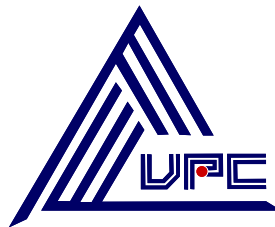# APO KM Training Course
@Hanoi, Vietonam
10-11 August 2005

How to Build a
Knowledge-based Organization

- Best Practices and Keys for KM Implementation -

Organized by: Vietnam Productivity Centre (VPC)

Agenda

Session .   **(August 10th 09:00-10:30)**

Definition and Best Practices of KM

- Introduction and Course Review
- Why and What's KM?
- Best Practices of KM

Session .   **(August 10th 11:00-12:30)**

Overview of Implementation of KM

- 3 types of KM Strategy
- Difficulties and Measures of KM Implementation
- Lessons Learned

Session .   **(August 11th 09:00-10:30)**

Case Study (1) Defining KM Strategy

- Finding Opportunities of KM
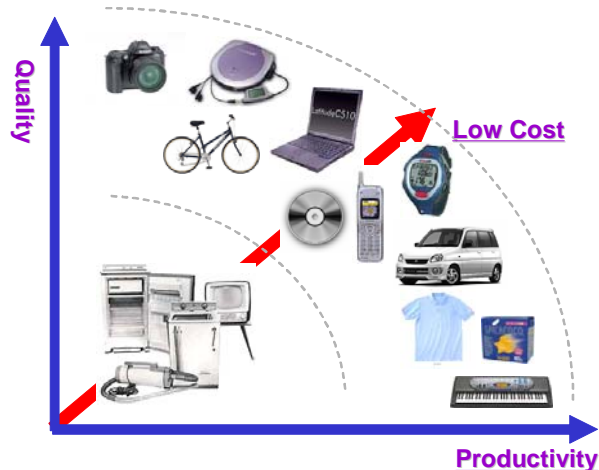- Defining KM Strategy

Session .   **(August 11th 11:00-12:30)**

Case Study (2) Selecting Pilot Areas

- Finding Potential Pilot Areas
- Evaluating the Options
- Summary and Feedback

Why Enterprises need KM?

Before Knowledge Era

After Knowledge Era

Paradigm of Competition

- How to generate products and services with better quality and less cost?

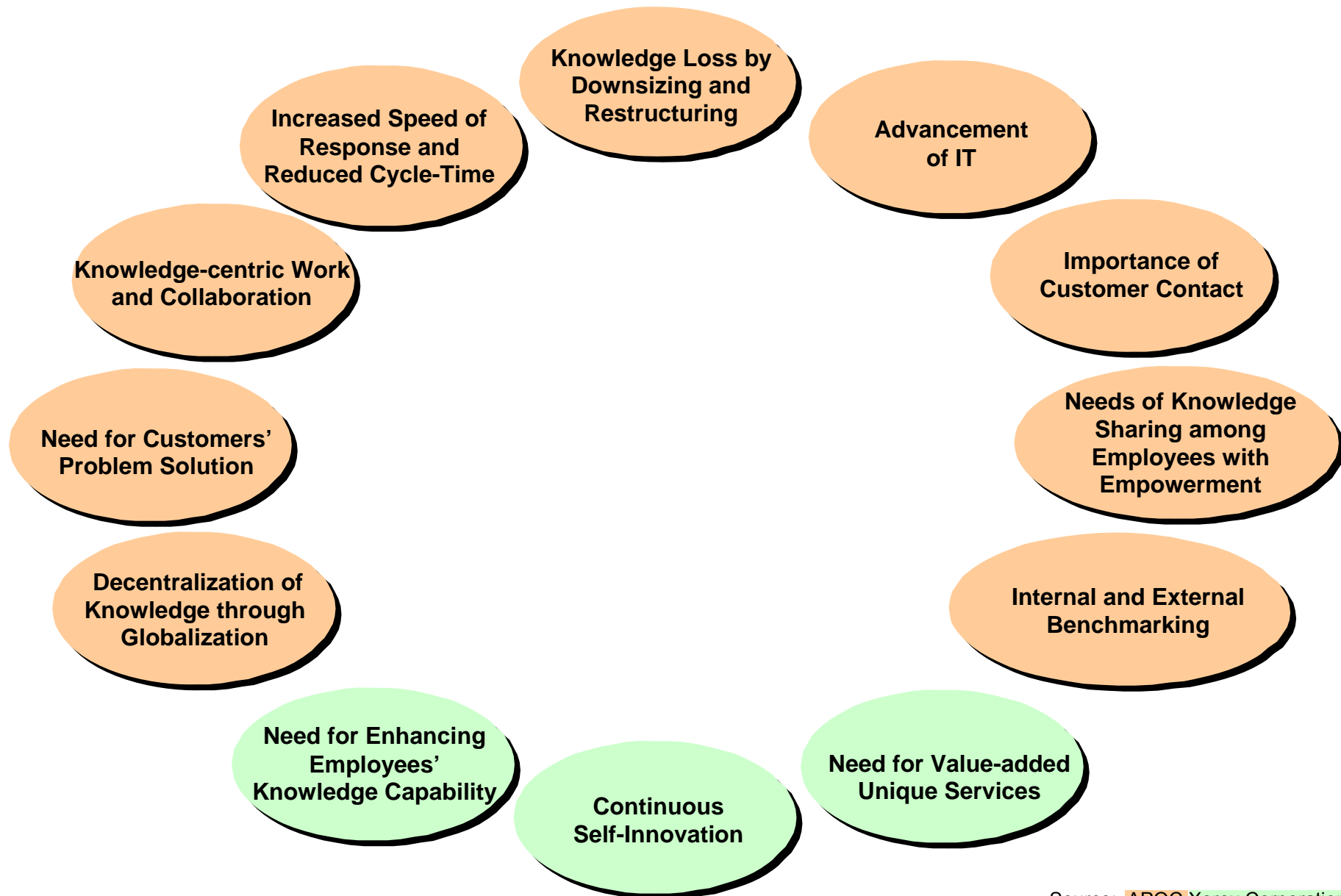、 Focusing on "How" rather than "Why" and "What"

Paradigm of Competition

- What to provide products and services which are unique?
- Knowledge embedded in Business produce more profit than products.

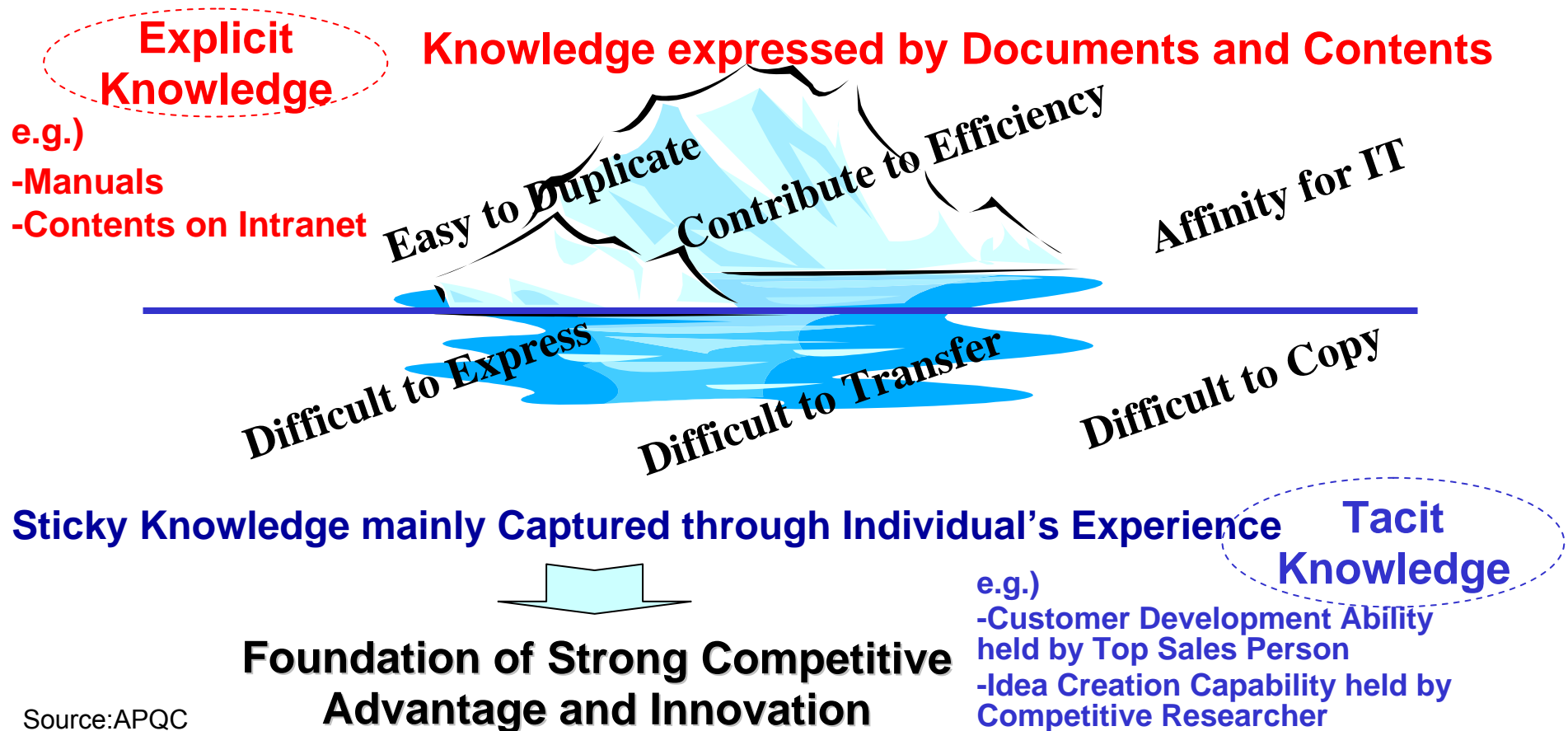、 Should focus on "Why" and "What" rather than "How"

"Continuous Innovation or Die"
- Knowledge is the most important resource of Value Creation

Main Triggers for Knowledge Management

Knowledge Loss by Downsizing and Restructuring

Increased Speed of Response and Reduced Cycle-Time

Advancement of IT

Knowledge-centric Work and Collaboration

Importance of Customer Contact

Need for Customers' Problem Solution

Needs of Knowledge Sharing among Employees with Empowerment

Decentralization of Knowledge through Globalization

Internal and External Benchmarking

Need for Enhancing Employees' Knowledge Capability

Continuous Self-Innovation

Need for Value-added Unique Services

By the way, What's Knowledge? (Definition)

- ## Knowledge is "Information in Action."
  … APQC (American Productivity and Quality Center.

- ## Knowledge is "Justified True Belief."
  … Professor Ikujiro Nonaka (Guru of Knowledge Management.

Explicit Knowledge

Knowledge expressed by Documents and Contents

e.g.)
-Manuals
-Contents on Intranet

Easy to Duplicate

Contribute to Efficiency

Affinity for IT

Difficult to Express

Difficult to Transfer

Difficult to Copy

Sticky Knowledge mainly Captured through Individual's Experience

Tacit Knowledge

e.g.)
-Customer Development Ability held by Top Sales Person
-Idea Creation Capability held by Competitive Researcher

Foundation of Strong Competitive Advantage and Innovation

Source:APQC

Key Focus of Knowledge Management

- Since Knowledge is tacit and sticky to context, different from information, we should focus on following things to achieve KM successfully.

"Vital Individuals" and "Dynamic Ba"

- Physical and mental space that is shared by knowledge workers to co-create intellectual and emotional interrelationship

"Communities of Practice"

- Human networks that are formed voluntarily to learn specific knowledge mutually, which maintain close but independent relationship
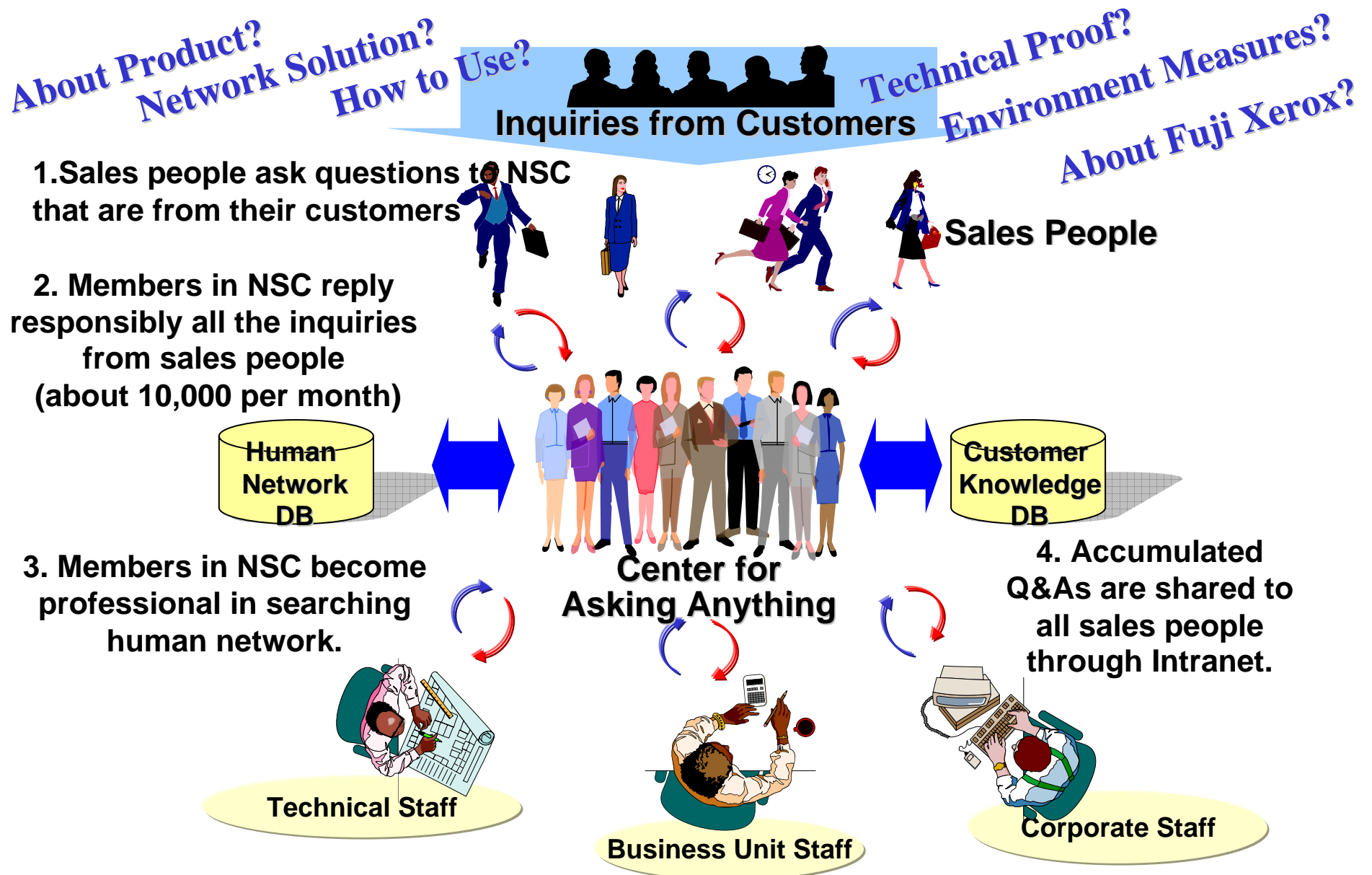
"Social Capital"

- Collective value of all "social networks" and the inclinations that arise from these networks to do things for each other ("norms of reciprocity")

Best Practices of KM

Case1.Fuji Xerox "Ask-Anything" Center

About Product?
Network Solution?
How to Use?

Inquiries from Customers

Technical Proof?
Environment Measures?
About Fuji Xerox?

1.Sales people ask questions to NSC that are from their customers

Sales People

2. Members in NSC reply responsibly all the inquiries from sales people (about 10,000 per month)

Human Network DB

Customer Knowledge DB

Center for Asking Anything

3. Members in NSC become professional in searching human network.

4. Accumulated Q&As are shared to all sales people through Intranet.

Technical Staff

Business Unit Staff

Corporate Staff

Case1.Fuji Xerox "Ask-Anything" Center

- **The Q&As Accumulated Become Valuable Knowledge for Sales People**

Case1.Fuji Xerox "Ask-Anything" Center

Key Success Factor

1. Well-Designed Collecting Needs for Sales that fits Sales People's Behavior

- "We will Solve your Problem" Approach Fits Sales People's Behavior.

  ("Put in your Knowledge" Approach does not Work for Sales People.)

- Resultingly, Repeating Q&A Process Generate Huge Knowledge Accumulation that Fits Needs of Sales People.

2. Capturing Fresh Knowledge through Dialogue

- "Picking out Essence of the Knowledge from Dialogue" Approach can Build Useful Knowledge Repositories.

  ("Automatic Knowledge Accumulation" Approach does not work.)

- For that, Full-Time Workers who Have Passion for "Knowledge Stewarding" are Effective Measure.

- Knowledge Management is not "System-Intensive" but "Labor-Intensive"

- Members in NSC are very responsible, because they all raised their hands to Launch NSC.

3. Company-Wide Learning Network

- By Accumulating customer knowledge in the intranet, almost every answer for inquiry can be found as the ones answered before. (Organizational Learning)

Case 2: Fuji Xerox Virtual Hollywood Program
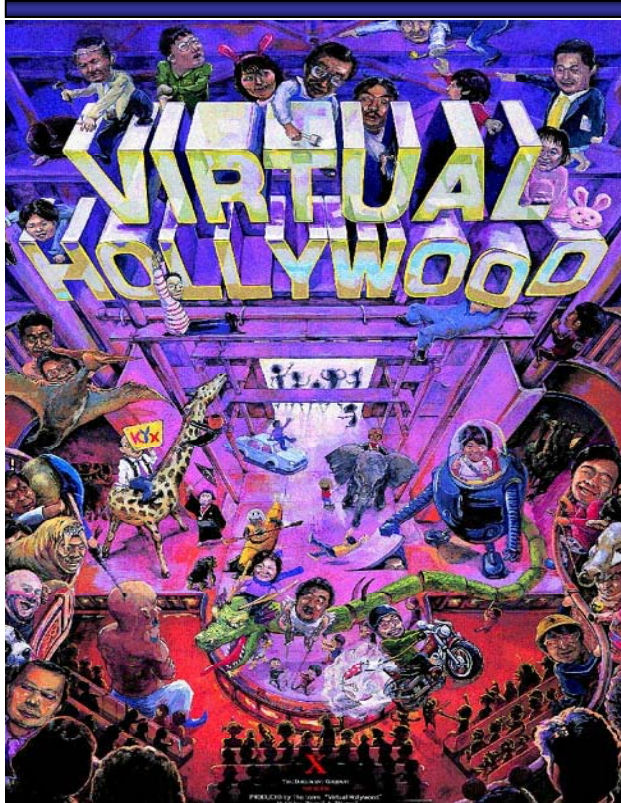
- **Innovative activities assumed from customer's scene and to collaborate beyond organizational boundary.**

---Write Scenario and act beyond what customers expect as if we create Hollywood movies to excite people, all for excitement of our customers...---

230 DIRECTORS

Virtual Hollywood Program

Purpose

Extrication of Hierarchical Management

Extrication of Job-Description Oriented Work Style

| Supporting Community | Bringing out Ownership |

Fostering Customer View

Networking

Community Activity

Nurturing Change Leaders

Case 2: Fuji Xerox Virtual Hollywood Program

List of Themes

Community members

Collaboration Space

Case 2: Fuji Xerox Virtual Hollywood Program

Evolution of Virtual Hollywood

1999
VIRTUAL HOLLYWOOD
- Fostering Change Leaders

2000
VIRTUAL HOLLYWOOD 2
Over the Rainbow
- Developing Environment of Community Activities

2001
VIRTUAL HOLLYWOOD 3
- Involving Mgr. and Affiliates

2002
VIRTUAL HOLLYWOOD
Platform
- Involving Senior Executive as Theme Setters

2003
VIRTUAL HOLLYWOOD
Platform
- Involving Customers to Achieve Innovation

Fostering Change Leaders
Enhancing Continuous Evolving Capability

- Virtual Hollywood has been consistently challenging to achieve innovation through interaction beyond boundaries.
- This year, we are challenging the interaction even beyond corporation.

Case 3: Buckman Laboratories

"Change from product-oriented to customer-oriented company"
Robert Buckman chairman (1978)

Selling knowledge instead of product
Become a solution offering company instead of product offering company

K'Netix
A communication environment which links researchers in main office with sales person located all over the world or among sales person

K'Netix
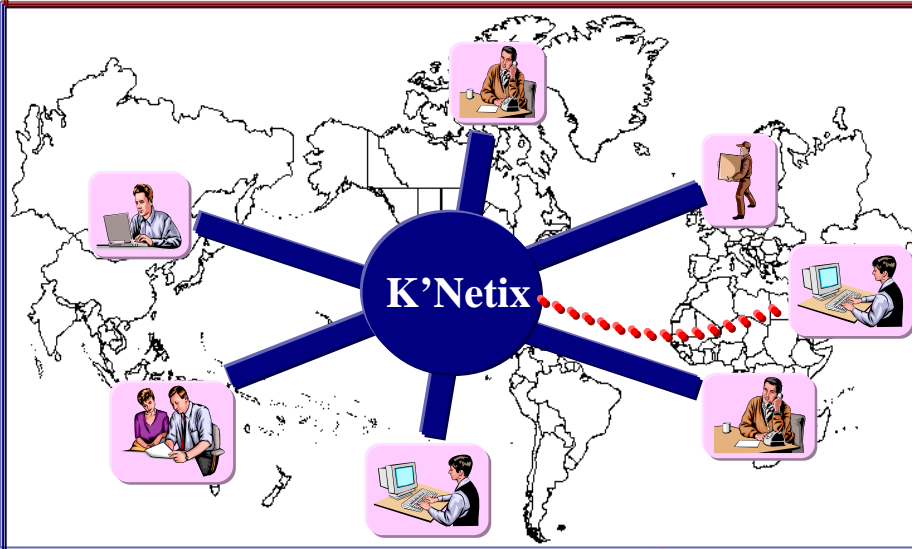
Entire company works totally as a "brain"
Practice the system and culture that provide customer value by connecting people

Index for measuring effects
-The sales ratio of new products (over 50%)

-Increase the ratio of employees working with customer directly

-Shorten the response time to customer.from few days to few hours.

Tech forum
The virtual community for specific customers in each field

Facilitator
A full-time person to support teaming and dialogue beyond division

Section leader
Answer the questions from communities as a field expert

Top's Humorous involvement
'Dear associate,
You haven't been sharing knowledge, how can we help you?
All the best
Bob'
A mail to those who are not using KN'etix

Case 4: Northrop Grumman

Retain, Utilize and Create Knowledge to Activate and Innovate

.Due to defense spending reduction, thousands of employees were laid off
"Retaining knowledge" became the most urgent and important issue

-Utilize IT thoroughly but recognize the importance of tacit knowledge
-KM approach based on the concept of connecting people
-Take initiative of the worksite to complete system by trial and error

Cross-team Expertise Exchange

"Discipline Manager"
Make cross-communities for each special field and select the expert as the leader. The leader has authority to set skill-set or learning program
"Job Rotation of Chief Engineer"

'Ba' for Connecting People

"Workplace Designed for Informal Dialogue"
Clarify workstyle of others and triple the space for informal dialogue

Corporate culture

-hope that the projects will success even if they have to leave the company

-desire to leave their name and contribution in the company's legend

Co-creation with Customer

"Integrated Product Team"
Organize a product team which involves customers and partners in order to utilize their knowledge

Using IT to Connect People

"Expertise Locator"
-locate people with particular expertise or find appropriate members for a new project
"Knowledge Capture"
-expertise is shared on the Internet
-engineers who will be retired also offer their knowledge actively

Case 5: Nippon Roche

Background

- Decline of the whole pharmaceutical market
- The medicine price declined continuously for three years
- No new medicine developed for six years

Urgent needs for improving sales productivity

Limit of Sales Education

- Limit of collective education
- Limit of explicit knowledge (manual)
- Limit of direct-control manager

Launch SST project
(Professional skills Transfer project)

Aim 2 figure growth of sales in two years

SST activity overview and key factors

- Direct control project by the president
- Thorough appointment of talented people
- Explicating knowledge by intensive discussion
- Choose pilot team which is nearest to the success
- Long period of full accompany
- Coaching method to make person consider by themselves

Achieve 23% sales increase than last year

Case 6: Sumitomo 3M

Many autonomous employees are an essential source of the growth of 3M
William. L. Mcknight 3M the forth President

To be the most innovative company

Benchmark for creating innovation

-The ratio of new products
-Develop competitive products

'Ba' for capturing customer's potential needs

-lead user research (USA)
-CTC

Success story

.Post-it story
.Non-woven material story, etc…

Creative is a thinking, innovative is an action

Promote the employee's autonomy

Autonomous activity encouraging system

-15% rule
-Product champion
-Genesis Program, etc…

Networking encouraging culture

An idea can be killed only by the people who invented it

Organizational chart shows only the half of the actual organization

> **All management, such as innovative vision, autonomous activity encouraging system, success story telling, is to promote the vitality of individuals.**

Lessons Learned from Best Practices

1. **Responsible Engagement of Senior Executive and Guerrilla Activity of Knowledge Leaders**
    (Appearance of New Role: "Knowledge Broker" "Evangelist")

2. **Building "Communities of Practice" that connect people and Supporting Environment of Human Behavior.**
    (We should not start KM from IT. IT is just one of the enablers.)

3. **Clarifying the relationship between KM and Business Strategy.**
    (Enabling Change of Employees' Mind and Behavior by Getting Understanding to "What for.")

People/Organization System

Key Approach
-Assessing Culture and
 Human Behavior
-Benchmarking Best Practice
-Supporting Initiative
-Designing Community

Traditional Approach
-Building Repositories
-Document Search
-FAQ System

Hard to Succeed...

Information System   **Environment System**
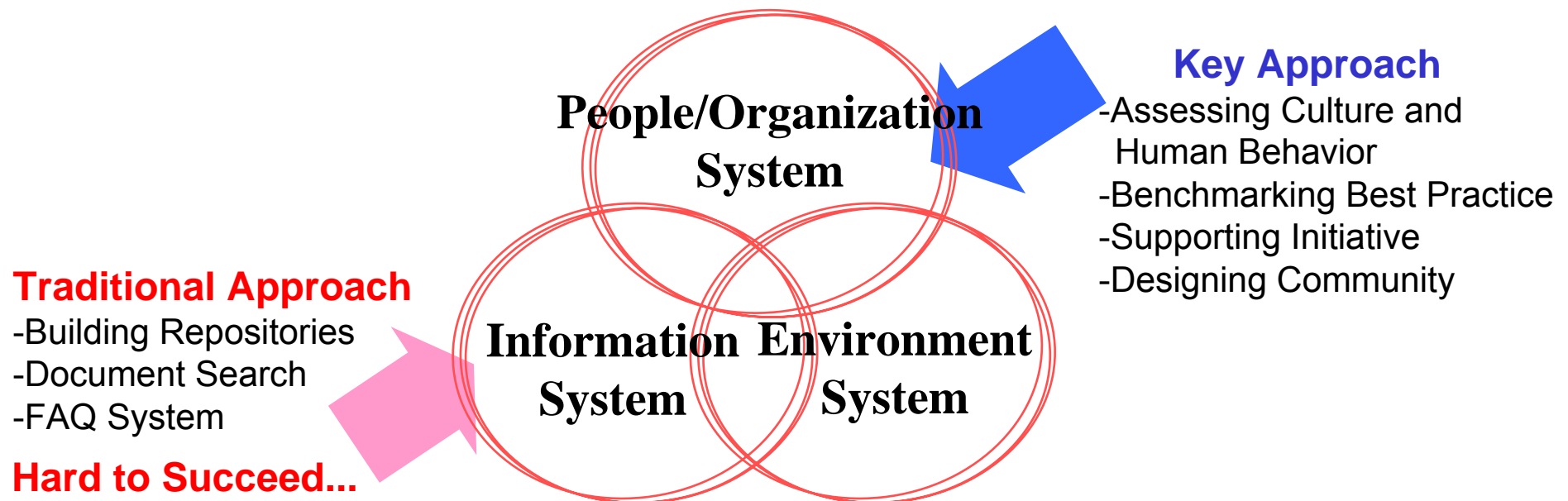
In Other Words, KM is…

- Carla O'Dell (APQC President)
  @KM Conference: "What's Now and What's Next"

"Managing Knowledge is Labor Intensive."

"For Successful KM, Dedicated People who Steward KM should be Needed."

- **Knowledge Brokers**
- **Knowledge Stewards**
- **Knowledge Researchers**

KM is not "Collecting Data," but "Connecting People."

Finally, we found we can't manage knowledge…
But we can…
…Manage information and content – the "stuff" of explicit knowledge
…**Create an environment and processes** where tacit knowledge and experience can be created and shared
    …You can't manage people, either.

Perspective for KM Environment Design

Synthetic 360. Design
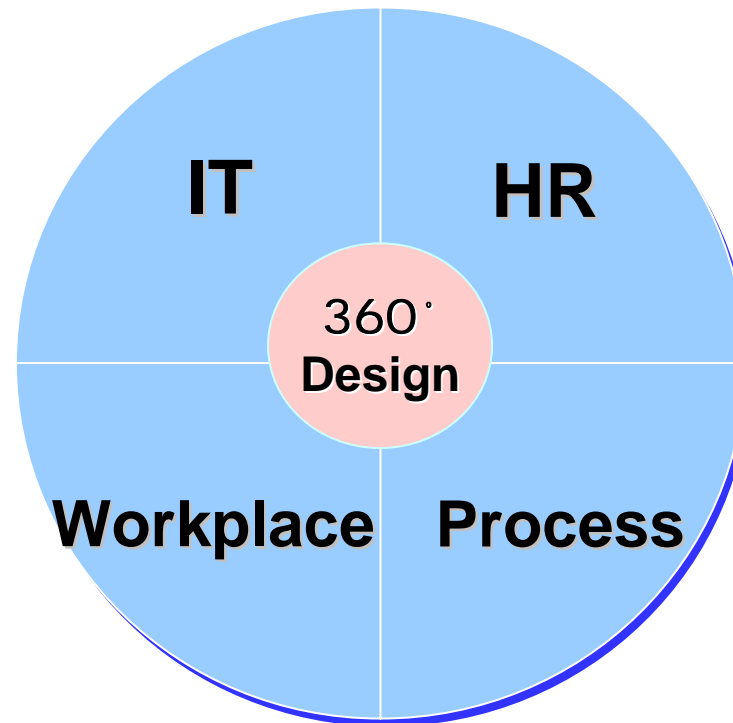
Designing Work Environment enabling Networking of People who need knowledge and who has knowledge.

Overview of Implementation of KM

Perspective for KM Environment Design

● Best Practice Companies of KM share the following characteristics:

- - The objectives of utilizing knowledge have been made visible.
  - ✓ KM efforts of each company have directly contributed to its competitive advantage.
  - ✓ The importance of the organizational utilization of knowledge has been widely recognized in each company.

- - The locations of important knowledge have been made visible.
  - ✓ Each company has focused on the knowledge which contributes to its competitive advantage, and has converted it into explicit knowledge.
  - ✓ On the other hand, each company is more interested in "people who have knowledge" than "knowledge itself."

- - The contexts of the job of each person have been made visible.
  - ✓ Since there are effective "ba" in each company, "people who have knowledge" are well informed about the contexts (background information) of how they can collaborate with each other.

➤ As a result, each company has developed a culture in which cross-functional interaction and knowledge sharing are "common and even customary."

3 Important Elements in KM to be Visible

- Companies which have successfully implemented KM have made the three important elements in KM (objective, contexts and knowledge) visible.

1. Making the objective visible

Managerial vision

Job focus

They know how their knowledge sharing contributes to its competitive advantage

2. Making the contexts visible

Cross-functional interaction

Context sharing

They have effective Ba, which "People who have knowledge" are well informed

3. Making knowledge visible

Networking people who have knowledge

Systems to network knowledge

They focus on the knowledge which contributes to its competitive advantage

Why "IT-based KM" usually fails?

1. Making the objective visible

The Objective Of the Job

The Objective Of the Job

2. Making the contexts visible

Organization

Organization

Knowledge

People

How to Link?

3. Making knowledge visible

Tools

Tools

Knowledge flows only when we make the three important elements in KM visible.
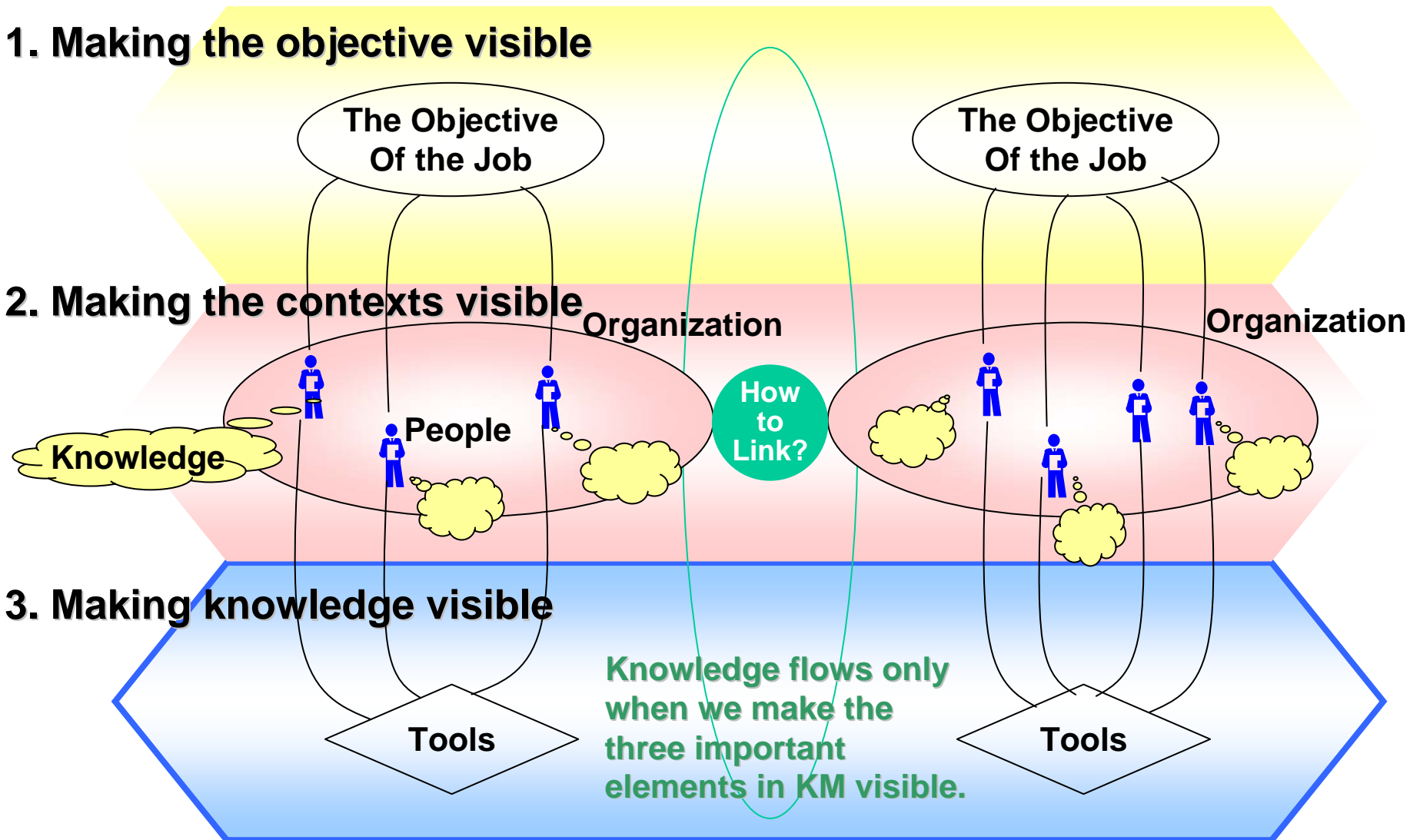
Why "IT-based KM" usually fails? (Continued)

If the organization pursues KM in a narrower sense with the objective to acquire, store and utilize knowledge organizationally, it is very likely to take an approach focusing only on "making knowledge visible," and thus end in failure.

- **If you start from "making knowledge visible," you will not able to motivate the members of your organization to share knowledge.**

- **You need to "make the objective visible." In other words, you need to set forth a specific objective, such as "the development of a new product to meet customer needs," and attach a significance to collaboration between the sales/service division and the R&D division.**

- **In addition, you need to facilitate voluntary circulation of knowledge in the organization by "making the contexts visible," or making what each person has to do and what knowledge he/she needs visible.**

1. Making the objective visible

the object of the job

the object of the job

An organization can achieve circulation of knowledge by sharing its mission, "the object of the job," and tools such as information and IT in conferences and day-to-day work at the office.

2. Making the contexts visible

Places (Organizations)

Places (Organizations)

People

People

People

People

People

People

How To Link?

Knowledge

Knowledge

Knowledge

Knowledge

Knowledge

Knowledge

3. Making knowledge visible

Tools

Tools

How can knowledge sharing among different organizations be promoted?

Three Types of KM Strategy

KM for Problem-Solving

KM for solving problems by tapping into the knowledge of many people

- **A clear vision**
- **"Ba" for sharing problems**
- **Just-in-time knowledge**
- **Examples: Buckman Lab., Northrop Grumman, FX "Ask-Anything" Center**

KM for Professionals

KM for improving competitiveness by constantly enhancing individual ability

- **Making knowledge assets visible and developing a methodology out of them.**
- **Examples: Nippon Roche**

KM for Emergence

KM for pursuing innovations by utilizing the knowledge of customers and employees

- **Chemistry between people from different fields.**
- **Examples: Sumitomo 3M, FX "Virtual Hollywood"**

KM Strategy 1: KM for Problem-Solving

● KM for solving problems by tapping into the knowledge of many people

  - **There is a clear vision which shows the direction the entire organization should take.**

  - **"Ba" for putting the vision into tangible forms is essential. "Just-in-time Knowledge (the right knowledge for the right man)" is realized on the sharing of problems by the entire organization.**

Buckman Lab.

1. Making the objective visible	Top executives have a clear vision which shows the direction the entire organization should take.	Bob Buckman (ex-chairman): "In order to become a customer-driven company, Buckman Labs. should function like a brain."
2. Making the contexts visible	"Ba" for sharing problems and collaborating	K'Netix, a cyber "ba" in which people share problems and exchange information on how past problems were solved.
3. Making knowledge visible	Agile problem solving by sharing useful, practical knowledge	Corporate culture in which sales representatives throughout the world and researchers at the headquarters are always ready to answer inquiries. ↓ Problem solving through tapping into the knowledge of employees scattered throughout the world.

KM Strategy 2: KM for Professionals

● KM for improving competitiveness by constantly enhancing individual ability

  - **Organizational learning is realized by making knowledge assets visible and developing them into a methodology.**

  - **It involves not only the sharing of externalized knowledge and methodologies but also the sharing of quality tacit knowledge through direct interactions with people possessing knowledge.**

Nippon Roche

1. Making the objective visible

Complete professionalism

Fundamental questions: "For what do MRs exist?" "What distinguishes good MRs from bad MRs?"

2. Making the contexts visible

Thorough interactions for developing methodologies

The 24 SST members selected from throughout Japan had intensive discussions for a period of two months in an isolated environment to externalize tacit knowledge.

3. Making knowledge visible

Sharing not only explicit knowledge but also tacit knowledge

The SST members thoroughly transferred such tacit knowledge to each branch office during a three-month coaching period.

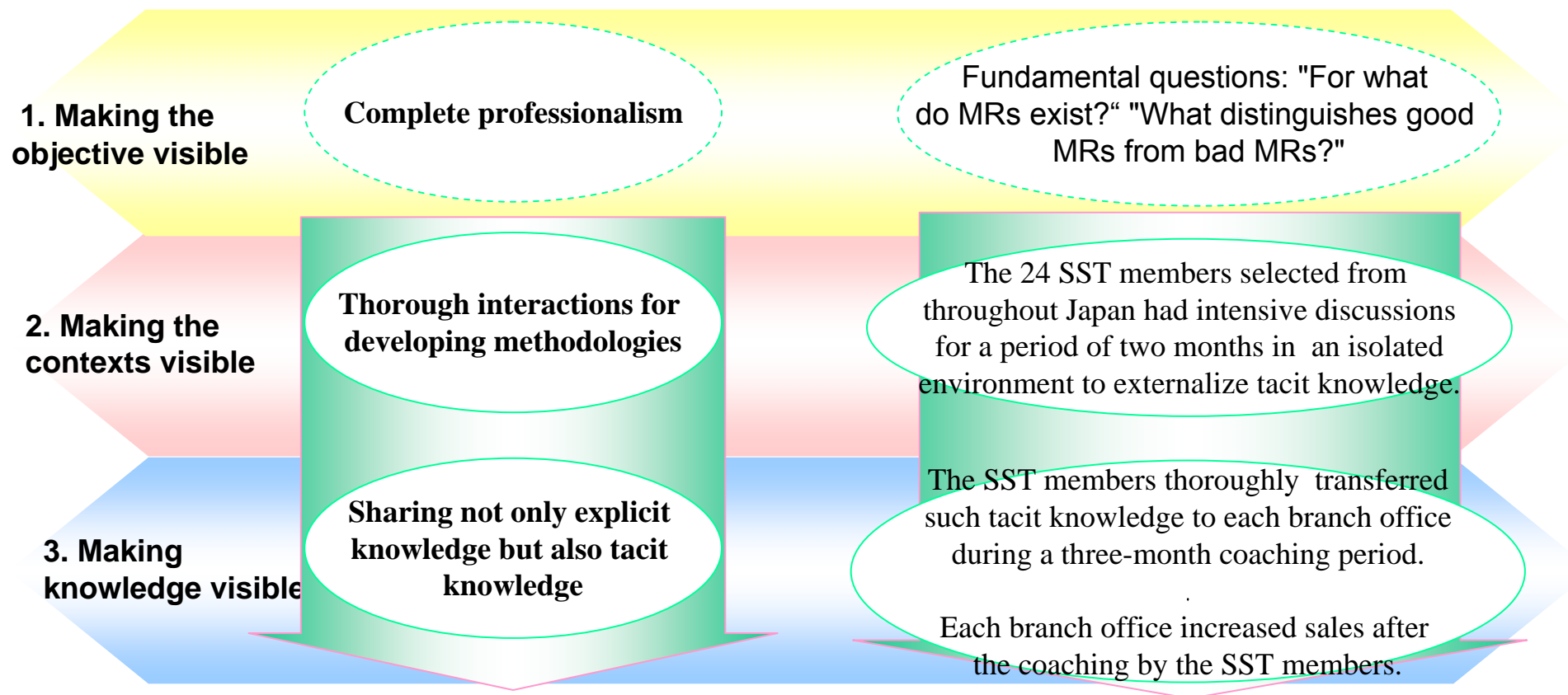Each branch office increased sales after the coaching by the SST members.

KM Type 3: KM for Emergence

- KM for pursuing innovations by dynamically combining the knowledge of customers and employees

  - **The source of innovations lies in interactions between people from different fields and the discoveries of new goals common to them. (Top executives talk about the importance of activities other than day-to-day tasks.)**

Sumitomo 3M

1.Making the objective visible

The discovery of new fields (new markets, applied technology)

The discovery of new goals is directly connected with the constant development of new products.

The sales and R&D divisions always seek new areas to apply the company's technology.

2.Making the contexts visible

"Ba" for creating chemistry between people with different backgrounds

Interactions among R&D people at the Technical Forum and Technology Fair; interactions with customers at CTC (Customer Technical Center.)

3.Making knowledge visible

Modularization of knowledge for making it reusable for anyone (knowledge as platforms)

Usable technology is made visible through the Technology Platform in which people actively share the company's past experiences including its failures.

Implications of the KM Strategy

● Criteria for selecting the most appropriate KM Strategy

In order to implement KM successfully, you need to choose the most appropriate KM approach for your organization in accordance with the organization's knowledge capability which directly affects its sales.

➢ **KM for Problem-Solving should be chosen when:**

- **Speed in solving problems is of primary importance.**

- **The performance of the team is more important than individual abilities.**

- **Momentary knowledge which easily becomes obsolescent is always necessary.**

➢ **KM for Professionals should be chosen when:**

- **The improvement of employees' abilities directly affects the company's turnover.**

- **Important knowledge can be used over the long term.**

- **Models for employees can be described.**

➢ **KM for Emergence should be chosen when:**

- **The company is innovation-oriented.**

- **The company desires to develop new products and services by utilizing customer knowledge.**

Thank you!