Leadership in Knowledge-based Organization
- A New Frontier of The Knowledge-Creating Theory -

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“Knowledge is the only meaningful resource today.”

“How knowledge behaves as an economic resource, we do not yet fully understand […]"

We need an economic theory that puts knowledge into the center of the wealth-producing process. It alone can explain innovation.”

Strategy is About Creating the Future

Strategy is an intelligent capability to interpret the current situation and continuously create future in the social contexts.

Knowledge is:

A dynamic human/social process of justifying personal belief towards the truth.

Knowledge is created by people in their interactions with each other and the environment.
Two Dimensions of Knowledge

Tacit Knowledge

Subjective and experiential knowledge that can not be expressed in words, sentences, numbers, or formulas (context-specific)

Cognitive Skills
- beliefs
- images
- perspectives
- mental models

Technical Skills
- craft, know-how

Explicit Knowledge

Objective and rational knowledge that can be expressed in words, sentences, numbers, or formulas (context-free)

- Theoretical approach
- Problem-solving
- Manuals
- Database

Spiral up through dynamic interaction

Analog-Digital Synthesis
Long History of Dualism in the West: Since the Greek Philosopher Plato

- Idealism
- Separation of the mind and the body
  - Mind > Body
- Origin of the Western scientific method
  - Deduction
- Pragmatism
- Synthesis of the mind and the body
  - Mind < Body
- Common with the Eastern thinking
  - Induction
  - Abduction
Why Tacit Knowledge?

- We can know more than we can tell.
- All knowledge is either tacit or rooted in tacit knowledge.
  – M. Polanyi
- Unless you believe, you will not understand.
  – St. Augustine
- Belief precedes knowing.

- To free ourselves from the prejudice of considering only objective, scientific, and explicit knowledge as the knowledge, we need to restore the perspective on knowledge which will balance belief and rational, and art and science, by admitting that “knowing” requires the commitment of the individual.
A process of changing perspective from the lower particular to the upper whole. A whole can become the part. A whole is determined by the purpose.
Organizational Knowledge Creation Process
SECI Model

Sharing and creating tacit knowledge through direct experience (Empathizing)
1. Perceiving reality as it is from activities
2. Empathizing, resonating, recognizing and foreseeing
3. Transferring tacit knowledge

Learning and acquiring new tacit knowledge in practice (Practicing)
9. Embodying explicit knowledge through experimenting, hypothesis testing and reflection
10. Contemplation in action

Articulating tacit knowledge through dialogue and reflection (Conceptualizing)
4. Articulating tacit knowledge using symbolic language
5. Translating tacit knowledge into a concept or prototype

Systemizing and applying explicit knowledge and information (Modeling)
6. Creating relationship and hypothesis among concepts; analyzing, modeling
7. Communicating and sharing explicit knowledge
8. Editing and systemizing explicit knowledge

I = Individual, G = Group, O = Organization, E = Environment

Ⓒ Nonaka I., H. Takeuchi & N. Konno
Innovation as SECI Spiral

Empathize with reality through actual experience (Socialization), condense the essence of awareness into concepts (Externalization), relate the concepts and systemize (Combination), create value in the form of technology, products, software, services and experiences, and embody the knowledge (Internalization) and, at the same time, stimulate the emergence of new knowledge in the organization, market and environment, and spiral up to the Socialization step.

Through continuous and fast spinning of the SECI spiral, a firm can build its synthesizing capability of knowledge to pursue both creativity and efficiency.
Knowledge is Created in \textit{Ba}
Shared Context in Motion

Co-Creating Meaning

Intersubjectivity

\textit{Ba}(Platforming)

Individual contexts are shared at “here now” context of \textit{Ba}. Shared context becomes the base of emerging knowledge. Intersubjectivity is established when people accept others as a whole being, resonate and empathize with others, then it becomes our subjectivity.
Ba Promotes Socialization Through Physical and Mental Touching

- Interpenetration of the body senses: Intercorporeality (Merleau-Ponty)
- Embodied Mind (Francisco Valera)
- Socialization occurs in the brain by copying the actions of others: discovery of the mirror-neurons. Through mirror neurons, we can understand the intentions of others...The interdependence between self and other that mirror neurons allow shapes the social interactions between people, where the concrete encounter between self and other becomes the shared existential meaning that connects deeply. (Iacoboni, et al:2005, Rizzolatti:2005)
A boundary object is a symbol, metaphor, concept, organization, system, culture, and ICT, that resides in the boundary of different communities or systems; it is an object that connects communities by creating a new community.

Knowledge ecosystem dynamically interacts and evolves the relationships between the stakeholders in the multi-layers of *ba*; stakeholders compete, collaborate and transcend the organizational boundaries.
Knowledge Leadership…

- Drives the dynamic process of knowledge creation by:
  - Providing the knowledge vision and driving objective
  - Developing and promoting the sharing of knowledge assets
  - Creating, energizing, and connecting \textit{ba}
  - Enabling and promoting the continuous spiral of knowledge creation through dialog and practice

At the base of such leadership is \textit{phronesis}. 
Three Types of Knowledge

- **Episteme (Scientific Knowledge)**
  Universal, context-free and objective knowledge (explicit)

- **Techne (Skills and Crafts Knowledge)**
  Practical and context-specific technical know-how (tacit)

- **Phronesis (Practical Wisdom)**
  Experiential knowledge to make context-specific decisions based on one’s own value/ethics
  (synthesis: explicit + tacit)
Phronesis by Aristotle
Prudence, Practical Wisdom

Phronesis is practical wisdom for exercising the best judgment for the common good in a particular context.

- Ability to find the right response in a particular context
- Ability to synthesize the particular and universal, contemplated rationale and improvisation on the spot
- Contemplation in action
- Contextual judgment and timely balancing
Wise Leader
See Through the Context and Realize the Value

Source:
Phronesis is the virtuous habit of making decisions and taking actions that serve the common good.

1. Ability to make judgment on goodness.
2. Ability to create ba.
3. Ability to grasp the essence of particular situations/things.
4. Ability to articulate the essence.
5. Ability to exercise political power.
6. Ability to foster phronesis in others.

Source: Nonaka & Takeuchi, HBR May 2011
Phronetic Leaders:
Soichiro Honda, Steve Jobs, and Konosuke Matsushita

- Soichiro Honda (1906-1991)
  Founder of Honda Motor Corporation

- Konosuke Matsushita (1894-1989)
  Founder of Panasonic Corporation

- Steve Jobs (1955-2011)
  Co-founder of Apple Computer
Phronetic Leadership

1. Ability to make a judgment on goodness

Every sort of expert knowledge and every inquiry, and similarly every action and undertaking, seems to seek some good.

Aristotle, Nicomachean Ethics

Example: Self-sufficient values such as happiness and self-actualization.

Internal Good: Realized in the course of trying to achieve those standards of excellence (artisanship).

MacIntyre
Technology Married with Liberal Arts and Humanity: Steve Jobs

Apple’s DNA: “Technology alone is not enough. It’s technology married with the liberal arts, married with the humanities, that yields the results that makes our hearts sing.”

Steve Jobs, Apple
Phronetic Leadership

2. Ability to create *ba*

Imaginative capacity to understand and empathize with others through daily verbal and nonverbal communication, to read the situation to judge the best timing for interaction, and to elicit empathy in return.
“Joking is very difficult. You have to grasp the atmosphere of the occasion and the opportunity. It exists only for that particular moment, and not anywhere else. The joke is in the timing and it doesn’t work at any other moment ... to joke is to understand human emotion.”

Soichiro Honda
Phronetic Leadership

3. Ability to grasp the essence

The ability to recognize the constantly changing situation correctly, and quickly sense what lies behind phenomena to envision the future and decide on the action to be taken.

God is in the details.
“I can see many things when I see a machine. How can we maneuver through that curve? We should do this, we should do that.... Then I think about the next machine. We can make a faster machine if we think like this, and so on. It’s a natural progress into the next step.”

- Soichiro Honda

“it (a mouse) was the best thing I’d ever seen in my life.... within ten minutes it was obvious to me that all computers would work like this some day.”

Phronetic Leadership

4. Ability to articulate the essence

The ability to conceptualize and articulate subjective ideas in a clear language, link these ‘micro’ concepts to a macro historical context, and convincingly articulate them as vision and story for the future.
Harmonize the Concepts in *Ba*/Make Full Use of Metaphor Soichiro Honda and Steve Jobs

http://images.businessweek.com/ss/09/09/0929_jobs_presentations/index.htm

Source: Honda Motor Company
Phronetic Leadership

5. Ability to exercise political power

The ability to bring people together and spur them to action, combining and synthesizing everyone’s knowledge and efforts in pursuit of the goal, by choosing and utilizing the means and rhetoric (the art of effective or persuasive speaking or writing) suitable to each particular situation with shrewdness and determination.
Leadership to Exercise Political Power
Soichiro Honda and Steve Jobs

Declaring participation in the Isle of Man Tourist Trophy Race

I address all employees!

Let us bring together the full strength of Honda Motor Co. to win through to this glorious achievement. The future of Honda Motor Co. depends on this, and the burden rests on your shoulders. I want you to turn your surging enthusiasm to this task, endure every trial, and press through with all the minute demands of work and research, making this your own chosen path. The advances made by Honda Motor Co. are the growth you achieve as human beings, and your growth is what assures our Honda Motor Co. its future.

Source: Honda Top Talks “Passing down the basics”

Reality Distortion Field

The reality distortion field was a confounding mélange of a charismatic rhetorical style, and indomitable will, and an eagerness to bend any facts to fit the purpose at hand. In one line of argument failed to persuade, he would deftly switch to another. Sometimes, he would throw you off balance and suddenly adopting your own position as his own, without acknowledging that he ever thought differently.

If you are communicating your idea to your subordinates, you have to remember to do three things; communicate with passion, communicate repeatedly, and explain why.


Good ideas or great plans have no value if they are not accepted by others and executed. You need to persuade. To persuade, you must talk in a way that is appropriate to others. Depending on who you are facing, you may talk about justice, profit, or emotion, or logic; using an appropriate approach is important.

Phronetic Leadership

6. Ability to foster *phronesis* in others

The ability to create a system of distributed *phronesis* by fostering and transferring the existing *phronetic* capabilities of individuals to others to build a resilient organization which can respond flexibly and creatively to any situation to pursue its own good.
Managing with Collective Wisdom: Everyone is a Manager with ideas
Konosuke Matsushita

This company is not managed solely by Konosuke Matsushita alone, or anyone else. Everyone needs to gather and manage. Manage with collective wisdom. If we succeed, then the future of this company is determined. Thus, every one of you is a manager with ideas. We must all think about it.

Source; Konosuke Matsushita talks, Volume 23 “Showa 35 nen no hatsugen”
http://panasonic.co.jp/rekishikan/tokubetsuten/2007/cnr01/cnr01_01.html
Provide *Phronetic* Examples (Apprenticeship)

- Practical Wisdom = Classroom Instruction (most MBAs) + Practice + Feedback & Self-Correction

- Leadership can only be developed through practice.
- Growth is accelerated by challenging, complex jobs and by timely and detailed evaluation and self-reflection
- Can expect giant leaps in learning

Practice as *Kata*

*Kata* 型 (form) : “Way of doing things,” core of the ideal action.

Good *Kata* functions as archetype that fosters creative routine but provides higher freedom.

*Shu* 守 (learn), *Ha* 破 (break), and *Ri* 離 (create) steps are critical in continuous self-renewal processes.
System to Distribute *Leadership*

- LPL and PL to nurture Honda DNA -

**Honda’s exemplar is Soichiro Honda.**
Honda is not a company in which only top management plays an important part. Every one at the frontline is very important. Every worker should be Soichiro Honda. It is important for Honda to create many Soichiro Honda.  

- Takeo Fukui, CEO of Honda

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**LPL**
In charge of development

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**Engineering PL**
- Engine
- Body
- Suspension
- Rigging
  ... etc

**Test PL**
- Engine
- Wind-tunnel
- Crash
- Emission
- Durability
  ... etc

**Design PL**
- Layout
- Exterior
- Interior
- Color
- Design data
- Design model
  ... etc

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Source: Honda Motor Company internal material
Matrix and Hyper text organization connects multiple *ba*.

Matrix organization cannot convert knowledge effectively, because matrix tend to coordinate between project and business layers.

Business and Project layers create and accumulate knowledge on their own way. Hyper text organization flexibly combines various knowledge from each layer; can maximize the use of resources and energy in a limited time.

Project team reports directly to top management; reduces the organizational hierarchy, communication will be condensed, dialogue will be deepened, and promote middle-up-down spiral.

The key of Knowledge Layer is the “boundary object” that stimulates the conversion of knowledge; symbol, concept, system, culture, ICT, etc.

Source: Kikuzawa and Nonaka, (2012). “Chishiki base kigyou no kouritsu soshiki design”
DAIHATSU: Mira e:S

“Polish up the Ecology Power of the Small Cars with Existing Technologies”

- Facing headwind, but changed to tailwind: Lehman shock and Prius shock
  - In 2009, concept car was presented at the Tokyo Motor Show. But due to the sudden increase of oil price and the launch of hybrid cars, expectation for small cars changed drastically.
  - Keep the target launch timing at 2011 as scheduled, but redo everything from the product planning phase. Changed the concept “e:S” from “energy saving” to “eco and Smart”.

- 2 innovations led to launch in 17 months
  - Innovation in Organization: from partial to total optimization “e:S optimization”; set up a virtual company of 30 experts in planning, development, procurement, production, and sales.
  - Innovation in Technology: realize 30km/l at JC08 mode, start from 7.95 million yen. Reduced 60kg from Mira, reduced parts for 15%, while improving fuel efficiency for 40%.
Reset All the Existing Processes and Minds
Questioned the Raison D'être of a Small Car

- The 3rd category of Eco-car
- Small car needs to be fuel efficient, low price, and ecological
- Not extension of the past, but change the way of DAIHATSU
- Stop the matrix of vertical and horizontal organizations; transfer members to the project team, share objectives, and unite their actions
- Create a sense of surprise with TV ads

Bruce Willis
Innovation at Organization and Technology: Self-contained Virtual Company

- **Transfer members to project teams**
  - Set the taskforce under the top management. Create, accumulate, and utilize knowledge.
  - Members should not represent their home division (partial optimization), but act for the benefit of the project (total optimization) in a same vector.
  - Chief Engineer is given personnel management authority; “no place to go back”, “ticket with no return” for the members.
  - Make judgment on the spot based on the actual situation.

- **Use new terms for new activities**
  - Synchronized designing: set an agile scrum so that design, evaluation, and production collaborate from the early stage.
  - Budget approach: not cost down approach, but realize maximum feature within the budget.
  - Material oriented: back to the basics of design and maximize the quality of material for all the parts.
“Agile scrum encourages team members to socialize, externalize, internalize and combine technical knowledge on an ongoing basis, thus allowing technical expertise to become community property for the community of practice [Nonaka 95].

Scrum Meetings are therefore rituals with deep cultural transcendence. Meeting at the same place at the same time and with the same people, enhances a feeling of belonging, and creates the habit of sharing knowledge.”

Human Touch with IT
Key Points of Scrum Development

- **Pair Programming**
  - Two developers (roles of a driver and a navigator) share one PC
  - Change roles every 5~10 minutes. Change pairs several times a day

- **Task “Kanban” (Visualize the tasks)**
  - Way to manage “ToDo”, “Doing”, and “Done.”
  - Everybody can start working on their task autonomously without any instruction
  - Check every morning at the 15 minutes of Scrum Meeting

- **Feedback (KPT: Keep/Problem/Try)**
  - In a casual atmosphere, everybody share their ideas on “Keep”, “Problem”, “Try.”
  - Through the dialogue, socialize tacit knowledge and convert to explicit knowledge (externalize and combine)

Scrum development consists of multiple sprints – a cycle of feature definition, development and testing.

Scrum Master leads the daily meeting every day at same time
Scrum members act autonomously (task kanban) and collaborate with each other (pair programming)


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Middle-up-down Knowledge-Creation Process

Grand Theory (What ought to be)

Solving contradiction

Mid-range theory (Middle)

Contradiction

Reality (What is)

Cross-leveling of Knowledge

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Distributed Idea Engine
-Cisco’s CEO John Chambers-

From a top-down command-and-control company to the teamwork and collaboration; connected communities of the distributed leaders.

"Leading from the middle is the biggest change in the management of the company ever."

“You won’t have to depend on the CEO anymore. We now have a whole pool of talent who can lead these working groups, like mini CEOs and COOs. We’re growing ideas, but we are growing people as well… where I might have had two potential successors, I now have 500.”

Cisco Japan
(Winner of Japan Management Quality Award)
Organization for Continuous Innovation

- **Middle manager who knows top management strategy as well as what’s happening at the frontline**
  An environment where all employees can share, empathize, and resonate with the vision and the culture, around the middle managers who are close to the frontline and who understand the management vision

- **Hybrid Management with the sense of frontline**
  Human resource system with ICT tools, Company wide strategy framework

- **“Soccer” style organization where individuals can move dynamically**
  An organization that makes timely judgment and balancing while utilizing the network of proactive individuals.

- **From an ICT company to BT company**
  From selling products to selling business model
Basis of *Phronesis*

- **Humanity/Liberal Arts**

- **Peak and Diverse Experience**
  Pure Experience (sense of awe), Shared-experience with the exemplar, Success/Failure experience, Cross-cultural experience …

- **Practice and Tradition**
Innovates with idealistic pragmatism which synthesizes:

- **Ontology**: How to be
  - “For what do we live?”: the vision to the future and the commitment to it.

- **Epistemology**: How to know
  - “What is the truth?”: the SECI spiral which synthesizes objective and subjective views.

- **Creation**: How one can change one’s self and the environment

Management is viewed as “a way of life” rather than a tool to make money.
Idealistic Pragmatist: Phronimos
Contemplation in Action

Phronimos is the producer of new value propositions and collective practices

Mind
Deep Thinker

Embodied Mind

Body
Doer

“Intellectual Muscle”
Relentless Pursuit of
Common Good