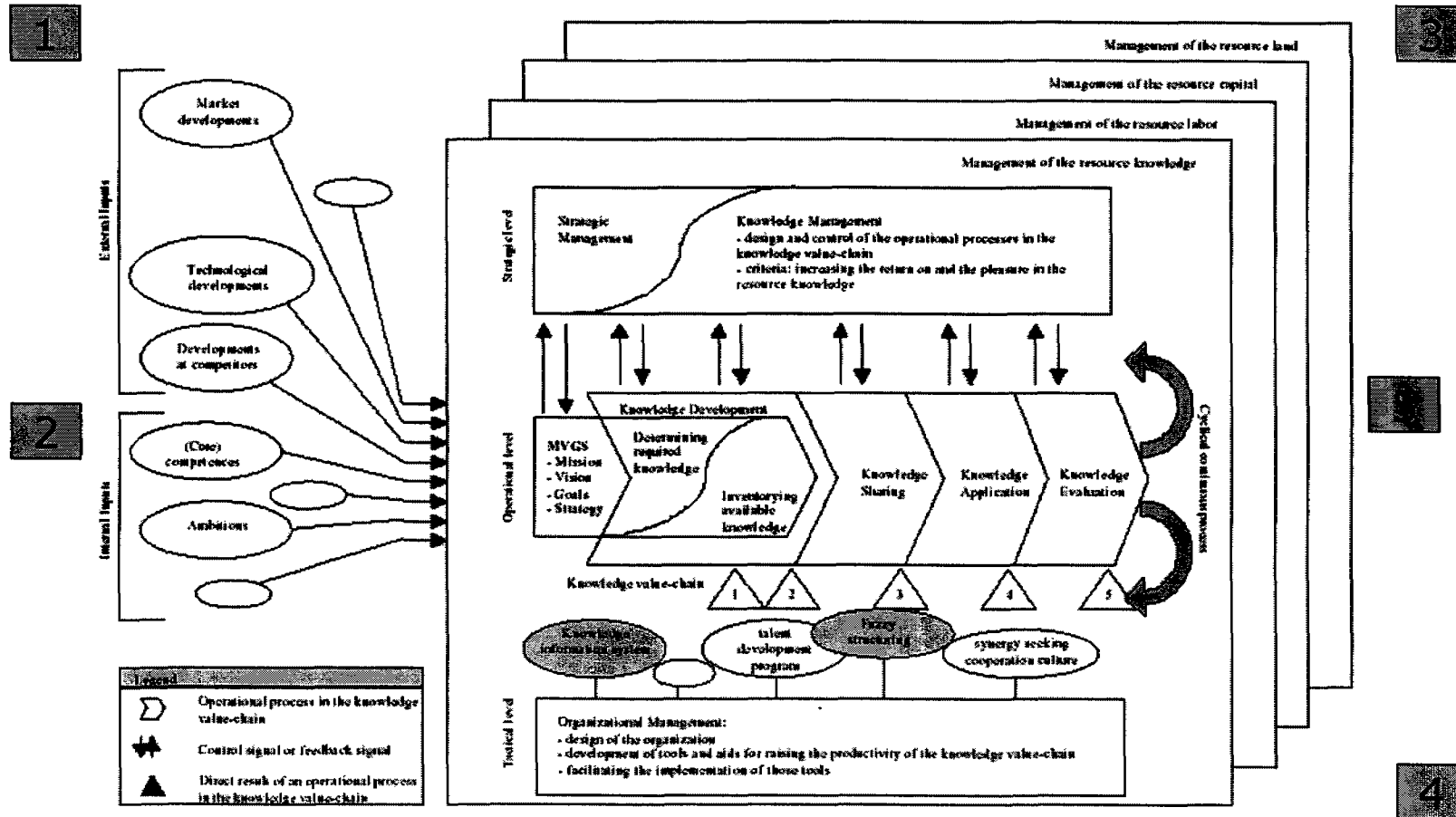
Context: External inputs
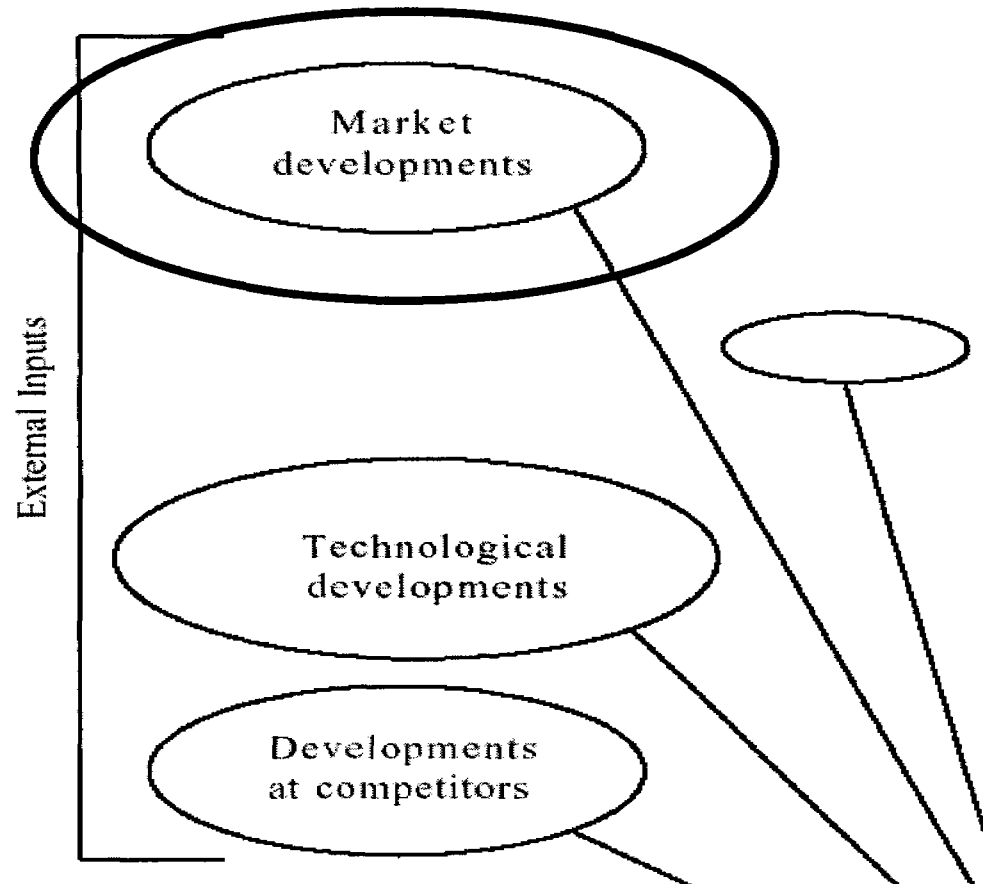
Context: Internal inputs
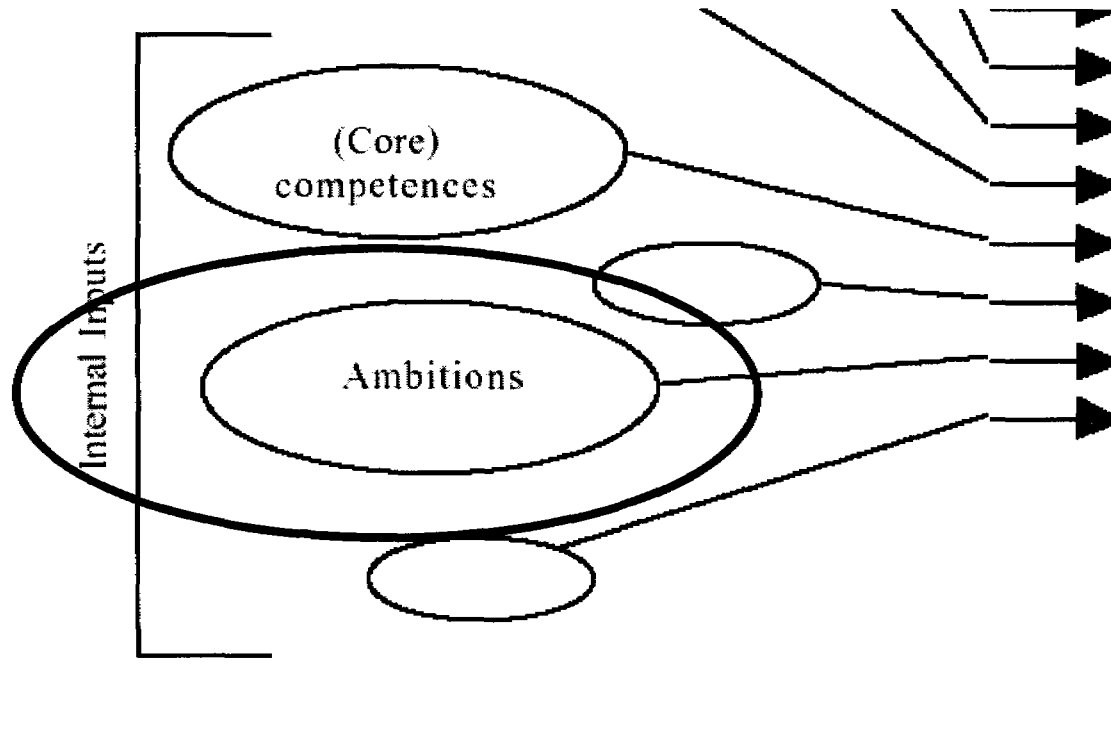
Context: Strategic level

3

Management of the resource land

Management of the resource capital

Management of the resource labor

Management of the resource knowledge

Knowledge Management
- design and control of the operational processes in the knowledge value-chain
- criteria: increasing the return on and the pleasure in the resource knowledge

Context: Tactical level

talent
development
program

synergy seeking
cooperation culture

Tactical level

Organizational Management:
- design of the organization
- development of tools and aids for raising the productivity of the knowledge value-chain
- facilitating the implementation of those tools

Context: Operational level

Operational level

MVGS
- Mission
- Vision
- Goals
- Strategy

Knowledge Development

Determining required knowledge

Inventorying available knowledge

Knowledge Sharing

Knowledge Application

Knowledge Evaluation

Cyclical continuous process

Knowledge value-chain

1   2   3   4   5
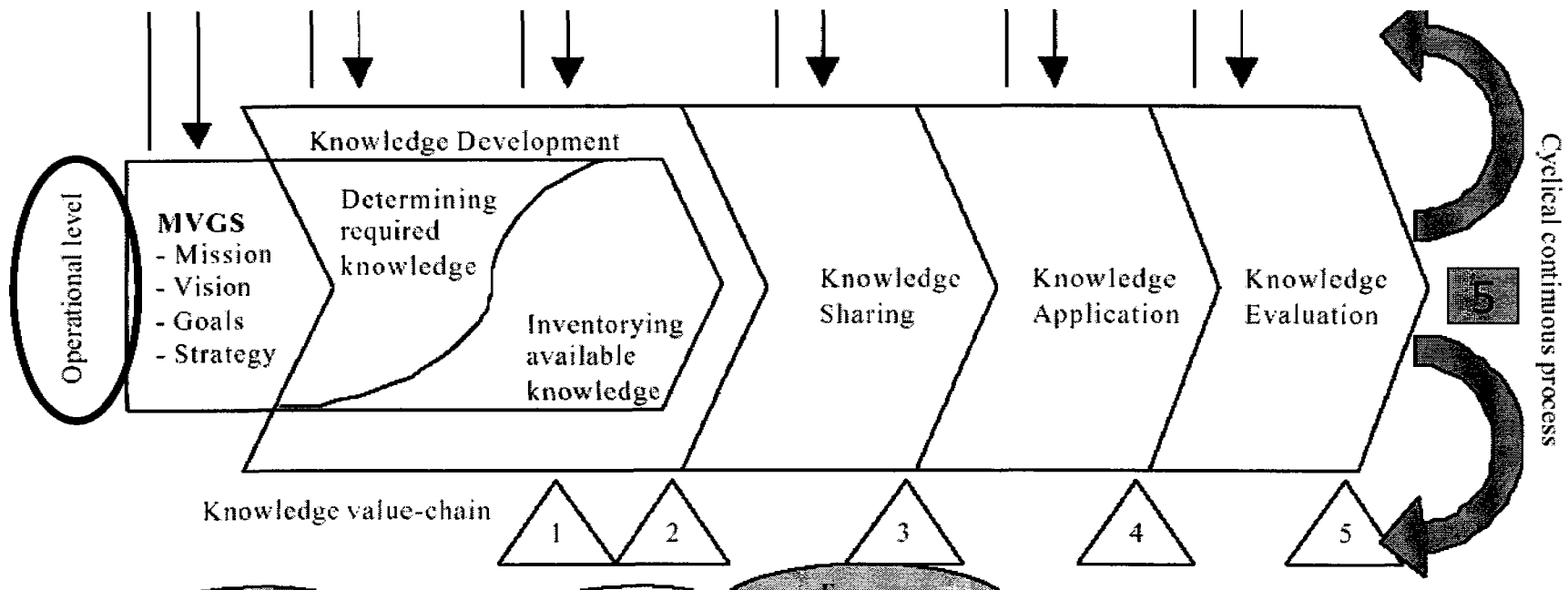
KVC in organizational context
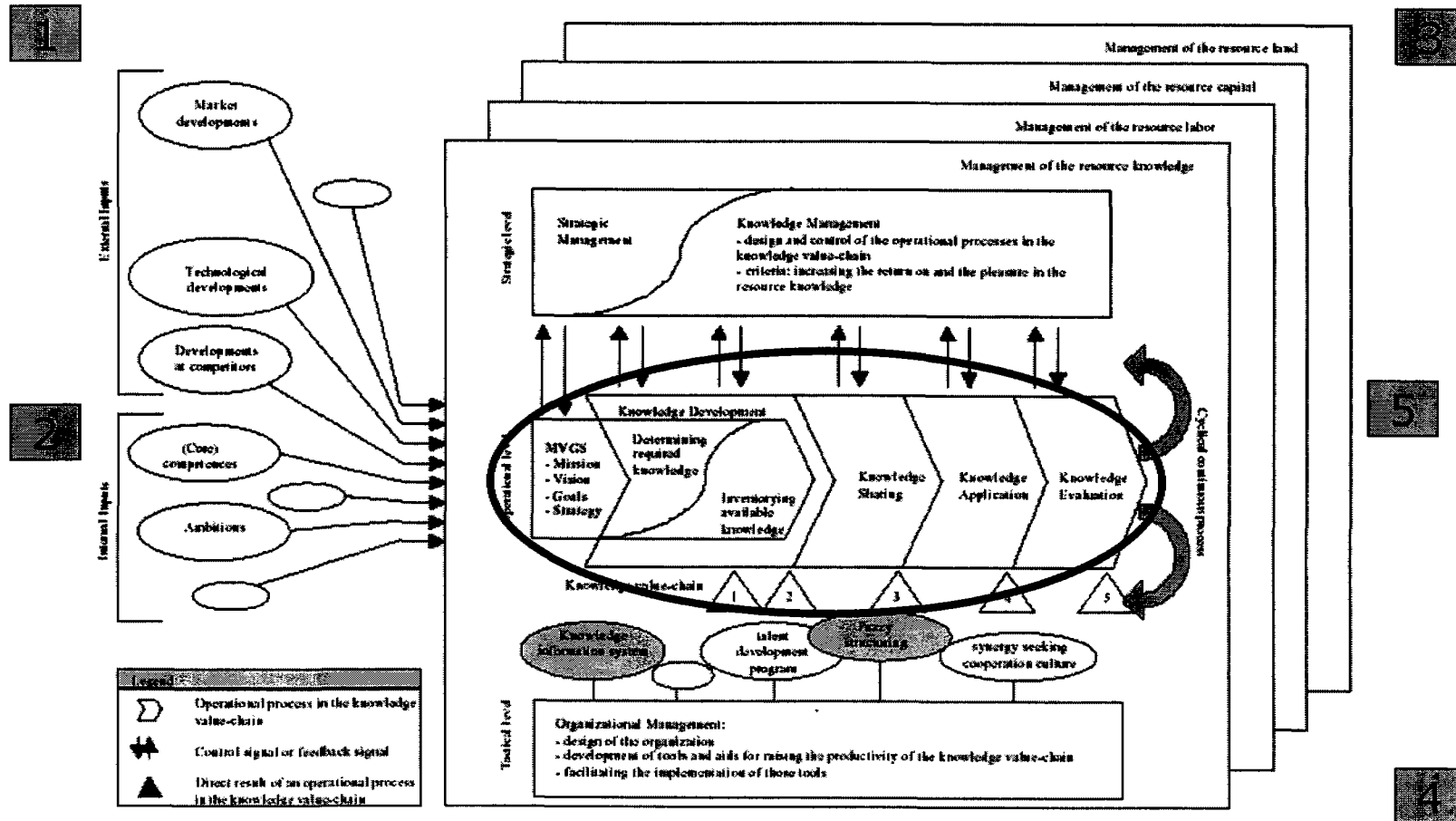
And another 'tile'-wisdom..

"The basic economic resource is no longer capital, nor natural resources, nor labor.

It is and will be knowledge."

Peter Drucker

M. Huysman VU Amsterdam 2002

	1st generation	2nd generation
What knowledge is shared?	codified	Tacit and codified
How is knowledge shared?	Use of **ICT** to capture knowledge	Use of **networks**
Why is knowledge **shared**?	Because of managerial need to share knowledge	To accomplish collective mission
When is knowledge sharing **managed**?	When managers want to do so	When individuals want to do so
Where is knowledge **shared**?	**Operational level**	**Organisation-wide**
Who's knowledge is managed?	Individual: human capital	Collective: social capital

Knowledge Value Chain
The Model
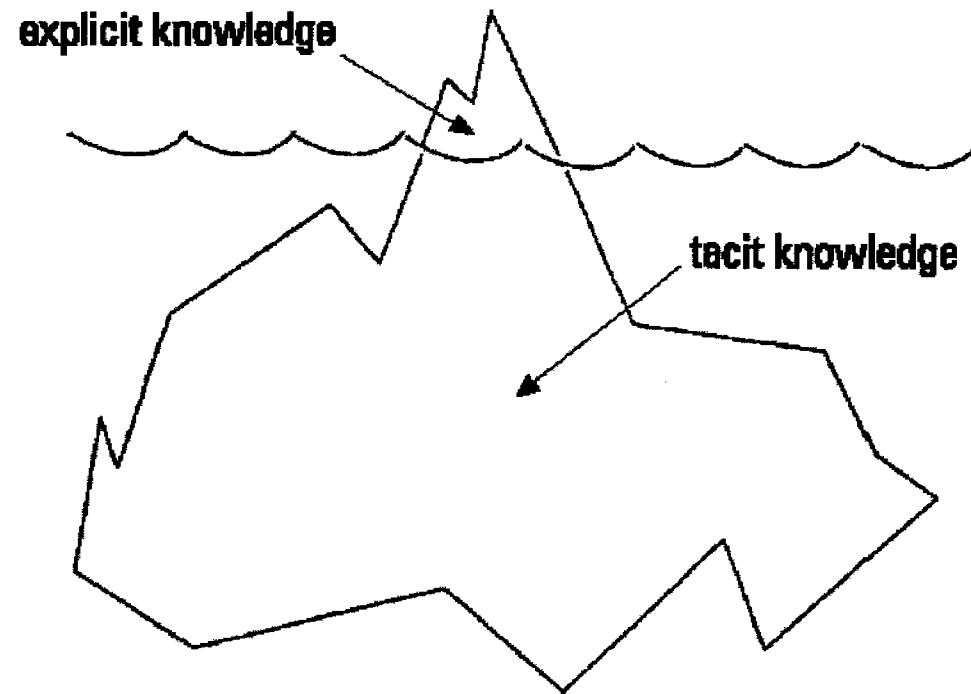
explicit knowledge

tacit knowledge

Knowledge Value Chain (KVC)
The model

	Mission / Vision / Goal	Knowledge Needed	Available	Develop	Share	Apply	Evaluate	
Strategy								Do it
Culture								Hard
Man. Style								Hard
Personnel								Hard
Structure								Easy
Systems								$

KVC Mission, Vision and Goal (s)

	Knowledge Needed	Available	Develop	Share	Apply	Evaluate	
Mission / Vision / Goal							
Strategy							Do it
Culture							Hard
Man. Style							Hard
Personnel							Hard
Structure							Easy
Systems							$
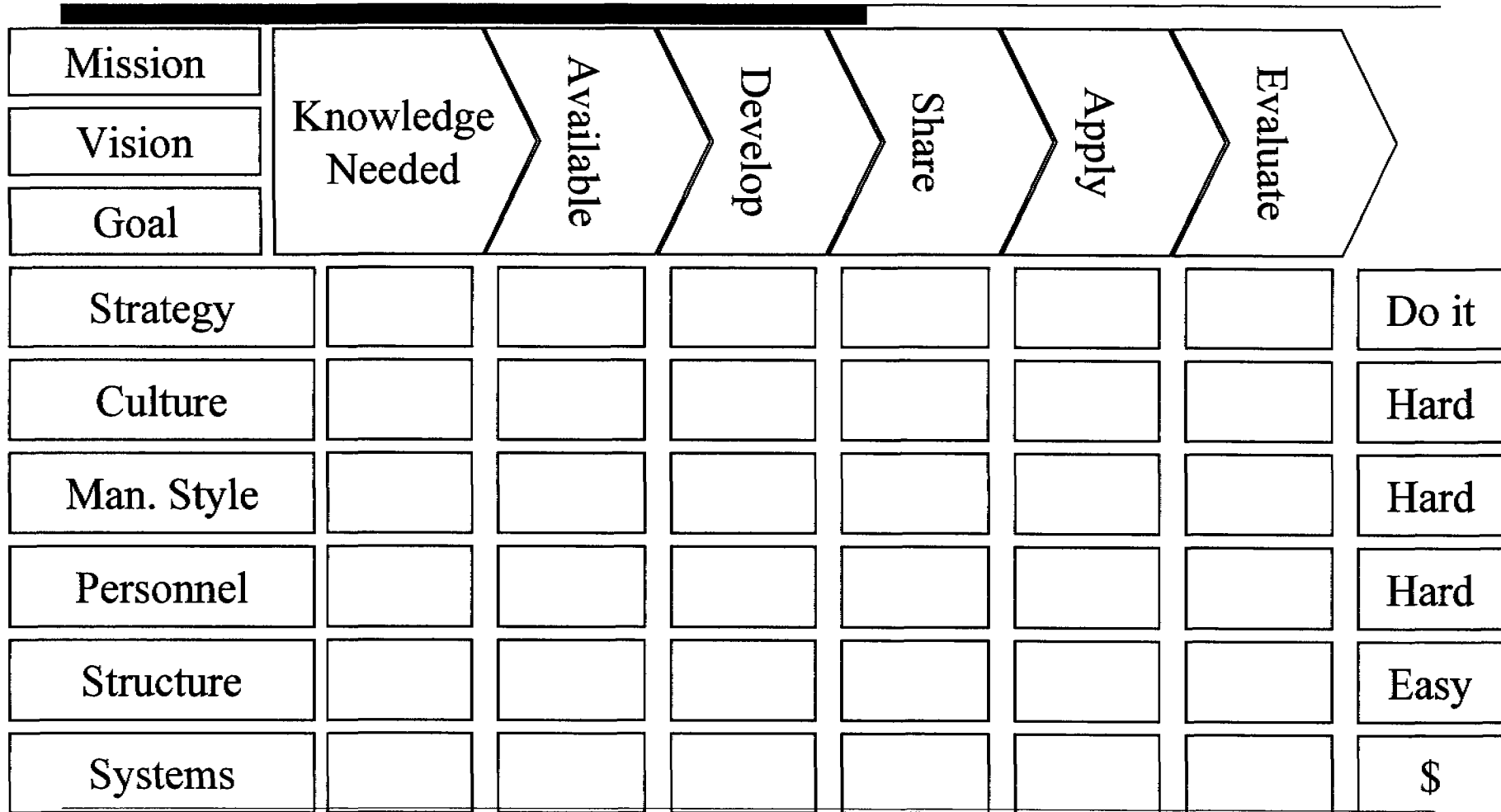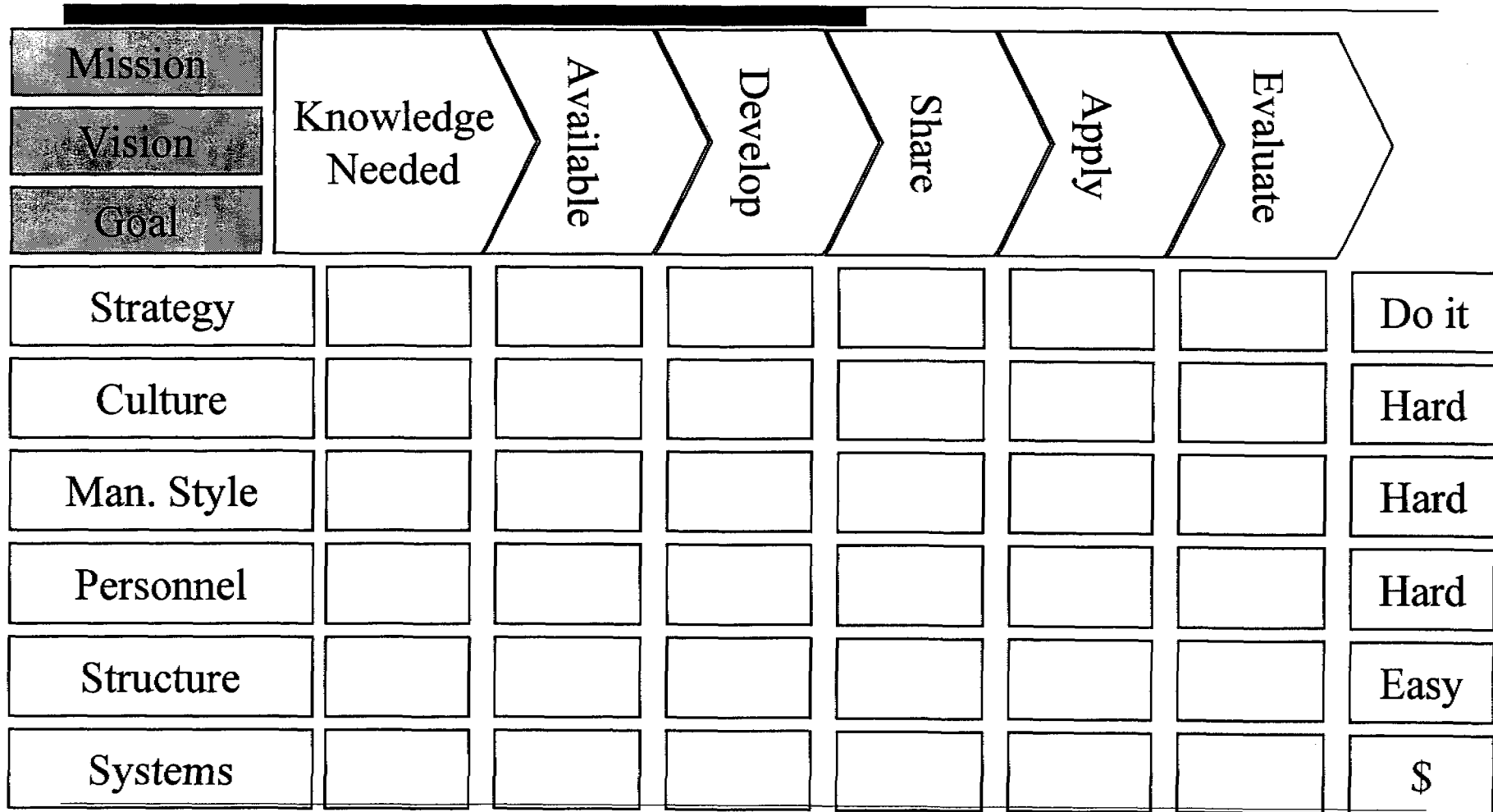
KVC Mission, Vision and Goal (s)

- Mission: raison d'être
- Vision: long term perspective

Collective ambition

- Goal (s): measurable result (s)
- Strategy: action plan for a goal

Policy

- Mission driven => collective ambition
- $ Money driven => goal + strategy = enough

KVC Mission, Vision and Goal (s)

☐ Mission, vision, goals and strategy of an organization drive the knowledge value chain.

Value chain: the further knowledge is held in the chain, the more value it has for the organization.

KVC Description chain

	Knowledge Needed	Available	Develop	Share	Apply	Evaluate	
Mission							
Vision							
Goal							
Strategy							Do it
Culture							Hard
Man. Style							Hard
Personnel							Hard
Structure							Easy
Systems							$
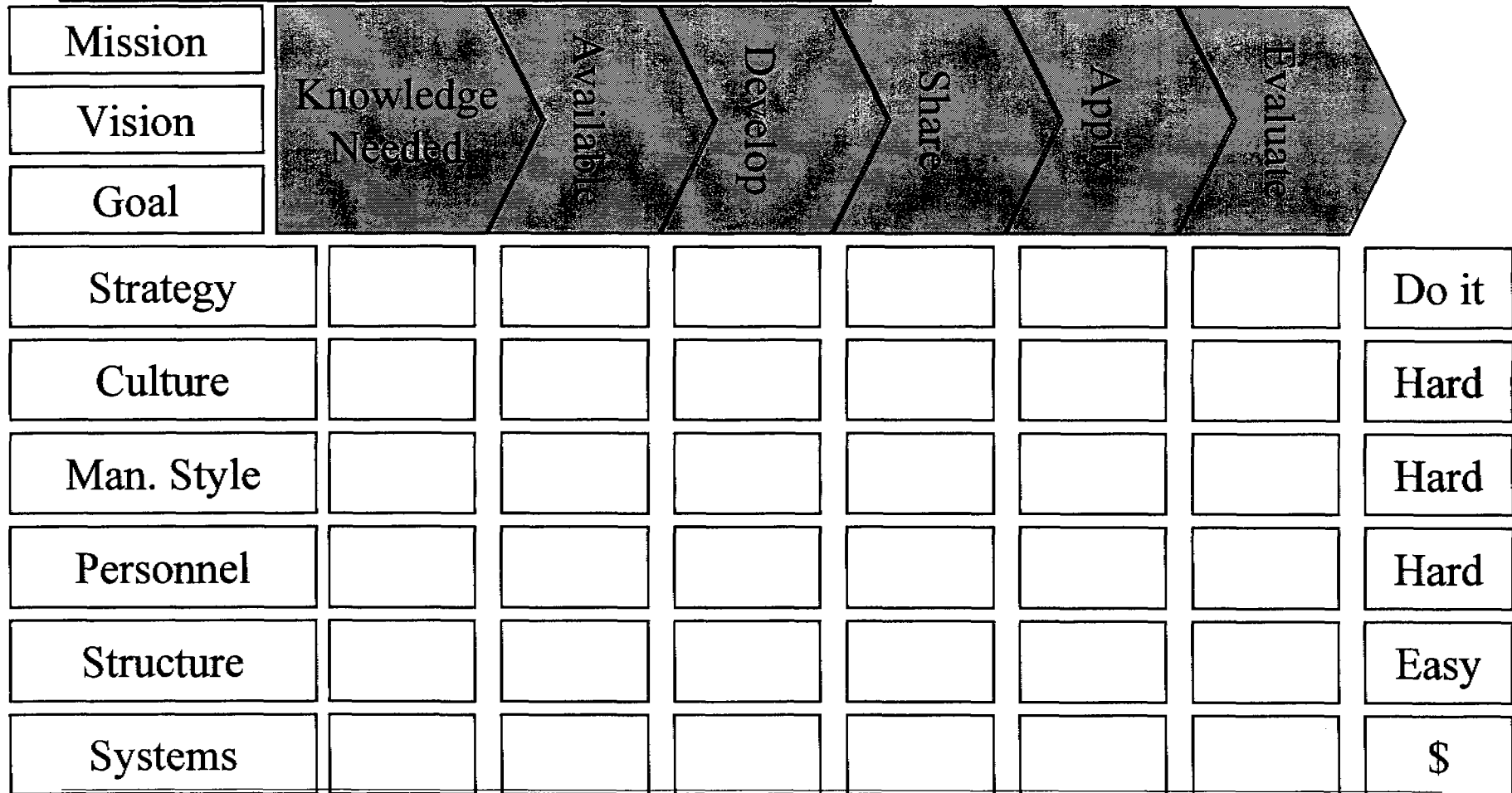
KVC Description

- ☐ Operational knowledge process:
    1. Determining the **needed** knowledge (based on the organization' s strategy)
    2. Determining the **available** knowledge
    3. **Developing** the missing knowledge
    4. **Sharing** the developed knowledge with the employees (who need the knowledge to perform their job well)
    5. **Using** the shared knowledge (most important process)
    6. **Evaluating** the previous knowledge processes

KVC Close the loop

	Knowledge Needed	Available	Develop	Share	Apply	Evaluate	
Mission							
Vision							
Goal							
Strategy							Do it
Culture							Hard
Man. Style							Hard
Personnel							Hard
Structure							Easy
Systems							$
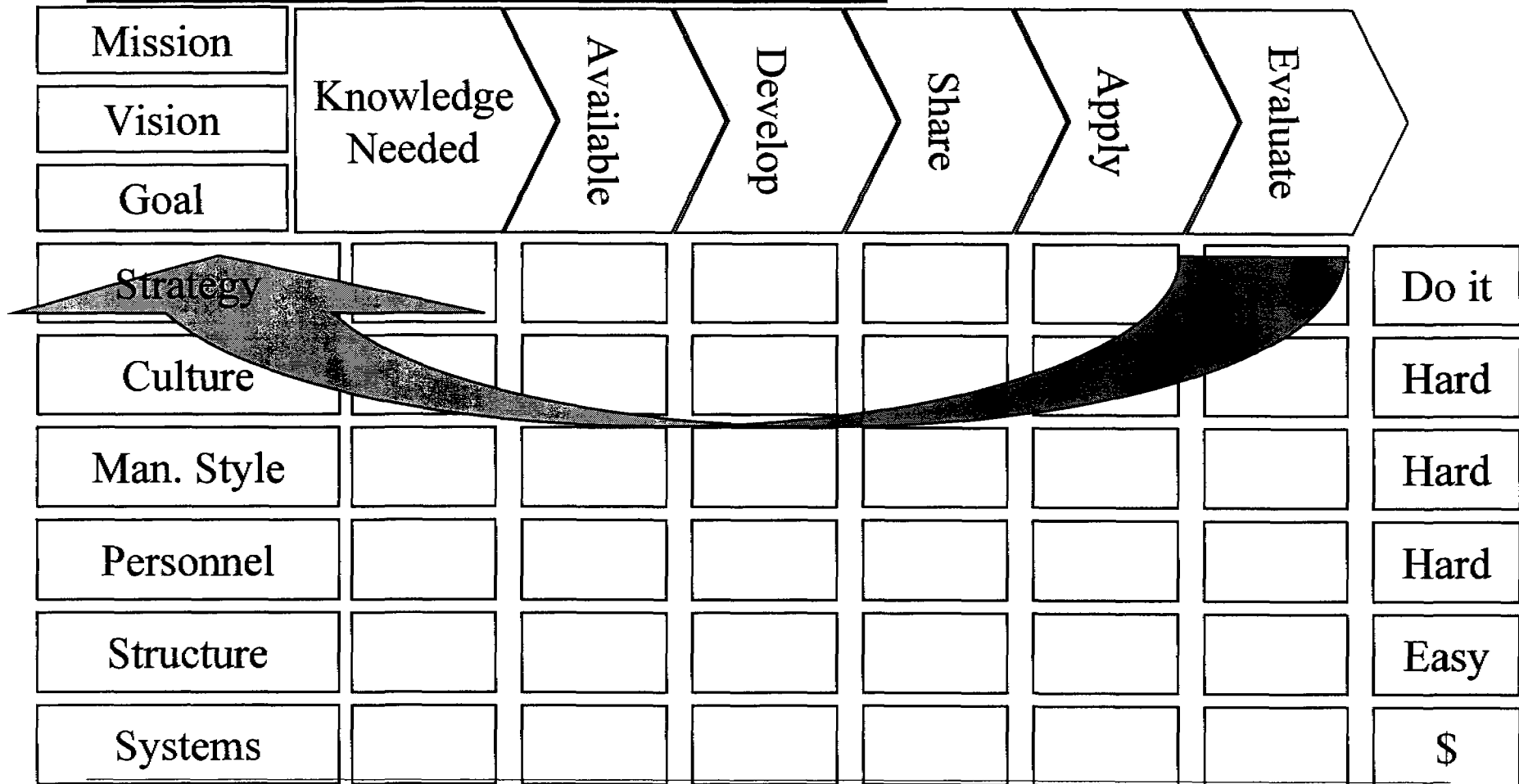
KVC Close the loop

☐ After evaluation (re) define core competences and or goal (s) of the organisation. This could imply change in strategy, knowledge needed etc.

This cyclic process of knowledge creation and exploitation keeps going round.

Double loop learning, continuous improvement

Organisational Design Variables

	Knowledge Needed	Available	Develop	Share	Apply	Evaluate	
Mission Vision Goal							
Strategy							Do it
Culture							Hard
Man. Style							Hard
Personnel							Hard
Structure							Easy
Systems							$
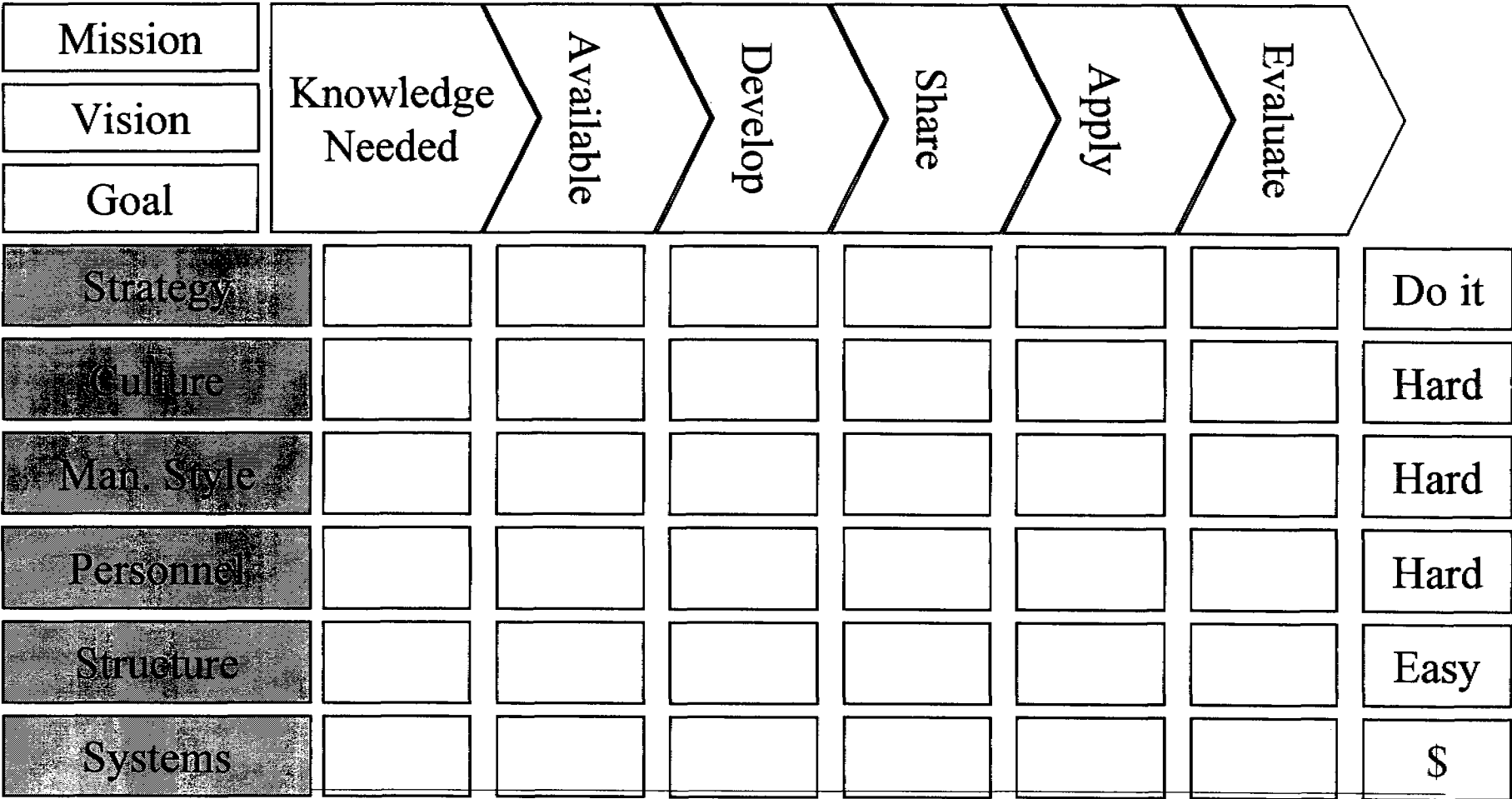
Organisational Design Variables

- [ ] What must be our <u>strategy</u>?
- [ ] How should our organisational <u>culture</u> look like?
- [ ] Which management <u>style</u> do we practice?
- [ ] What competence need our <u>personnel</u> and what behavioural patterns do we want?
- [ ] What <u>roles</u> and <u>responsibilities</u> do we want?
- [ ] Which technical <u>systems</u> do we install?

Organisational Design Variables
'Hard' to change

	Knowledge Needed	Available	Develop	Share	Apply	Evaluate	
Mission							
Vision							
Goal							
Strategy							Do it
Culture							Hard
Man. Style							Hard
Personnel							Hard
Structure							Easy
Systems							$
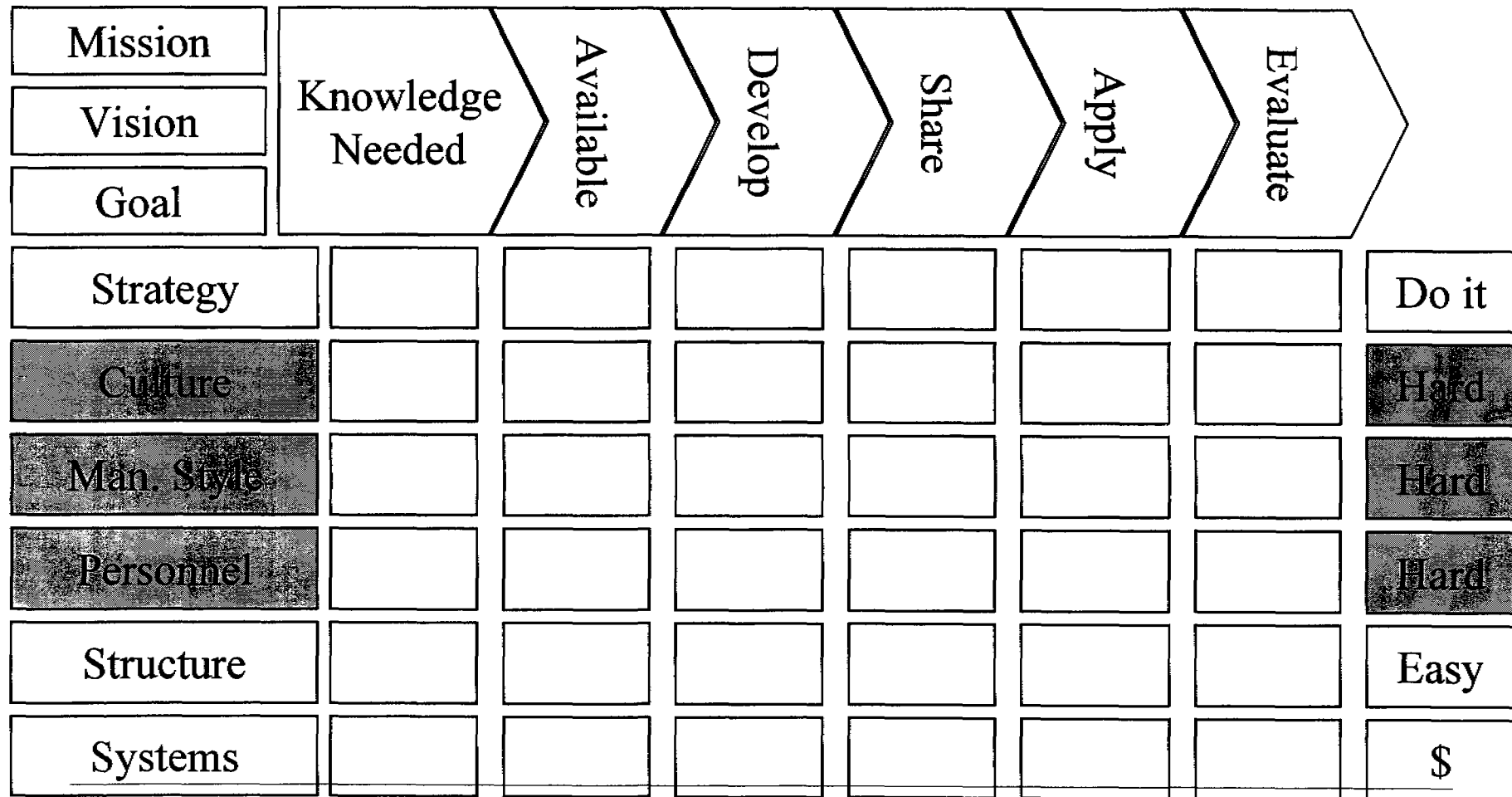
Organisational Design Variables
'Easy' to change

	Knowledge Needed	Available	Develop	Share	Apply	Evaluate	
Mission							
Vision							
Goal							
Strategy							Do it
Culture							Hard
Man. Style							Hard
Personnel							Hard
Structure							Easy
Systems							$
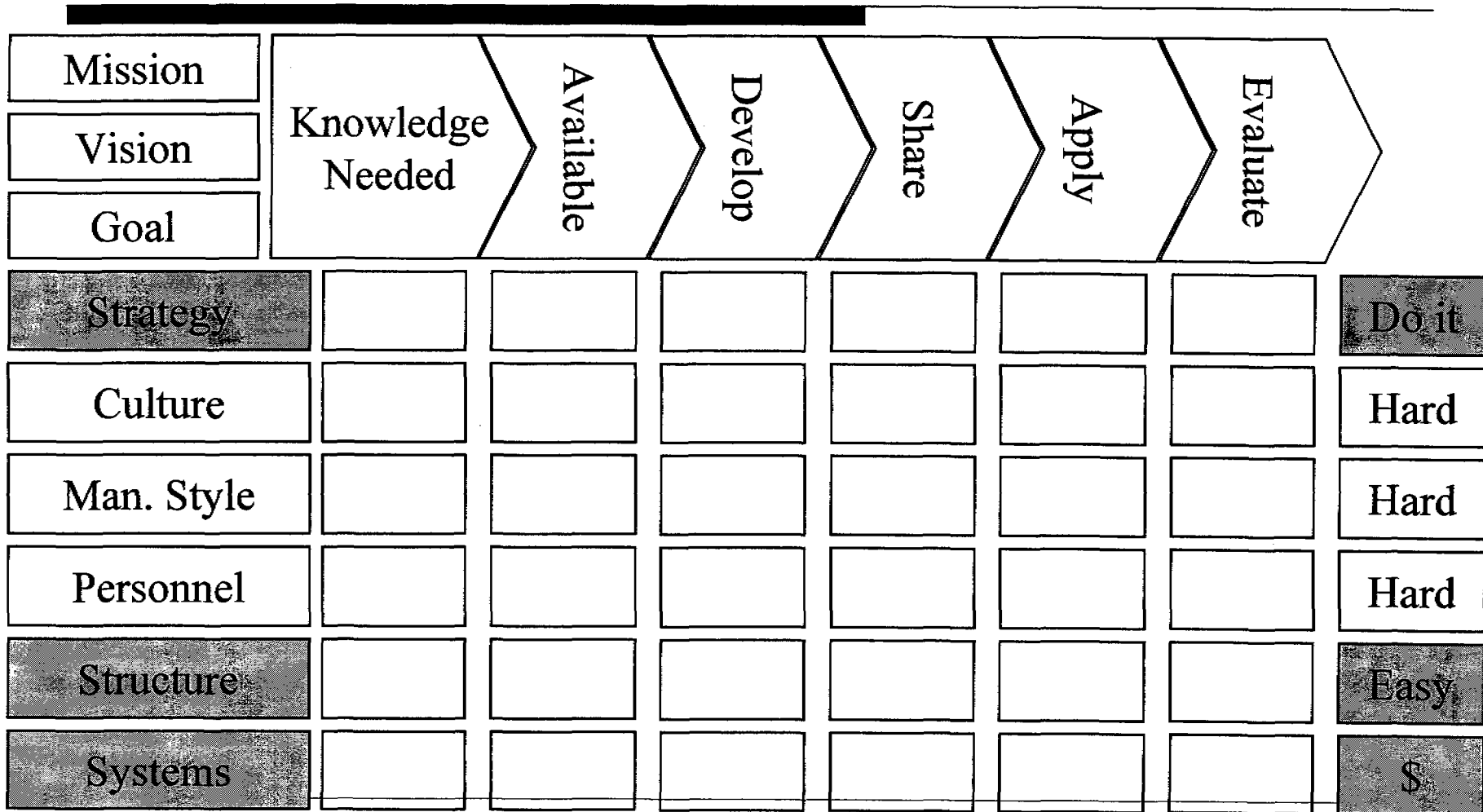
Organisational Design Variables
General

- ☐ 'Easy' = direct to influence
  - ■ Buy, try, implement or agree upon
- ☐ 'Hard' = indirect to influence
  - ■ behavior, style, skills, experience, attitude

- ☐ Change behavior => change culture
- ☐ Management course in man. style
- ☐ Train personnel or rotate jobs

KVC by column and 'Harvard style'

KVC Knowledge Needed

	Knowledge Needed	Available	Develop	Share	Apply	Evaluate	✓
Mission / Vision / Goal							
Strategy							Do it
Culture							Hard
Man. Style							Hard
Personnel							Hard
Structure							Easy
Systems							$
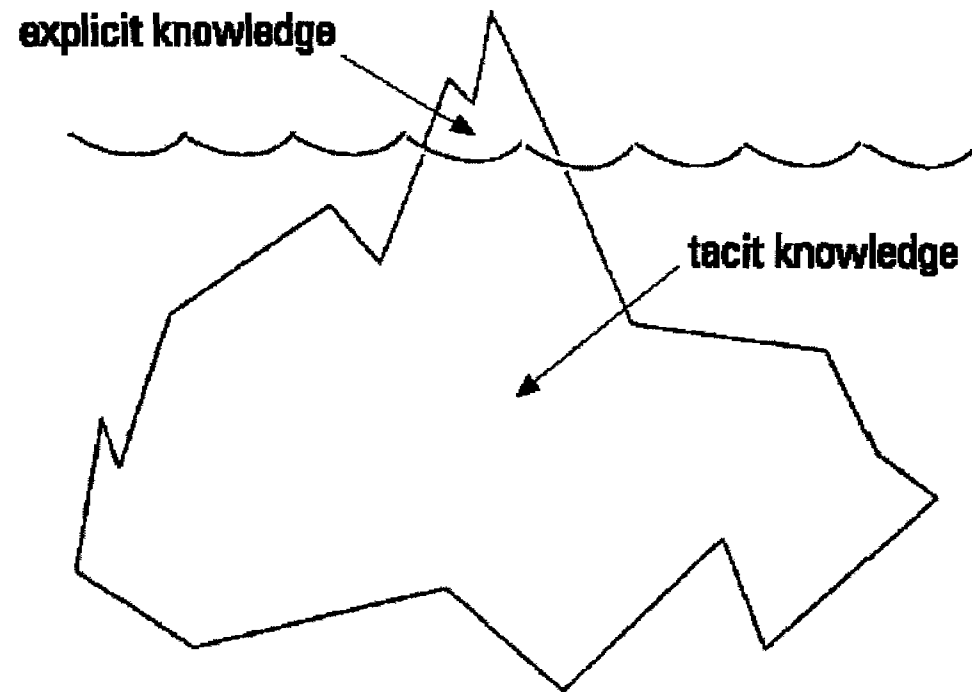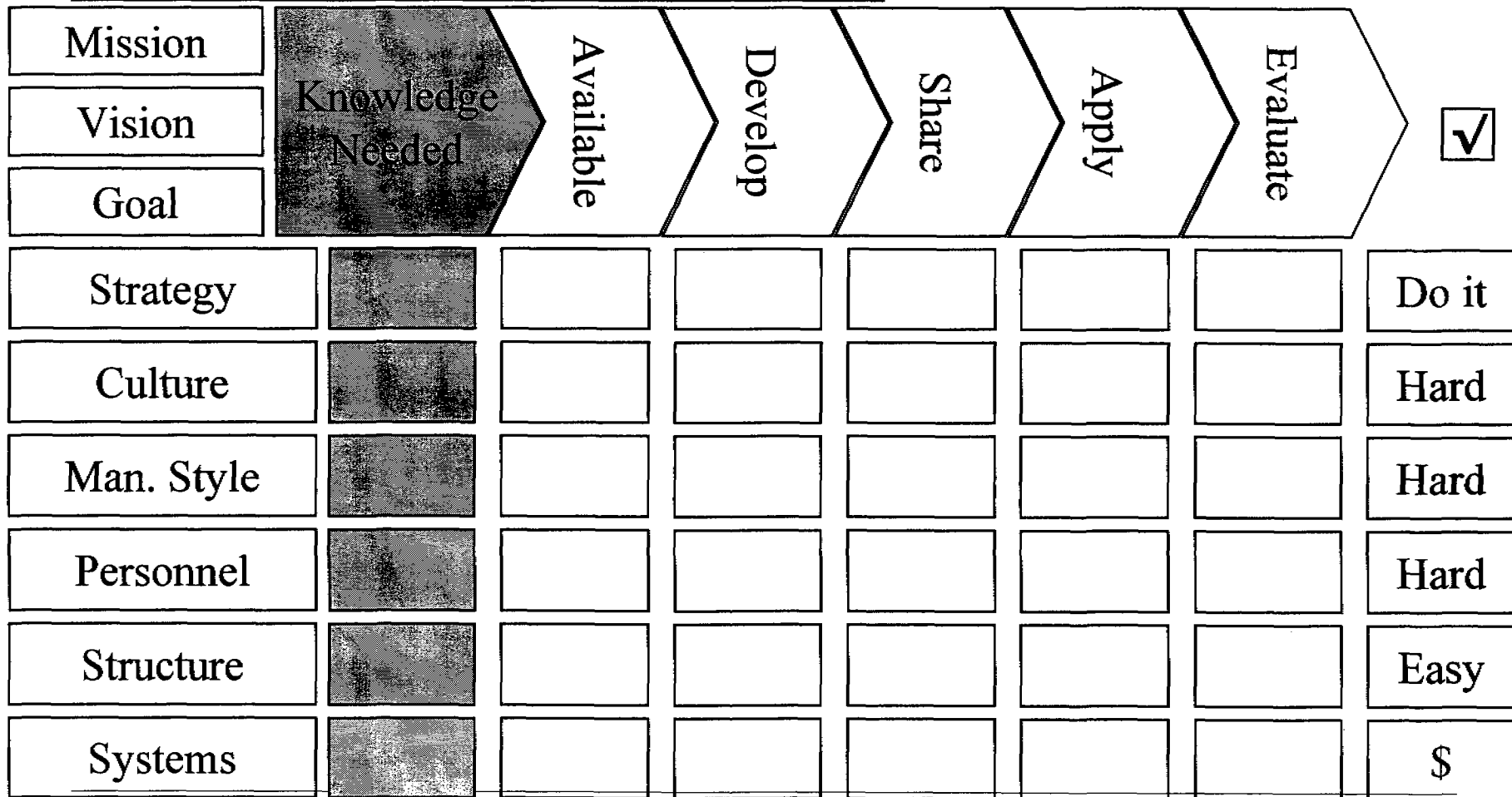
KVC Knowledge Needed ✓

- Given strategy we need:
    - Which information
    - Which (technological)
    - Which skills, attitude, style

    - Use brainstorms / scenario's /interview
    - Anticipate technical, political, sociological, cultural developments

- RCD / SoK Needs assessment?

KVC Needed / Strategy ✓

☐ Dataware Technologies:

■ 7 steps: business case, organization change, team, audit, core issues, instruments and people

☐ ING: competence management

KVC Needed / Culture √

□ ?:

- Discuss with sharecroppers (clients of clients), stakeholders (clients), stockholders (DGIS?) and opinion holders (other NGO's etc)

KVC Needed / Man. Style ✓

□ IRC:

- ■ Program management
- ■ Bottom up business plan

KVC Needed / Personnel ✓

□ **KPN Research:**

- Competence profile, s / w staff, personal development plan, develop and coaching

□ **Baan: (also systems)**

- 100 competences on knowledge, skills and human skills
  match against function profile

KVC Needed / Structure √

☐ **Pink Elephant:**

- ■ From HRM dep. Pilot; update skills list, take part in various projects

☐ **KPMG:**

- ■ matrix partner, manager, consultant and trainee versus market, people and result orientation and professionalism

KVC Needed / Systems $\sqrt{}$

☐ Mercedes Benz:

- ■ Knowledge map organization and staff based on competence maturity level

☐ Ericsson: (also Personnel)

- ■ 3 knowledge domains: technical, social (= management) and business

☐ Fortis: (also Personnel)

- ■ Function / personal profile => PDPlan

KVC Knowledge Available

	Knowledge Needed	Available	Develop	Share	Apply	Evaluate	✓
Mission							
Vision							
Goal							
Strategy							Do it
Culture							Hard
Man. Style							Hard
Personnel							Hard
Structure							Easy
Systems							$
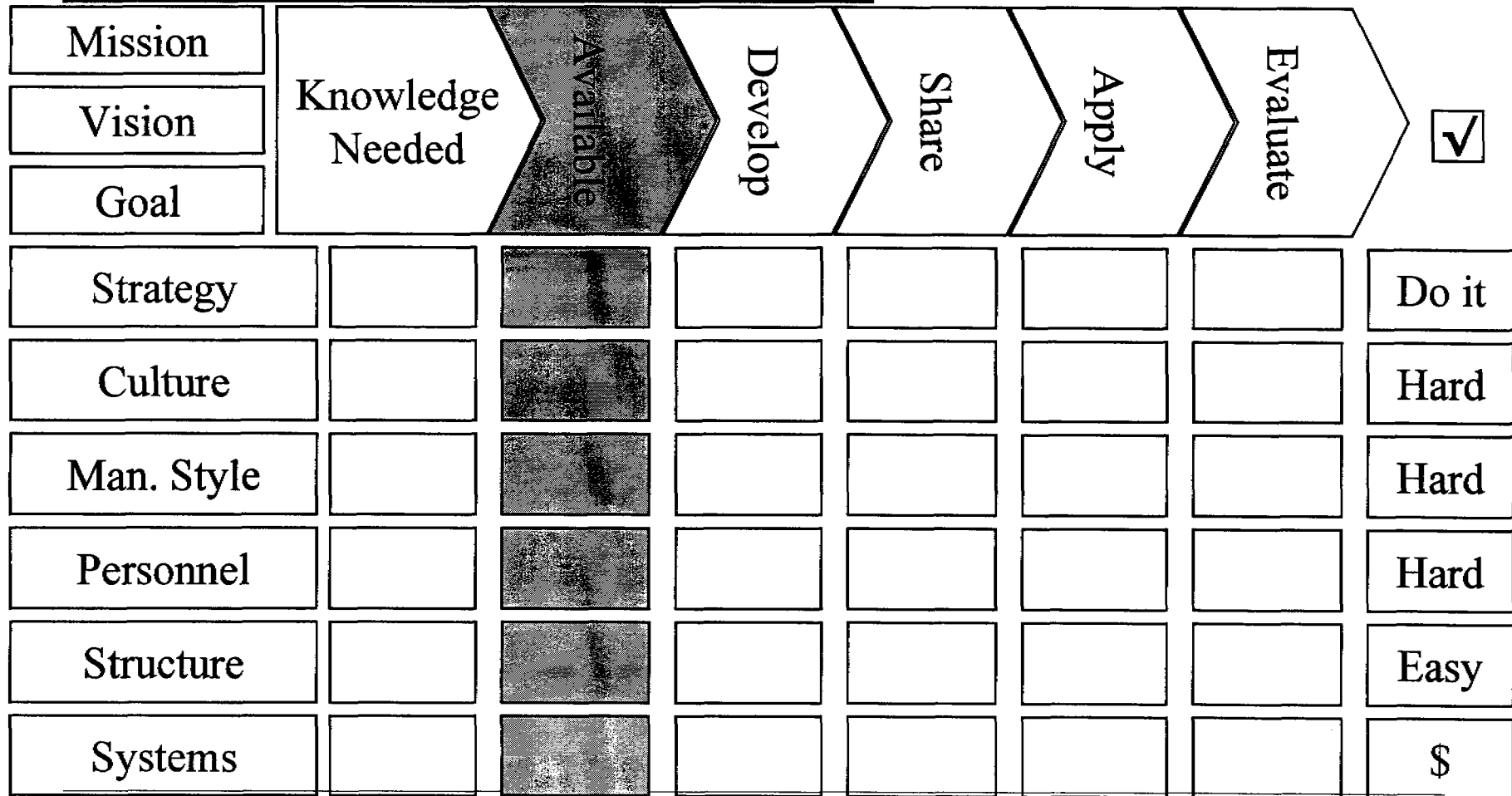
KVC Knowledge Available ✓

- ☐ Make knowledge-in-use explicit
  - ■ In organisation / colleague / heads
  - ■ In network / peers / partners / CoP's
  - ■ Digital mailing lists / WWW / Weblog
  - ■ Hard copy library / drawers
- ☐ Are we (un) conscious (un) competent?
  - ■ 'We have a couple very good people in R&D'
  - ■ 'Our marketing-K is up-to-standard'

KVC Available / Strategy √

☐ Engineering bureau:
   - Ask new / junior staff to lecture

☐ IRC: hire me

KVC Available / Culture √

□ IRC:

- Communication meetings
- Brainstorm over coffee

KVC Available / Man. Style ✓

☐ DAF:

- ■ Active look for the 'knowledge carriers' in your organization

KVC Available / Personnel ✓

☐ Roccade Finance:

 ■ Knowledge bank to add / update your knowledge profile with training vouchers as incentive

☐ NS:

 ■ 'Workshop' expert / novice to make tacit knowledge explicit (novice took notes)

KVC Available / Structure √

□ T&G:

- Best practices, bureau Lessons Learned, yearly scan on quantity, quality and up-to-date-ness

KVC Available / Systems ✓

□ Everest:

- CRM, HRM, project and hour system
- Discussion forum on intranet

KVC Develop Knowledge

	Knowledge Needed	Available	Develop	Share	Apply	Evaluate	√
Mission							
Vision							
Goal							
Strategy							Do it
Culture							Hard
Man. Style							Hard
Personnel							Hard
Structure							Easy
Systems							$

KVC Develop Knowledge ✓

☐ Needs -/- Available = gap

- ■ Develop in house
- ■ Buy knowledge / people
- ■ Outsource
- ■ Get from conference / congress / study
- ■ Partner: third party, clients, competitor

☐ Look for ROI, ROI$^+$ and USP

ROI = Return on Investment, + ROI spin off, USP = Unique Selling Point

KVC Develop / Strategy ✓

- ☐ BP Amoco / US Army: MAR
    - ■ Minutes Action Review as part of the cycle move, stop, reflect, learn, move ..
        - ☐ What had to happen?
        - ☐ What happened?
        - ☐ What's the difference? (NOT why!)
        - ☐ What have we learned?

- ☐ Chevron:
    - ■ Learning organization replaces TQM

KVC Develop / Culture ✓

☐ Boston Beer Company:

  ■ Staff was encouraged to go into bars and talk to public on the products....

KVC Develop / Man. Style   √

☐ **3M:**

- ◼ 'Thou shalt not kill a new product idea'
- ◼ No 'area of business' constraint
- ◼ Top down encouragement

KVC Develop / Personnel ✓

☐ Sollac:

■ Salary based on experience and skills and contribution to innovation and improvement (no need to become a manager for more €€'s)

KVC Develop / Structure ✓

□ Toyota:

- ■ functional organized innovation process
  - □ Mutual adjustment
  - □ Close supervision
  - □ Integrative leadership
  - □ Job rotation
  - □ Design standards

KVC Develop / Systems √

☐ KPN: IT supported idea box

KVC Share Knowledge

		Knowledge Needed	Available	Develop	Share	Apply	Evaluate	✓
Mission								
Vision								
Goal								
Strategy								Do it
Culture								Hard
Man. Style								Hard
Personnel								Hard
Structure								Easy
Systems								$
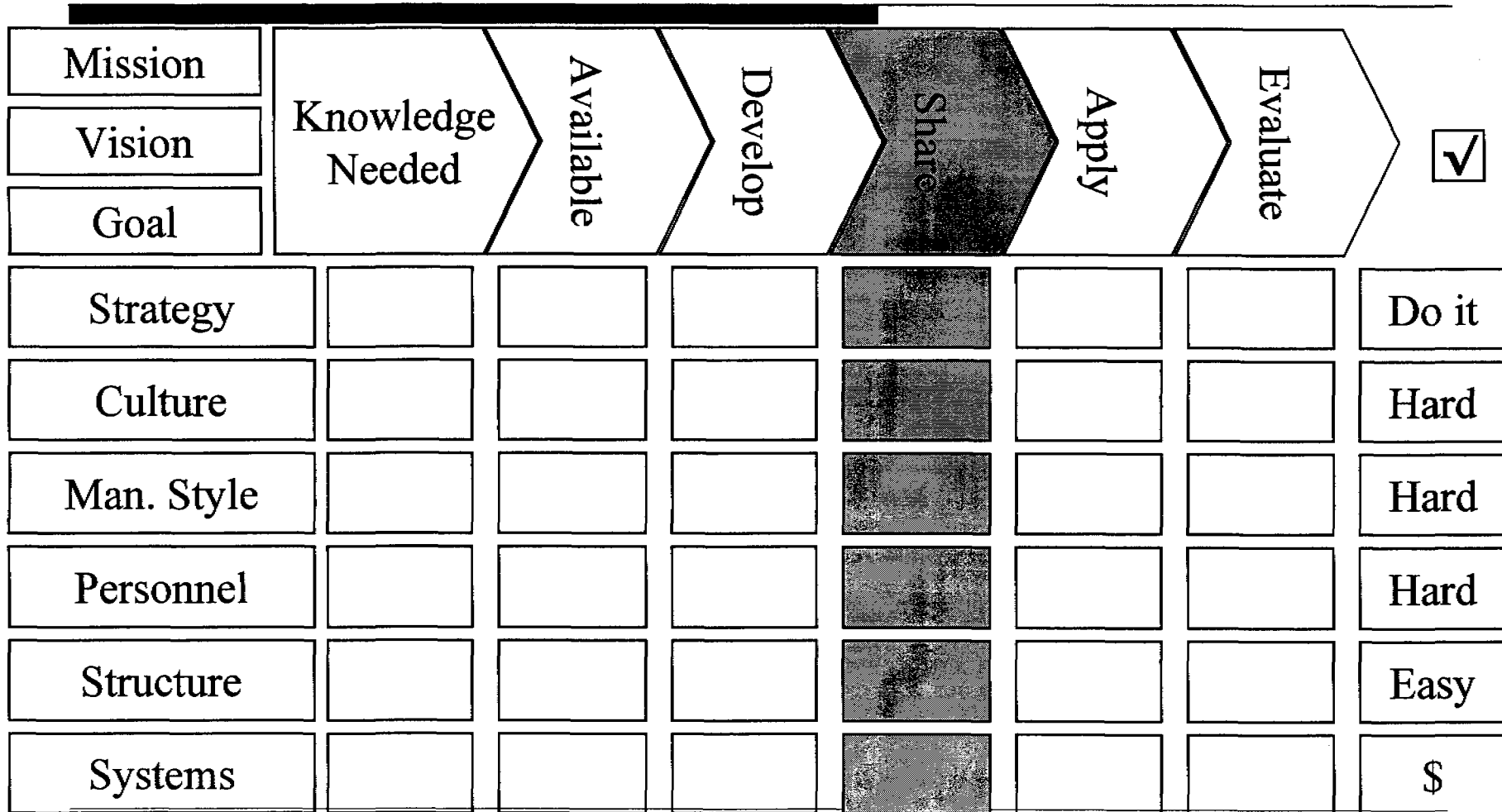
KVC Share Knowledge ✓

☐ Community of Practise (CoP)

☐ Intra- / Extra- / Internet (website)

☐ Yellow pages

☐ Happy hour

☐ Communication meeting

☐ Knowledge sharing (KS) is subset KM

KVC Share Knowledge
Hurdles from the source ✓

- ☐ The source is not motivated to share
  - ■ Power, position, time, priority
- ☐ Source thinks that the gap between source and receiver is too big
- ☐ Source thinks s/he's no expert
- ☐ Source doubts interest receiver
- ☐ Source has no respect for receiver

KVC Share Knowledge
Hurdles from the receiver ✓

- ☐ Receiver is not motivated to learn
- ☐ Receiver thinks gap is too big
- ☐ Receiver doubts the source
- ☐ Receiver has no respect for source

KVC Share Knowledge
Hurdles other   √

- ☐ Hobby-ism / too much money
- ☐ Relation with strategy weak
- ☐ Developed knowledge does not mach output specifications
- ☐ Knowledge is out of date / too late
- ☐ Users out off absorption capacity

- ☐ Share ≠ Apply : To know ≠ To be able

KVC Share / Strategy ✓

- ☐ Netscape 1997: source code open
  - ■ Resulting in tips / bug-fix from users
- ☐ MIT 2002: all material on the web
- ☐ WB: Storytelling

KVC Share / Culture √

☐HP: every section its own intranet Company breaks, drinks etc

☐Shell: publish scenario's (Tina: there is no alternative etc)

KVC Share / Man. Style ✓

□ Unilever:

- Friday afternoon session on immediate results
- Stimulate participation in CoP's
- Start CoP as standard practice

KVC Share / Personnel ✓

□ IRC:

- send people instead of paper
- JPO / SPO programs

KVC Share / Structure √

- ☐ Aegon: virtual university
- ☐ IHE: alumni day
- ☐ Ameron: open drawer in the hallway
- ☐ Oticon: no jobs only project teams
- ☐ Robeco:
  - ■ RoCK (RobecO Centre of Knowledge)

KVC Share / Systems   √

□This you can all come up with yourself...

(and you did and that's part of the IRC problem)

KVC Knowledge Apply

	Knowledge Needed	Available	Develop	Share	Apply	Evaluate	✓
Mission / Vision / Goal							
Strategy							Do it
Culture							Hard
Man. Style							Hard
Personnel							Hard
Structure							Easy
Systems							$
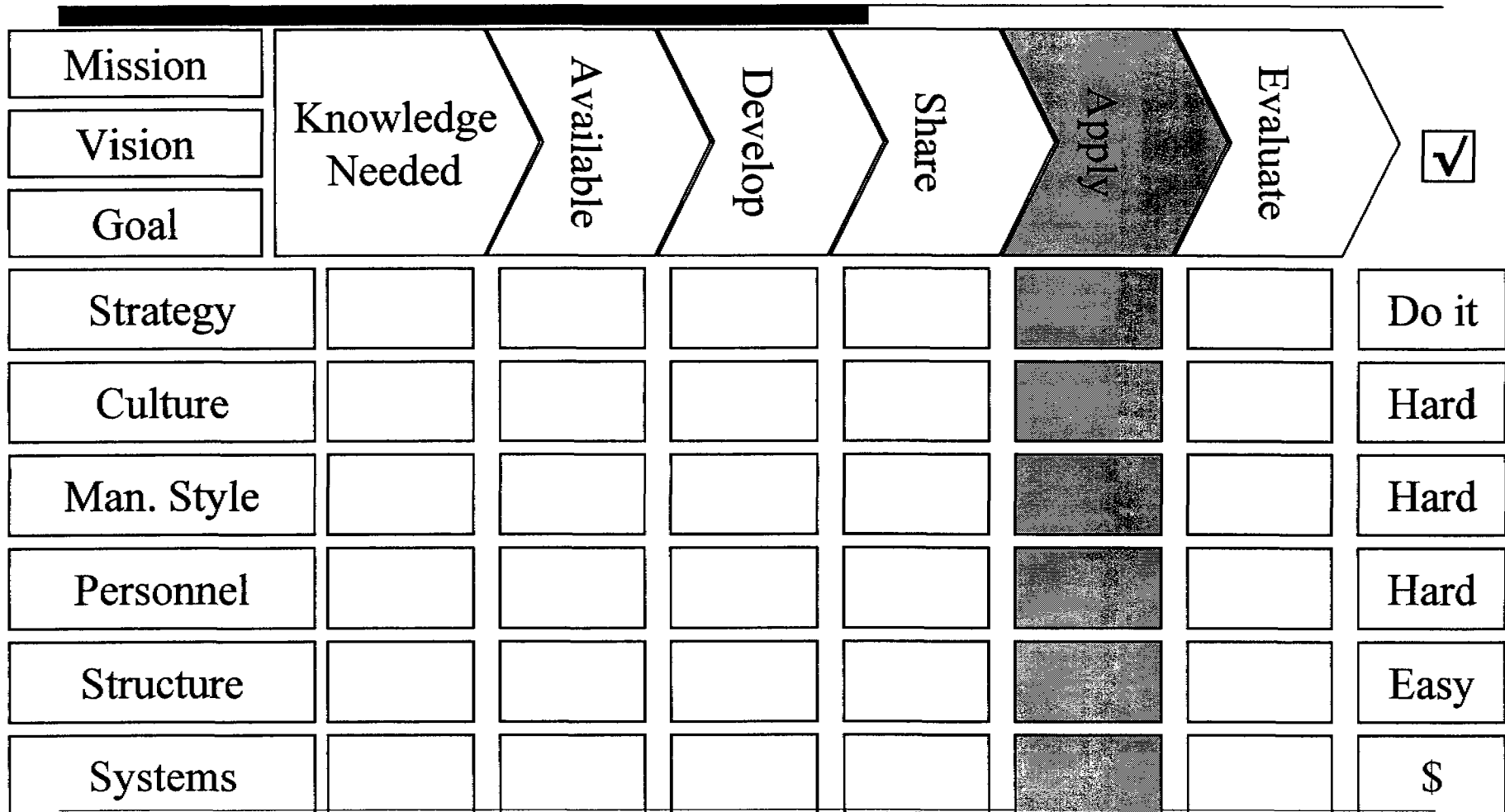
KVC Knowledge Apply ✓

- ☐ Capitalize on information + experience + skills + attitude to perform tasks

- ☐ Tasks are in line with collective ambition of the organization

- ☐ Hopefully learning takes place

KVC Apply / Strategy ✓

- [ ] KPN: BU 'Neue Kombinationen'
- [ ] CB: appoint a manager indirect distribution

KVC Apply / Culture ✓

- ☐ Kao: all meetings are open, all change projects headed by interdisciplinary and interdivision teams

- ☐ AES: yearly shared values survey

KVC Apply / Man. Style ✓

- □ BP: 'Thief of the Year' award
- □ TI: 'Not invented here, but I did it anyway' award
- □ Shell: reward early adaptors
- □ CB: Kill legacy systems / outsource (close) library

KVC Apply / Personnel ✓

☐ E-mail rules:

- Do not read any c.c. e-mail
- Delegate reply without notifying sender
- 72 hour age e-mail => low priority
- No reply within 96 hour => discard

KVC Apply / Structure ✓

- Nokia:
  - On top of formal structure CoP, interest group and process team, sponsored by board member
- DAS:
  - Shared files, call centre, front and back office

KVC Apply / Systems √

- ☐ Min SoZa:
  - ■ ExpertiSZe with legal rules...
- ☐ Ventana: group decision support

KVC Evaluate Knowledge

	Mission / Vision / Goal	Knowledge Needed	Available	Develop	Share	Apply	Evaluate	✓
Strategy								Do it
Culture								Hard
Man. Style								Hard
Personnel								Hard
Structure								Easy
Systems								$
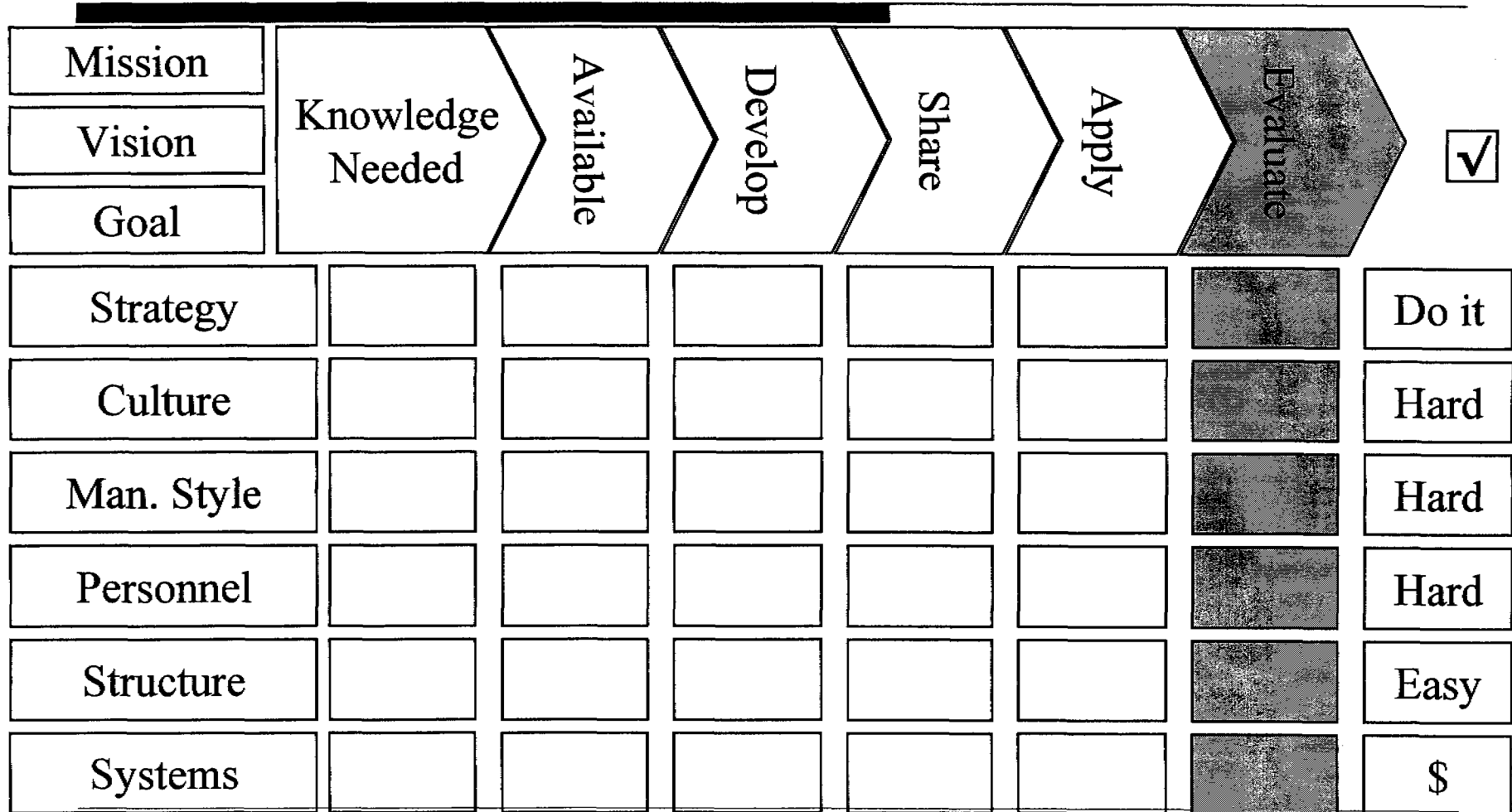
KVC Evaluate Knowledge √

- ☐ Prepare for the next loop
  - ■ Redefine (core) competence
  - ■ Gather input for SWOT
- ☐ Technique like AAR (after action review)
- ☐ Explore side steps
- ☐ Stimulate bottom up input

KVC Evaluate / Strategy √

□ Shiphol:

  ■ Operate airport => 1985 Schiphol
    Airport Consultancy

□ Monsanto: sell chemical division

KVC Evaluate / Culture √

☐ Construction bureau:
  - ■ Every Friday closed project review
  - ■ Every last Friday of the month: failures

KVC Evaluate / Man. Style √

□ ?

KVC Evaluate / Personnel ✓

- □ Baan: locate bottlenecks in KWK
  - On a regular bases and reason:
    - □ Priority
    - □ Time
    - □ No incentives
    - □ Not enough knowledge
    - □ Geographical distance
    - □ Training to early

KVC Evaluate / Structure √

☐ Ford and BP
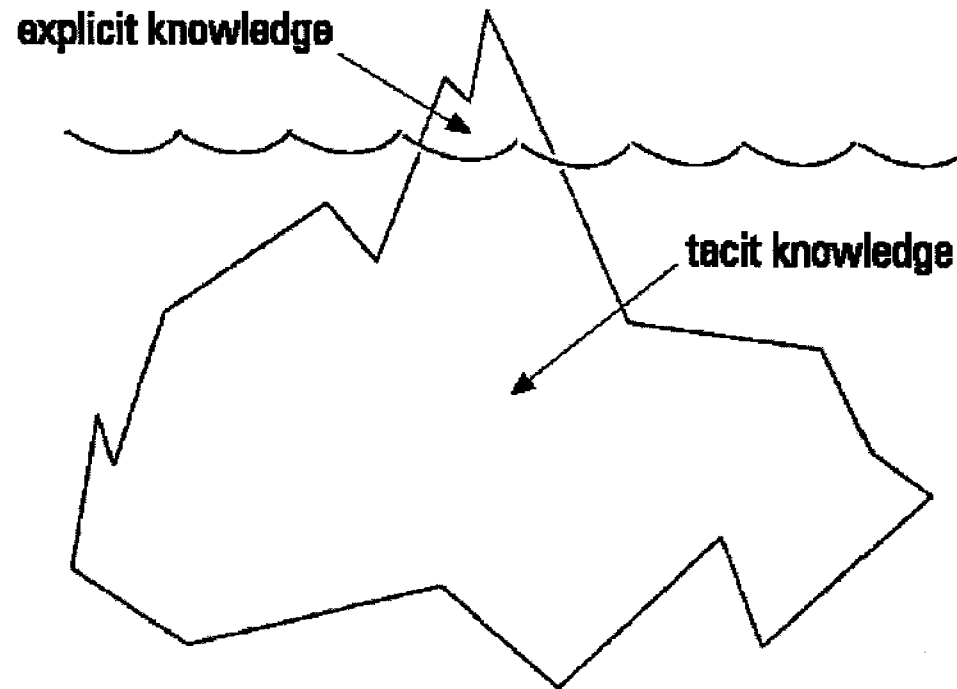
- ■ Publish best practice + author
- ■ Track implementation of best practices
- ■ Improve best practices

KVC Evaluate / Systems √

- ☐ TNO: human knowledge management
  - ■ develop competence knowledge worker
- ☐ Construction bureau:
  - ■ Every Friday closed project review
  - ■ Every last Friday of the month: failures

Knowledge Value Chain IRC

explicit knowledge

tacit knowledge

Knowledge Value Chain IRC √

	Knowledge Needed	Available	Develop	Share	Apply	Evaluate	
Mission √							
Vision √							
Goal √							
Strategy √			KDA	InfoCom	RCD	√	Do it
Culture		√	√	√	√		Hard
Man. Style							Hard
Personnel	√		KDA	√	RCD		Hard
Structure	√		√	√		√	Easy
Systems √							$
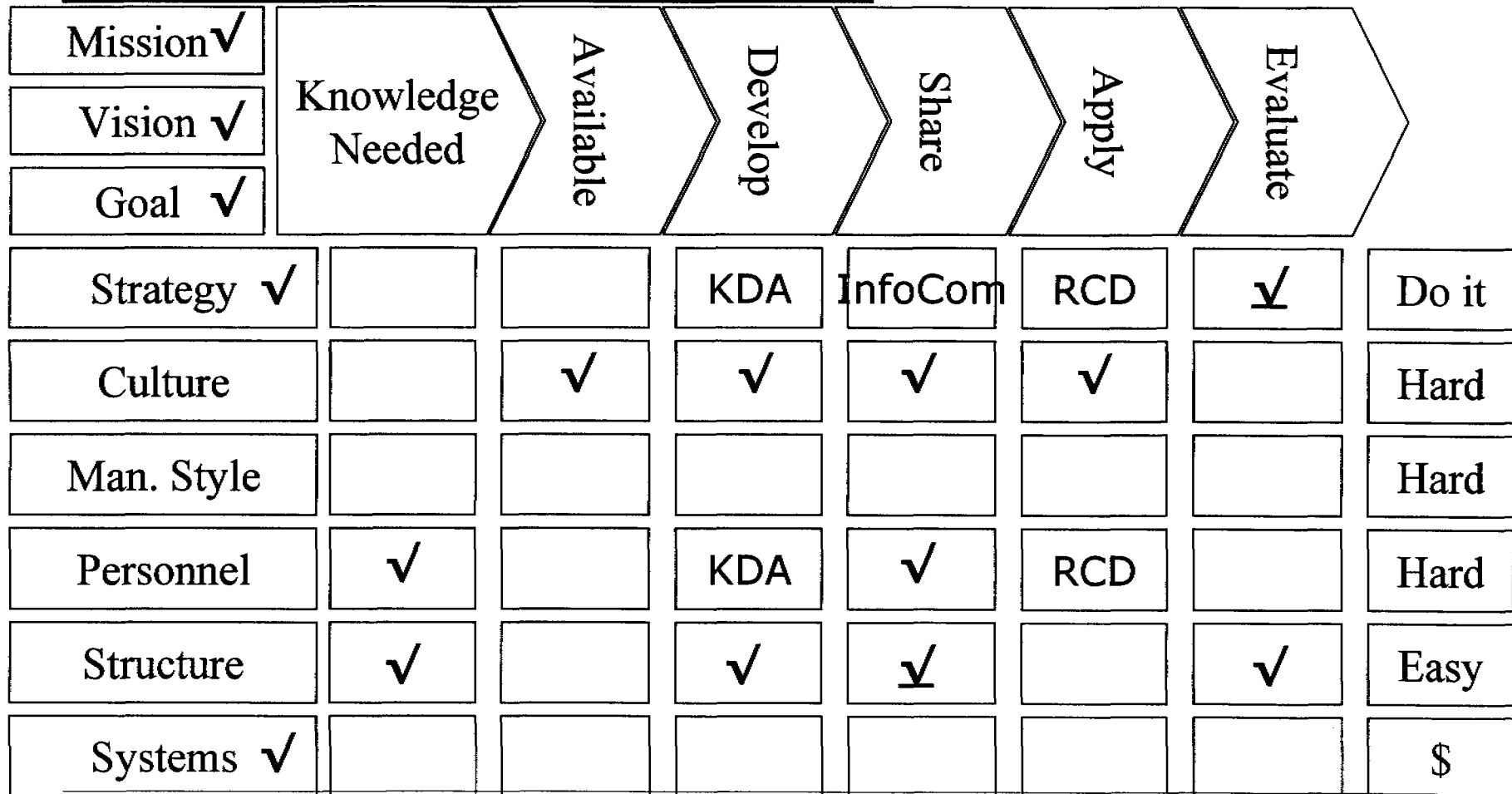
IRC Mission (statement 2002/3)

- IRC facilitates the sharing, **promotion** and use of knowledge so that **governments, professionals** and organizations can better support poor men, women and children in developing countries to obtain water and sanitation services they will use **and maintain**.

- IRC facilitates the **creation**, sharing, and use of knowledge so that **sector staff** and organizations can better support poor men, women, and children in developing countries to obtain water and sanitation services they will use and **can sustain**.

IRC Vision ✓

☐ IRC's **vision** is that all people have a
right to equitable access to adequate
and sustainable water and sanitation
facilities for which all stakeholders,
including the users, take their agreed
share of responsibility.
[IRC *Meeting the Future* Business Plan for 2002 –
2006, Delft, 25 September 2001]

IRC Goal(s) √

☐ To provide improved access to and promote the use of knowledge among sector institutions and other stakeholders.

☐ To build the capacity of resource centres for the WSS sector in developing countries. A strategy to incrementally increase the number of resource centres will be implemented, along with the activities through which their capacities will be strengthened.

IRC Strategy ✓

- ☐ This will be achieved through strengthening IRC's knowledge base, actions to make the base easily accessible to a wide range of stakeholders, the synthesis of knowledge on key issues, the dissemination of materials and the promotion of better knowledge use in developing countries.

- ☐ Using its web site, documentation, publications, IRC advocates change and aims to improve the information and knowledge base of the sector.

IRC Systems ✓

☐ Client Relation Management (CRM)

☐ Content Management System (CMS)

☐ Question & Answer Service (Q&A)

☐ Strategy: small network, Office software, huge bandwidth, ASP solution

KVC Needed / Strategy IRC   √

☐ From do-er to broker

☐ GEM

☐ Program management

KVC Needed / Culture IRC ✓

KVC Needed / Man. Style IRC ✓

KVC Needed / Personnel IRC
(DRAFT stolen from VM)   √

☐ Competence in function description
  ■ Understands the knowledge delivery process. Continually evaluates knowledge needs for him/herself and uses relevant options effectively to obtain knowledge. Recognizes opportunities to share knowledge with others (passive). Knows about the options available to distribute knowledge and uses the relevant processes efficiently and effectively.
  ■ See above plus: Is actively aware of knowledge needs of others and shares knowledge in accordance to the identified needs. Applies knowledge to add value to the process and clients.
  ■ Evaluates, sources, controls and maintains the quality of knowledge and competencies in own area of expertise to meet the needs of the clients and enhance the learning process.
  ■ Develops, maintains and promotes the knowledge process -
☐ Train people to the job

KVC Needed / Structure IRC
(DRAFT stolen from VM)   √

□ Based on the following 'knowledge process':
- evaluating needs,
  (identify 'knowledge to do what' question)
- sourcing,
  (either finding the knowledge or creating it)
- controlling, (QA)
- integrating,
  (within total delivery structure / mechanism incl.
  taxonomy; enabling people to find the knowledge)
- distributing and
- maintaining.

KVC Needed / Systems IRC ✓

KVC Available / Strategy IRC ✓

KVC Available / Culture IRC √

KVC Available / Man. Style IRC

KVC Available / Personnel IRC ✓

KVC Available / Structure IRC ✓

KVC Available / Systems IRC ✓

☐ Web-skills

KVC Develop / Strategy IRC ✓

KVC Develop / Culture IRC ☑

KVC Develop / Man. Style IRC √

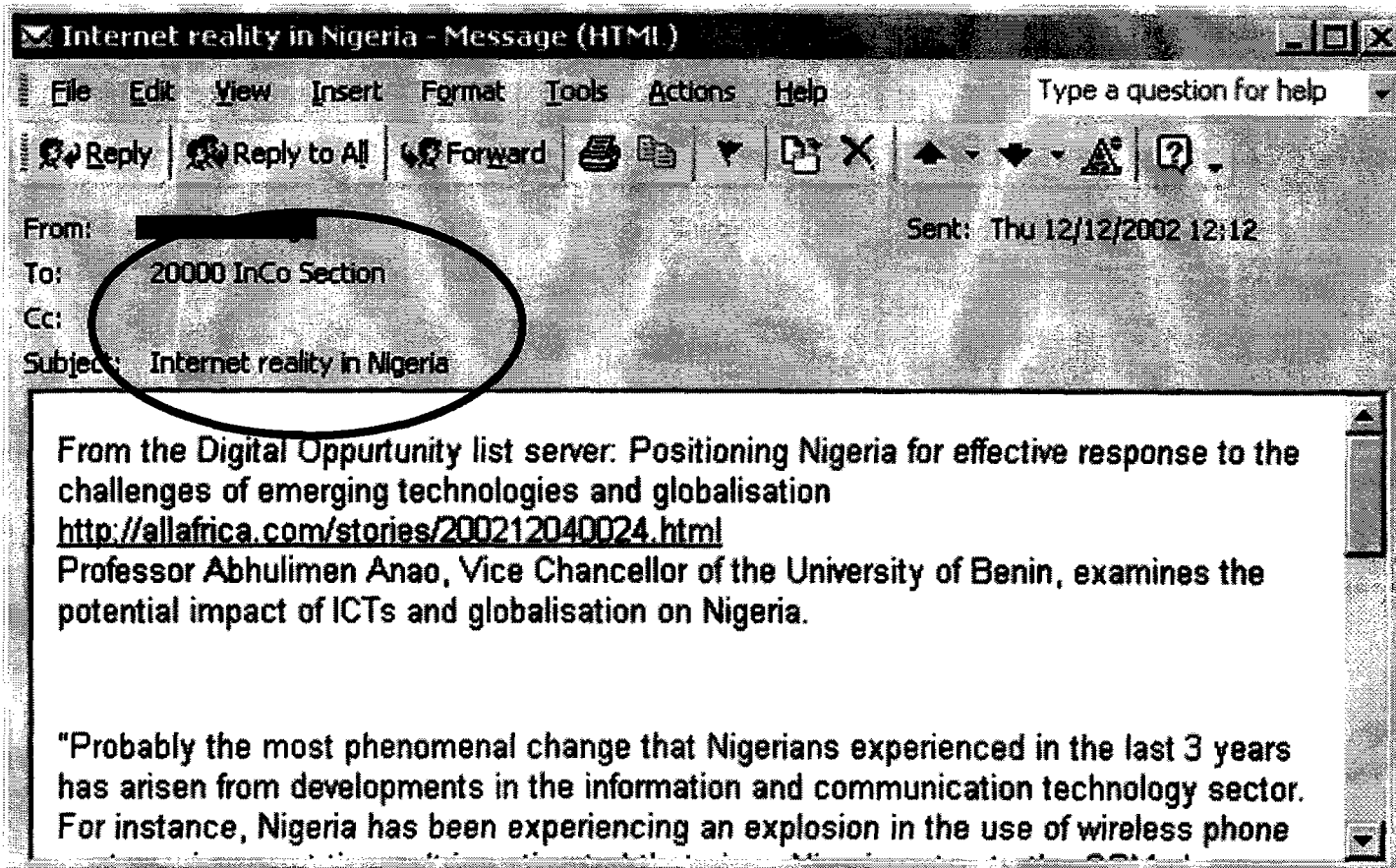# KVC Develop / Personnel IRC ✓

KVC Develop / Structure IRC √

KVC Develop / Systems IRC ✓

KVC Share / Strategy IRC √

☐ Portal (E distribution channel)

☐ Publication distribution channel (s)

KVC Share / Culture IRC   √

Internet reality in Nigeria - Message (HTML)

File   Edit   View   Insert   Format   Tools   Actions   Help   Type a question for help

Reply | Reply to All | Forward |

From: Sent: Thu 12/12/2002 12:12
To: 20000 InCo Section
Cc:
Subject: Internet reality in Nigeria

From the Digital Oppurtunity list server: Positioning Nigeria for effective response to the challenges of emerging technologies and globalisation
http://allafrica.com/stories/200212040024.html
Professor Abhulimen Anao, Vice Chancellor of the University of Benin, examines the potential impact of ICTs and globalisation on Nigeria.

"Probably the most phenomenal change that Nigerians experienced in the last 3 years has arisen from developments in the information and communication technology sector. For instance, Nigeria has been experiencing an explosion in the use of wireless phone

---

KVC Share / Man. Style IRC √

Prgress note: Reorganization and IHE november 2002 - Message (HTML)

File   Edit   View   Insert   Format   Tools   Actions   Help   Type a question for help

Reply | Reply to All | Forward

From: Jan Teun Visscher   Sent: Thu 14/11/2002 11:28
To: 00000 Everyone
Cc:
Subject: Prgress note: Reorganization and IHE november 2002

Dear colleagues,

Further to a discussion we had in the MT I would like to brief you on developments and do this from now on every month even if there are no developments.

IRC-IHE
Concerning the situation with IHE, a meeting was held between a few members of
both Boards, reconfirming the interest, but also because the situation with

KVC Share / Personnel IRC ✓

KVC Share / Structure IRC ✓

☐ Communication meeting

☐ Reports etc.

☐ Publication (s) (hard copy)

But (2002) ...

☐ Section meeting

☐ CRM / CMS / Q&A

KVC Share / Systems IRC √

- [ ] Intranet / Q-drive / IRC Doc
- [ ] Website / Source / InterWATER
- [ ] This you can all come up with yourself...

(and you did and that's part of the IRC problem)

KVC Apply / Strategy IRC ✓

KVC Apply / Culture IRC ✓

KVC Apply / Man. Style IRC ✓

KVC Apply / Personnel IRC ✓

KVC Apply / Structure IRC   √

KVC Apply / Systems IRC √

KVC Evaluate / Strategy IRC ✓

☐ Has been done in 2001; 5 years funding

☐ Program management, GEM, bottom up 2003 year plan

KVC Evaluate / Culture IRC √

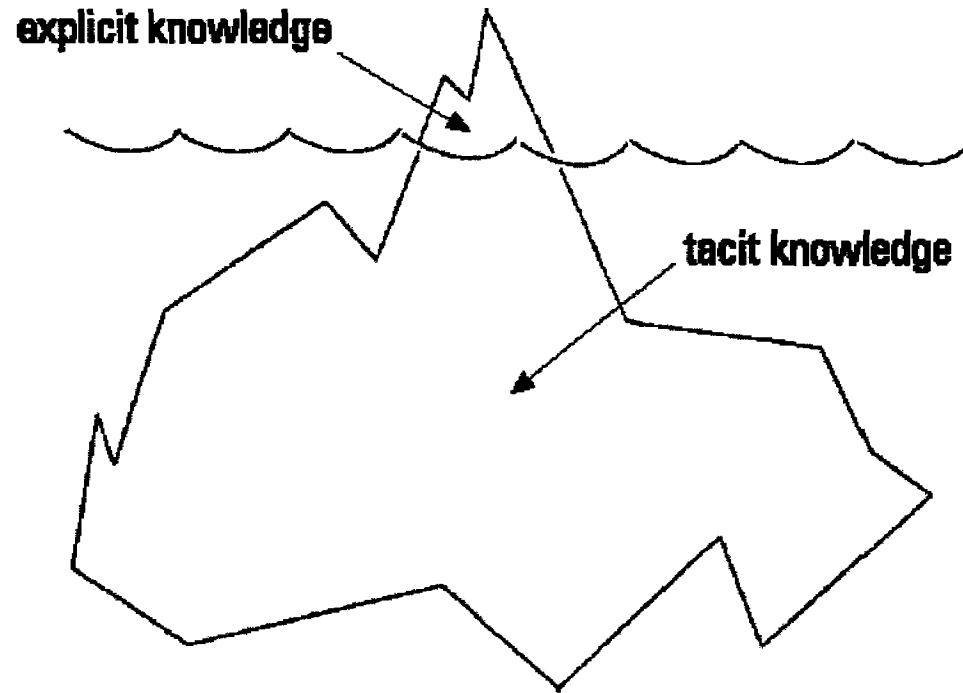# KVC Evaluate / Man. Style IRC√

KVC Evaluate / Personnel IRC √

KVC Evaluate / Structure IRC ✓

KVC Evaluate / Systems IRC √

Loose ends and ... links to RCD

explicit knowledge

tacit knowledge

Knowledge Management
Loose ends and ... links to RCD

- ☐ What to pick-up for RCD
- ☐ How 'to become information broker'
- ☐ The model extended
- ☐ IRC and RC acting in network
- ☐ From E-now to E-2-B
- ☐ Model for a Resource Centre
- ☐ Who does Knowledge Management?
- ☐ Instruments to steal...

Knowledge Management
What to pick-up for RCD

- ☐ Use the model as a coat rack to get all the issues on the table (fractal)
- ☐ Strategic value of knowledge for RC
  - ■ Next to $ & HRM sustainability
- ☐ Collective ambition group of people
  - ■ Forget about 'command & control'
- ☐ Role ICT enabling technology
  - ■ from executing routine task to
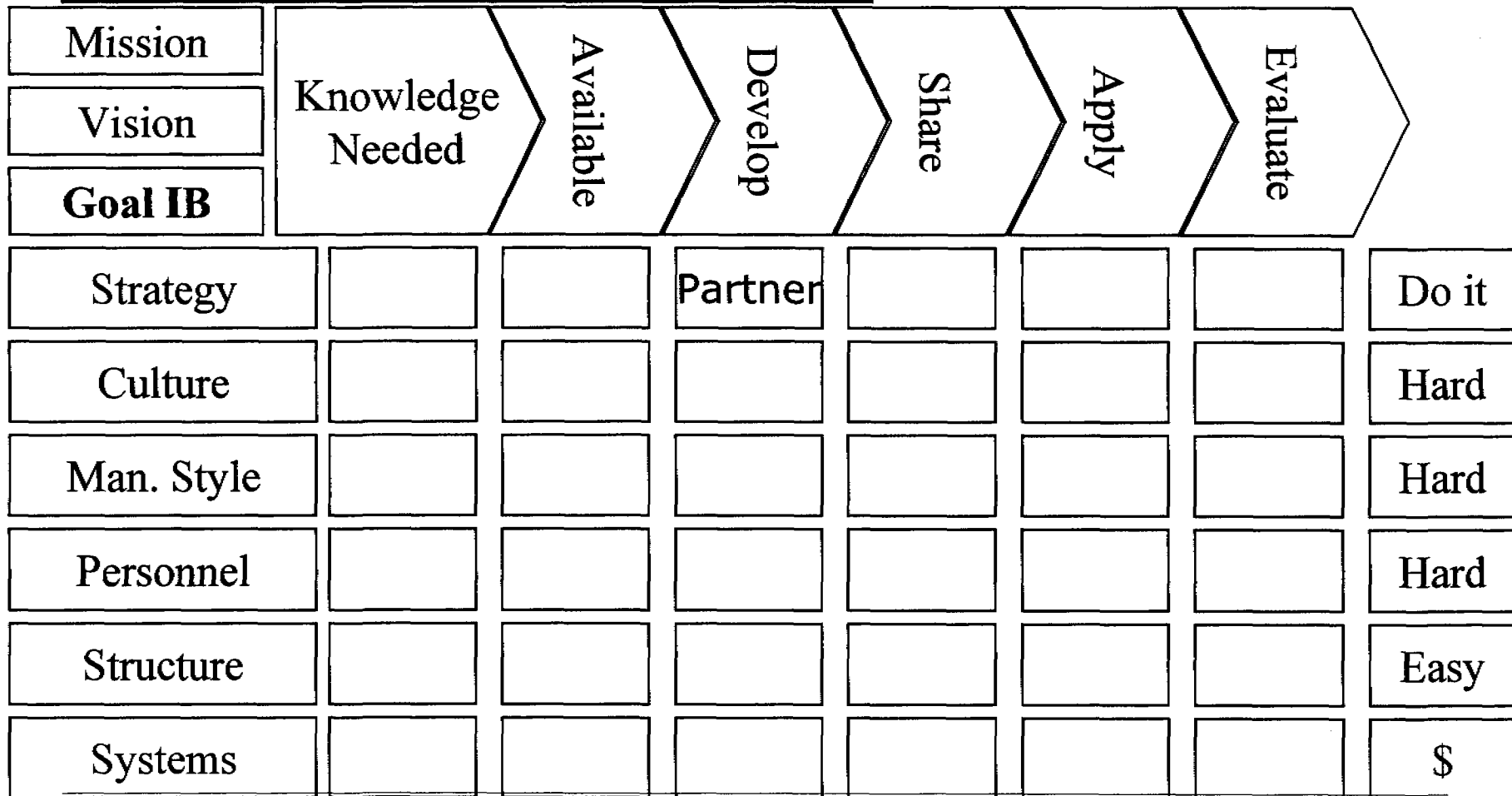   - ☐ from horsepower to horseracing

Knowledge Management
What to pick-up for RCD

- ☐ Goal KM is to make as much relevant knowledge explicit as possible
  - ■ Heads -> accessible for others (power)
  - ■ Individual -> organizational memory
- ☐ Object KM is people learning from each other
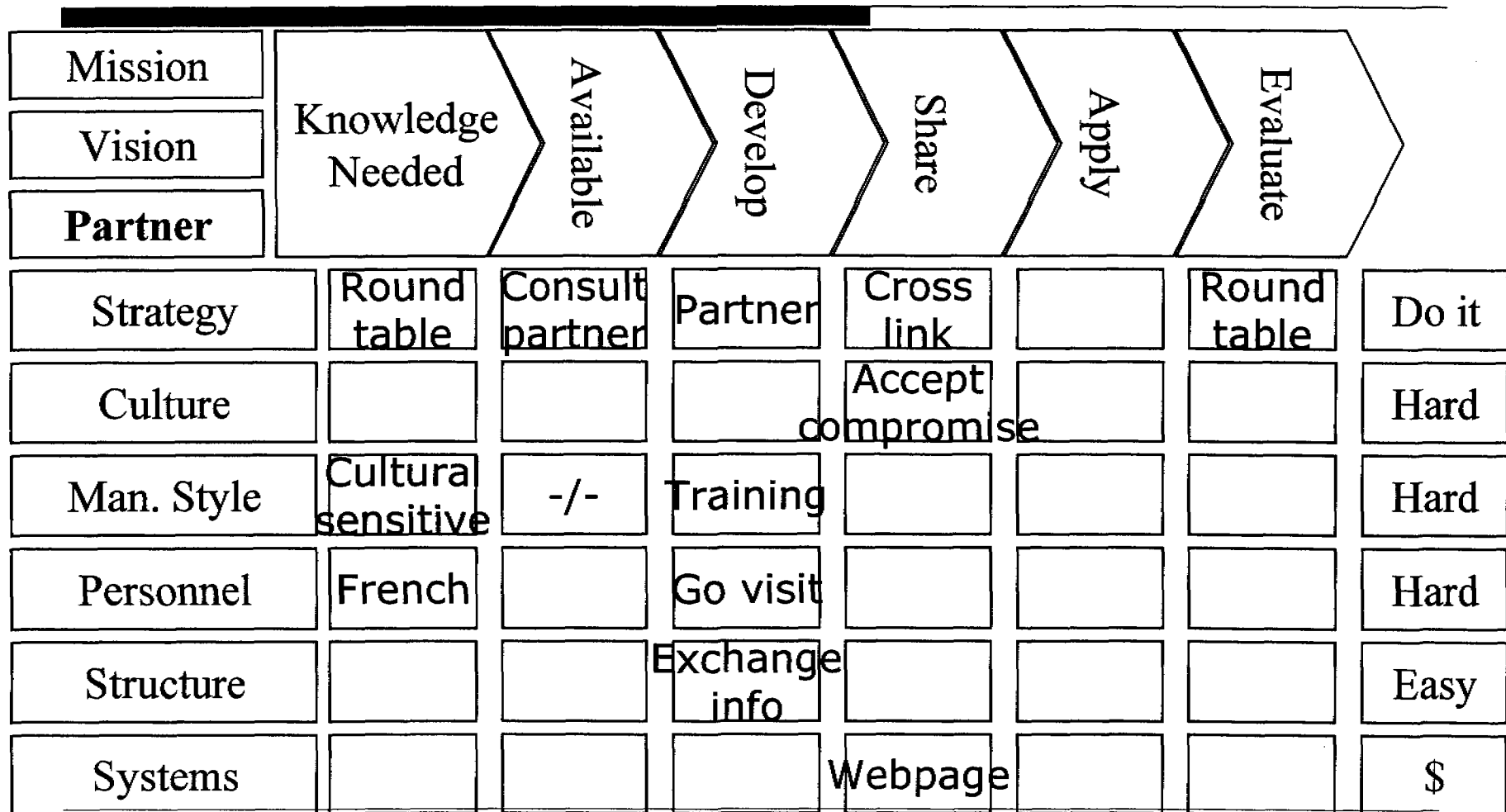 - ■ Organize learning process / environment (trust)

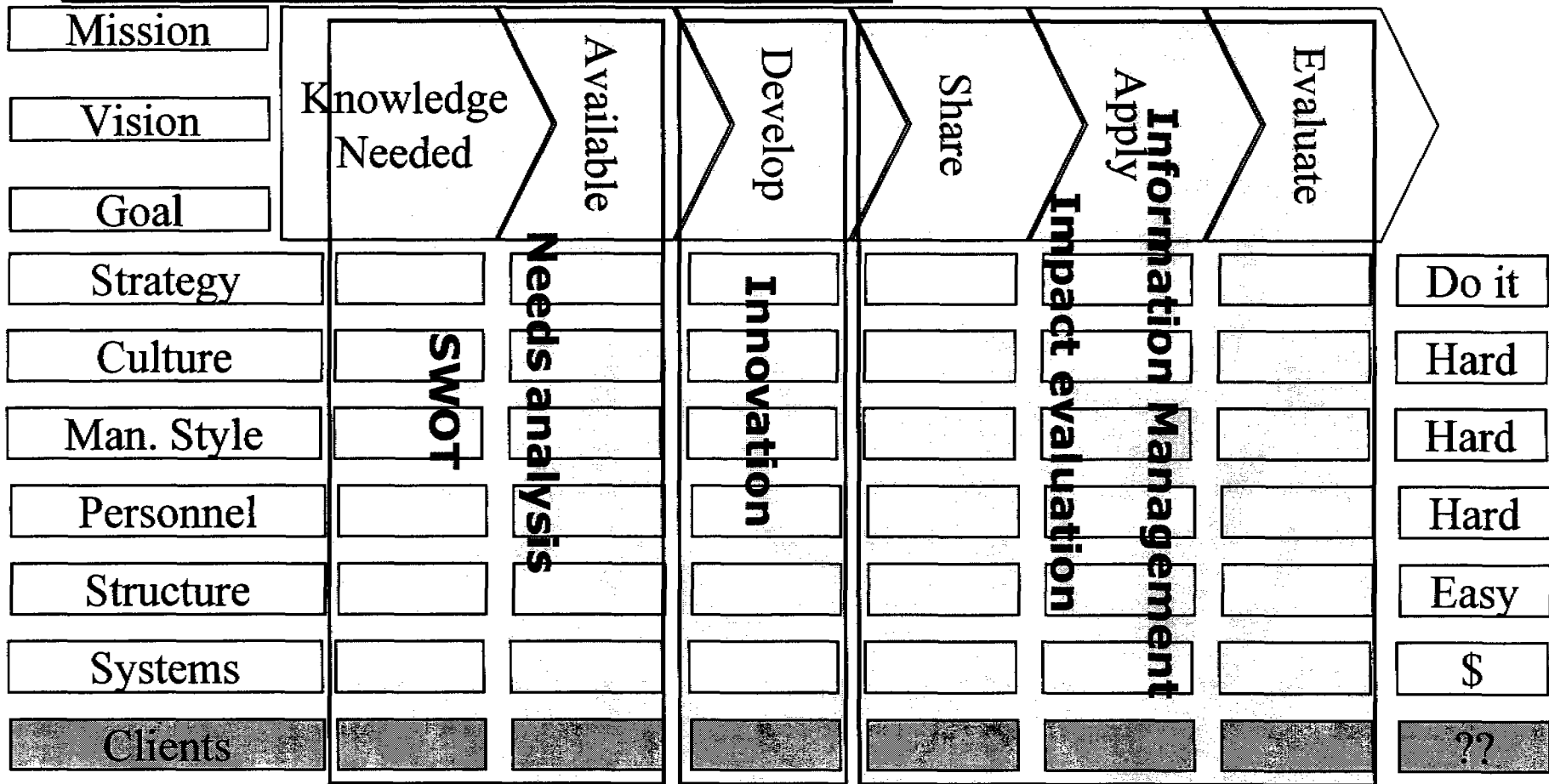# Knowledge Value Chain (KVC) 'to become information broker' 1

	Knowledge Needed	Available	Develop	Share	Apply	Evaluate	
Mission							
Vision							
Goal IB							
Strategy			Partner				Do it
Culture							Hard
Man. Style							Hard
Personnel							Hard
Structure							Easy
Systems							$

Knowledge Value Chain (KVC)
'to become information broker' 2

	Knowledge Needed	Available	Develop	Share	Apply	Evaluate	
Mission							
Vision							
Partner							
Strategy	Round table	Consult partner	Partner	Cross link		Round table	Do it
Culture				Accept compromise			Hard
Man. Style	Cultural sensitive	-/-	Training				Hard
Personnel	French		Go visit				Hard
Structure			Exchange info				Easy
Systems				Webpage			$

Knowledge Value Chain (KVC)
The model extended 1

	Knowledge Needed	Available	Develop	Share	Apply / Information Management	Evaluate	
Mission							
Vision							
Goal							
Strategy							Do it
Culture							Hard
Man. Style	SWOT	Needs analysis	Innovation		Impact evaluation		Hard
Personnel							Hard
Structure							Easy
Systems							$
Clients							??

Knowledge Value Chain (KVC)
The model extended 2; VM

Mission	Knowledge Needed	Available	Develop	Share	Apply	Evaluate	
Vision							
Goal							
Strategy							Do it
Culture	Culture						Hard
Man. Style	People						Hard
Personnel							Hard
Structure	Process						Easy
Systems	Technology						$
Clients							??

IRC and RC acting in network
Thick = RCD, thin is info (.. through others)
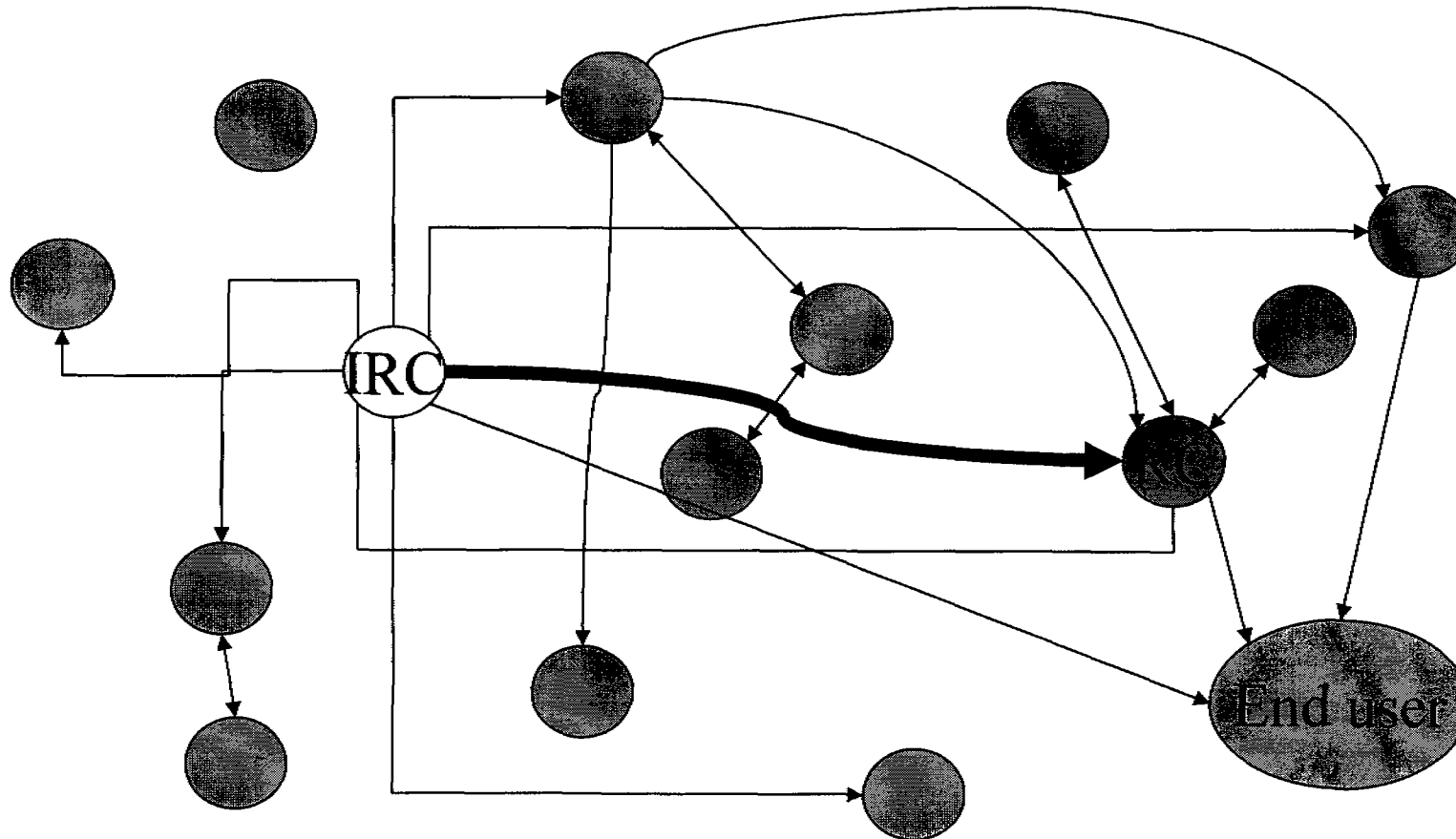
IRC and RC acting in network
Policy info
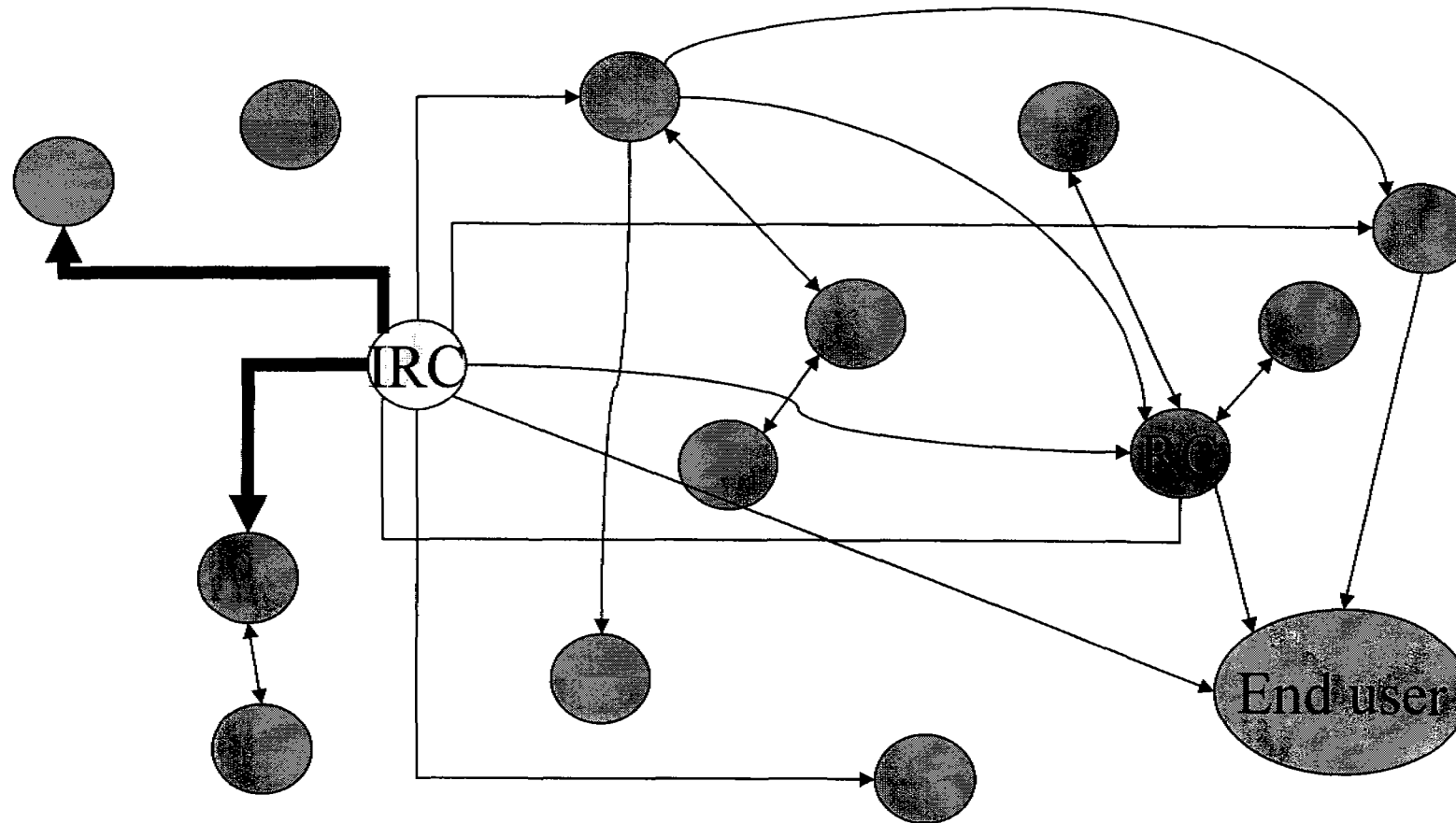
IRC and RC acting in network
Books..
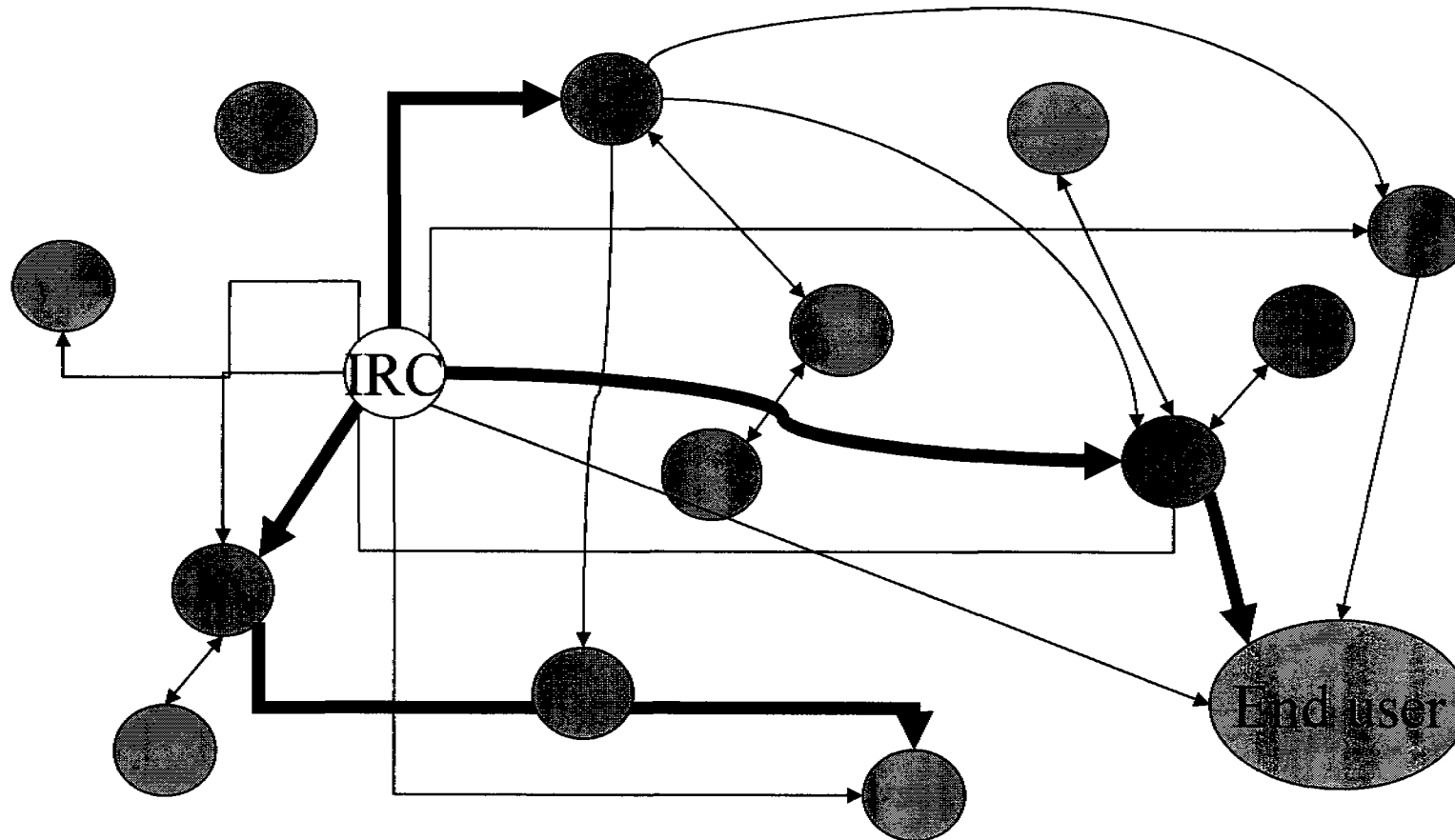
RC: the 'spider' in their network
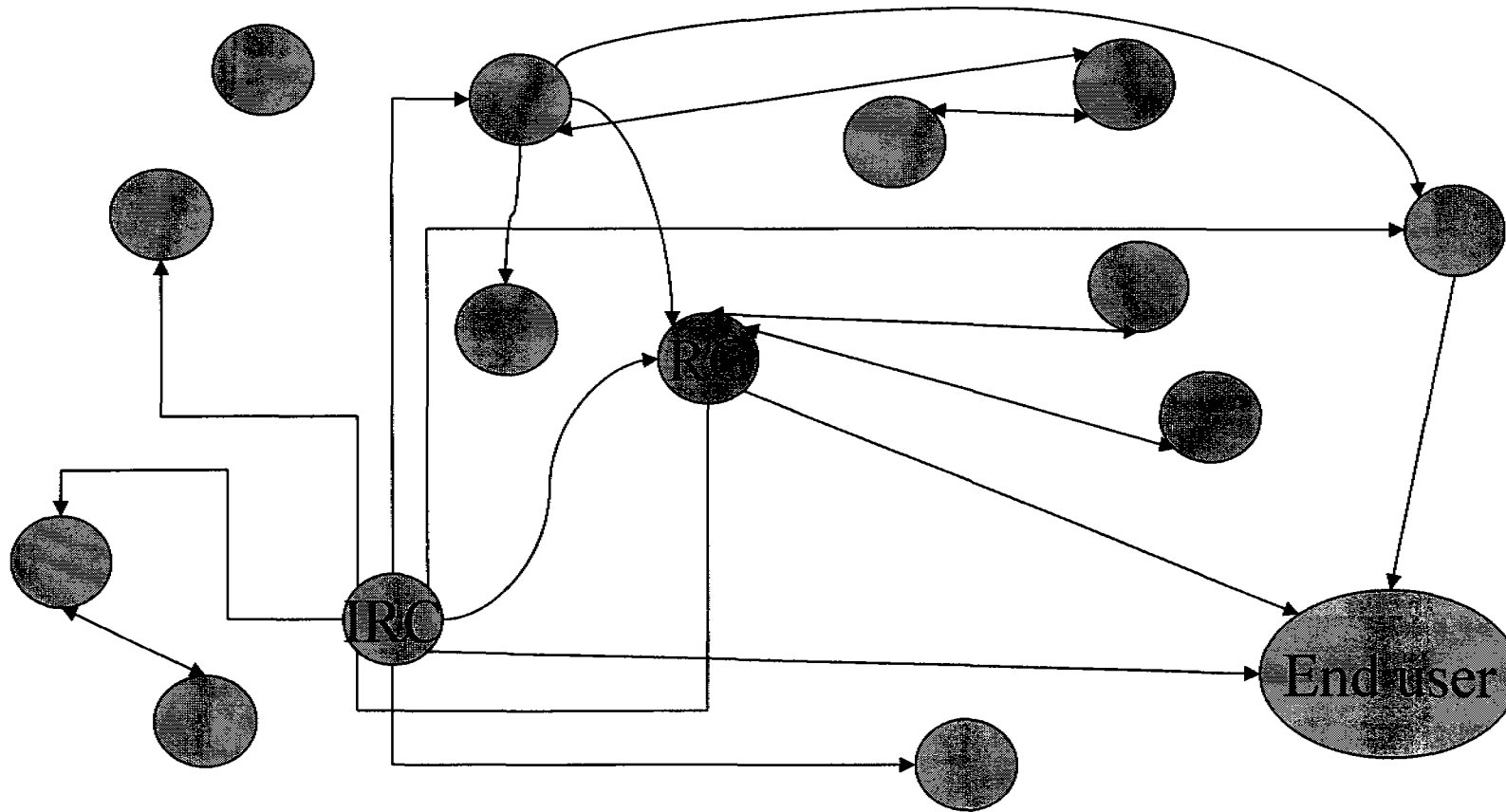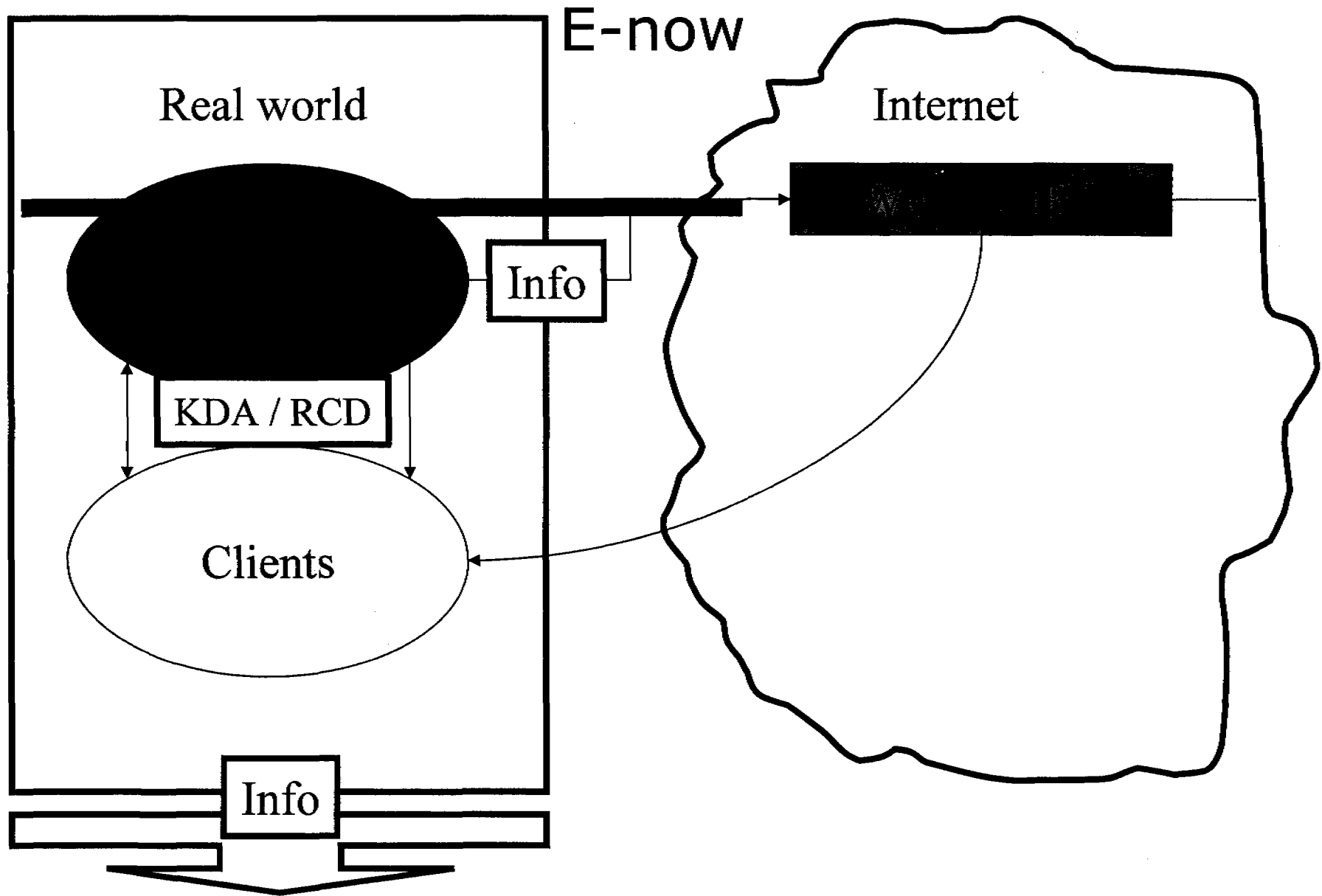
E-now

Real world

Info

KDA / RCD

Clients

Internet

Info

Straight = bring info   Curved = get info

E-2-B

Real world

Internet

Info

Po...l

Info

CRM IRC

links

KDA / RCD

E-now

Q&A IRC

Clients

I/KB IRC

Info

Info

Straight = bring info

Curved = get info in any possible way

Model for a Resource Centre

Need   Organisation | K/I base | Channel   Client   End user

WAT SAN

XXX

IRC

YYY

Store
Collect

Quality
Check I/O

RC's

Institution

Anonymous
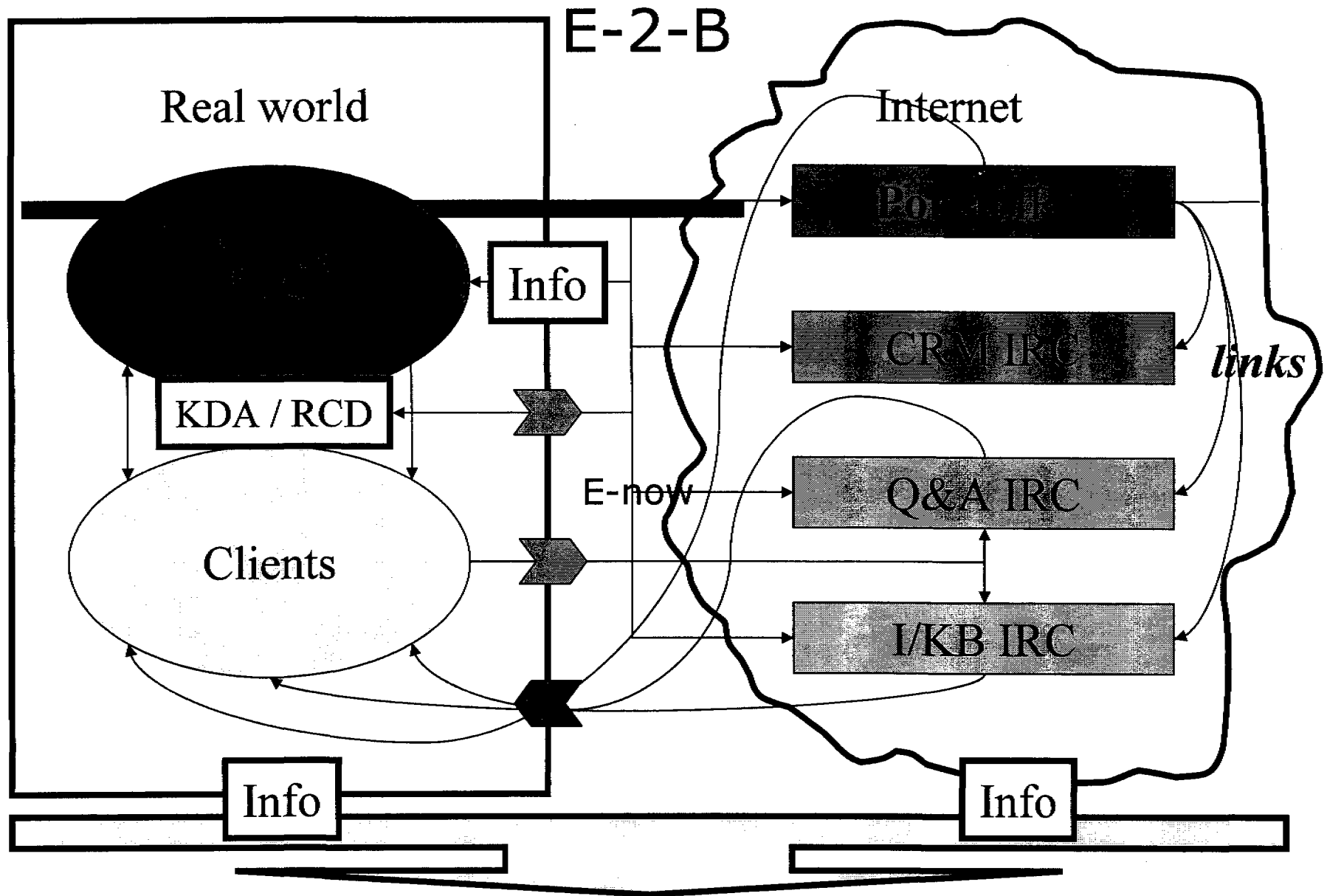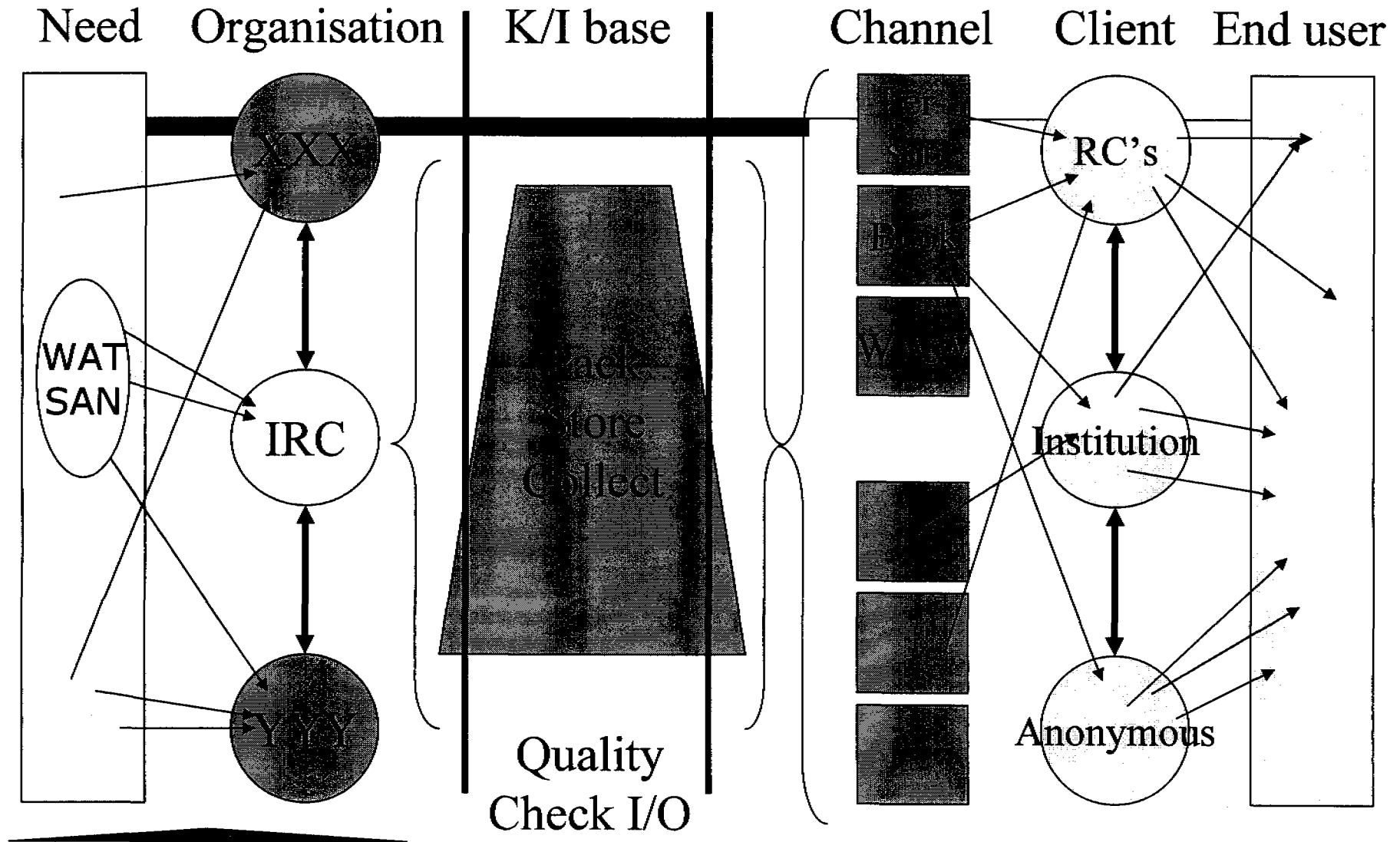
Who does Knowledge Management?

Information Manager: Weggeman

ICT KM = Information (&CT) management. $K = \mathbf{I}.f(\text{esa})$

Management Team / Staff:

HTM KM = human talent / competence management. $K = \mathrm{I}.f(\mathbf{esa})$

Director / Knowledge Manager / Service section:

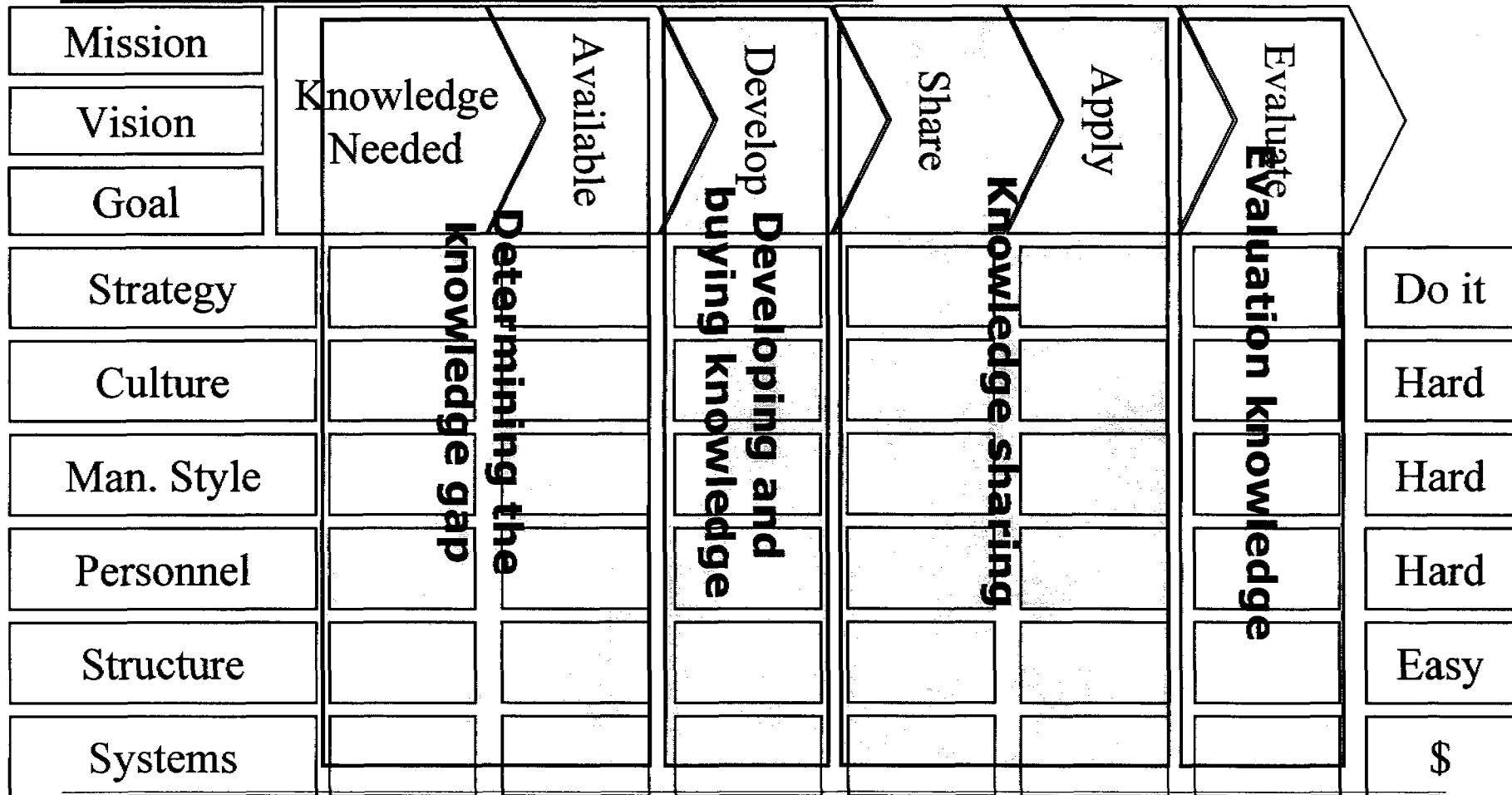KFO KM = to create a Knowledge Friendly Organisation. $K = \mathrm{I}.f(\text{esa})$

So, KM effects the business of every employee!

Old Organisation + New Technology = Expensive Old Organisation

Knowledge Value Chain (KVC)
Instruments to steal...

	Knowledge Needed	Determining the knowledge gap	Available	Develop Developing and buying knowledge	Share	Knowledge sharing	Apply	Evaluate Evaluation knowledge		
Mission										
Vision										
Goal										
Strategy										Do it
Culture										Hard
Man. Style										Hard
Personnel										Hard
Structure										Easy
Systems										$

Knowledge management instruments
1. Determining the knowledge gap.

- [ ] Develop knowledge information system.
- [ ] **Organize meetings for knowledge sharing.**
- [ ] Interview (knowledge-)workers.
- [ ] Search for best practices.   **Carry out knowledge mapping.**
- [ ] Develop scenarios.   Hire researchers and consultants.
- [ ] Carry out strategic studies.   Develop an intranet.
- [ ] Install Internet.   Detach personnel.
- [ ] Assess customers.   **Assess markets.**
- [ ] Manage by walking around.   Manage by wandering around.
- [ ] Assess product developments.   Assess competition.
- [ ] Organize brainstorm sessions
      (for instance through using Group Systems).
- [ ] Draw up an inventory of personnel and their qualifications.
- [ ] Carry out case-studies into the own organization.

Knowledge management instruments
2. Developing and buying knowledge

☐ Carry out strategic technology study..

☐ Carry out R&D..

☐ Install electronic boardroom..

☐ **Use external training..**

☐ Use business intelligence..

☐ Install helpdesk..

☐ Carry out customer satisfaction research..

☐ Carry out market research..

☐ Draw up an inventory of the need for training and education of personnel, both strategically as well as personal.

☐ Develop training and education plan..

☐ Educate and train personnel..

☐ **Learn from projects, for instance by evaluating them**.

Knowledge management instruments
2. Developing and buying knowledge

- Develop career paths for personnel.
- Give personnel time to develop ideas.
- Facilitate training-on-the-job.
- Facilitate job rotation.
- **Send personnel to conferences.**
- Give personnel time to read professional literature.
- Organize seminars with external speakers.
- Obtain knowledge from customers.
- Organize mentorship in units.
- Organize mentorship between units.
- **Look for traineeships.**
- Organize detachments.
- Buy knowledge and information hardware.
- Monitor the environment (benchmarks).

Build a network of relations.
Facilitate streams of information.
Facilitate learning-by-doing.
Create an open culture.

Obtain knowledge from suppliers.

Hire research and consultancy.
Install (virtual) suggestion box.

Manage networks.

Knowledge management instruments
3. Knowledge sharing

- ☐ Archive projects.
- ☐ Install computer networks.
- ☐ Make project- or fact-sheets.
- ☐ Organize mentorship between units.
- ☐ Install knowledge counter.
- ☐ Organize task groups.
- ☐ Stimulate teambuilding.
- ☐ Install knowledge management system.
- ☐ Appoint an information broker.
- ☐ **Debrief personnel.**
- ☐ **Enhance communication between personnel (for instance by lunch break meetings).**
- ☐ Facilitate job rotation.
- ☐ **Install an intranet.**
- ☐ Use video conferencing.
- ☐ Facilitate internal detachment.
- ☐ Facilitate informal gatherings.
- ☐ Facilitate culture of deliberation.

Use intermission.
Stimulate cooperation.
Organize mentorship in units.

Look for traineeships.
Organize theme groups.
Organize work meetings.
Work with databases.
Carry out internal audits.
Install helpdesk.

Organize autonomous work groups.
Facilitate exchanging of tasks.
Use information technology.
Facilitate training-on-the-job.
Organize cocktail hours.
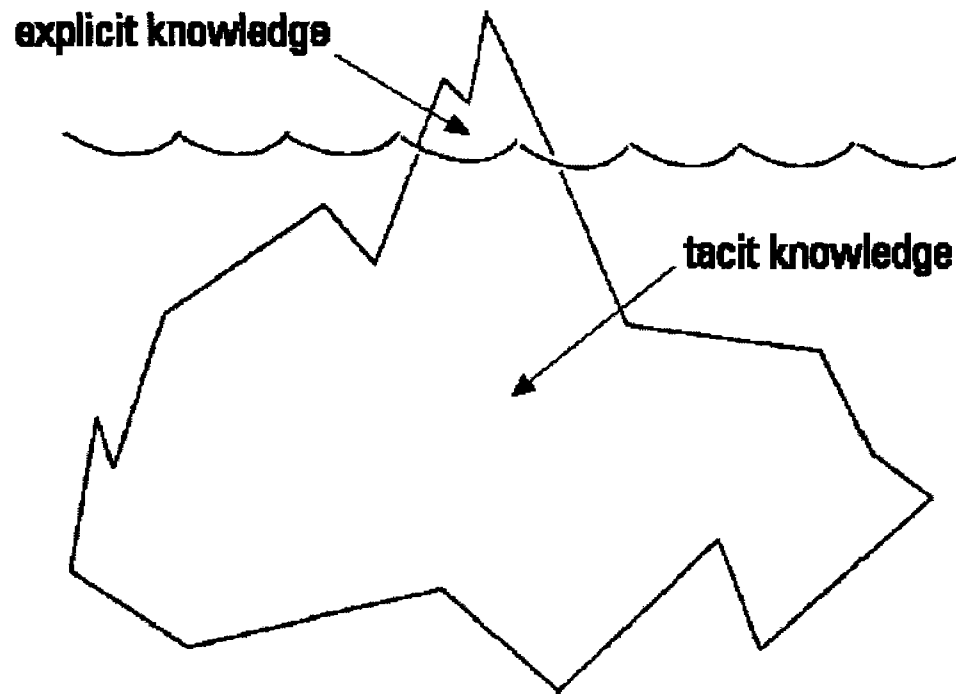Install electronic networks.

Knowledge management instruments
4. Evaluating knowledge

- ☐ Carry out internal audits.
- ☐ **Carry out external audits**.
- ☐ Carry out (informal) project evaluations.
- ☐ Interview suppliers.
- ☐ Interview customers.
- ☐ Carry out strategic studies.
- ☐ **Organize workshops**.
- ☐ Debrief leaving personnel.
- ☐ Use benchmarking.
- ☐ Read reports.
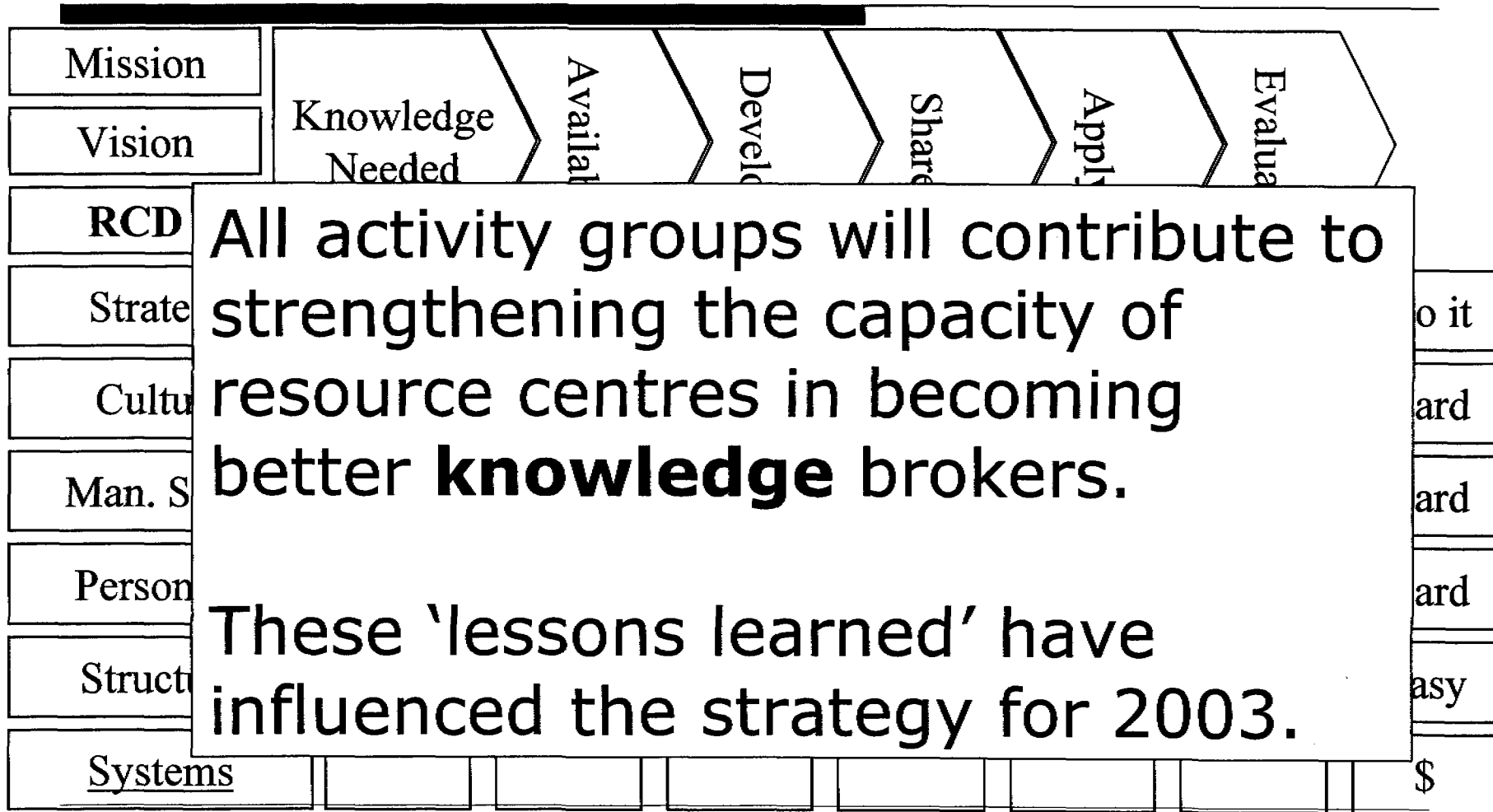- ☐ Use handbooks.

Questions in knowledge management

Roelof P. uit Beijerse Journal of Knowledge Management Volume 3 Number 2 . 1999 . 94?09

Knowledge Value Chain RCD

explicit knowledge

tacit knowledge

Knowledge Value Chain RCD

Mission						
Vision	Knowledge Needed	Availab	Devel	Share	Apply	Evalua

| RCD | All activity groups will contribute to strengthening the capacity of resource centres in becoming better **knowledge** brokers.

These 'lessons learned' have influenced the strategy for 2003. | | |
|---|---|---|---|
| Strate | | | o it |
| Cultu | | | ard |
| Man. S | | | ard |
| Person | | | ard |
| Struct | | | asy |
| Systems | | | $ |

Knowledge Value Chain RCD Strategy / Available

☐Information is not necessarily an issue that governments commit themselves to in terms of making resources available. An important challenge for the section will be to help RCs to make the government of their countries more information minded.

Knowledge Value Chain RCD Share

☐ Supporting RCs on the basis of their demands and requirements related to the knowledge sharing strategy they develop, and the capacity they need to implement this.

Knowledge Value Chain RCD Personnel

☐ Ensuring that a minimum of 5 IRC staff and a total of 2 RC staff are competent to facilitate RCD-processes (internal/external training and coaching).

Knowledge Value Chain RCD Evaluate

☐ We have started the development of a monitoring 'system', which needs to be tried out and be used. This includes more qualitative indicators that will allow us to see whether our support efforts are effective.

Knowledge Management
What to pick-up for RCD

☐ So maybe RCD should concentrate on creating Virtual Resource Centre and look for owners in the network from a RC; not necessarily the RC IRC works with.

☐ Example: www.cbnrmasia.com