OECD Conference on Intellectual Asset-Based Management

Intellectual Asset-Based Management by Small and Medium Enterprises in Japan

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Vice President, Organization for Small & Medium Enterprises and Regional Innovation, Japan
Professor, Seijo University

Tsutomu Muramoto
Why Intellectual Asset-Based Management?

- **Long Term**: Depopulation Society ⇒ Weakening economic infrastructure, number of stocks per person increases ⇒ Innovation is the breakthrough engine

- **Under Foot**: Economic recovery is much talked about, but is very slow other than in local and large city areas.
  - Economic recovery and business sentiment recovery at local areas and small enterprises are weak. ⇒ Hypothesis of main wheel on Jumbo Jet

  ⇒ Intensification of international competitiveness, improvement of productivity
  - Vitalization of community, small and medium enterprises (Community vitalization strategy)
  - Creating new demands by carrying out restructuring
  - 5 systematic infrastructures of productivity improvement type

  ”Promoting development of local industries using community resources as well as small and medium enterprises that occupy large part of local economy. Furthermore, promoting urban renewal and vitalization of central city area in strategic and intensive manner.”

  ⇒ Raise the technological capabilities of small and medium enterprises centering around the “regulation regarding sophistication of small and medium enterprises’ manufacturing platform technology”

  ⇒ Urban renewal using private funds and know-how, promoting town development with fully flourish atmosphere, etc.
Survey of business sentiment for small and medium enterprises. (By Organization for Small & Medium Enterprises and Regional Innovation, Japan. Traditionally announced as a survey of the Small & Medium Enterprise Bureau. 80% are subjected to small enterprises) Bank of Japan’s tankan survey = Corporations with 50 or more employees. After 2004, capital 20 million yen or higher.
Leaders of Local Vitalization: Small & Medium Enterprises

- Leaders of local vitalization ⇒ Corporations, residents, public administrations, NPO, joint public-private ventures, etc.
- The main leaders are the local small & medium enterprises
- However, Rate of Practice < Rate of Folding Up Business
- It is necessary to discover small & medium enterprises.
  Venture company [1,000 Ventures originated from Universities Plan, incubation, business matching, etc.]
- Management innovation at existing corporations
Financing is One of the Issues to Deal with at Small & Medium Enterprises

- March 2003: “Toward the Functional Enhancement of Relationship Banking” by the Financial Services Agency
- Requesting recovery of and demonstrating original function at local banking establishments ⇒ Supporting small and medium enterprises
- Not only treasury information (hardware and fixed quantitative information), but laying weight on software information (qualitative information*)
  

  Loans and discounts pursuant to financial statement, asset-based lending credit scoring, relationship lending

- These software information are the intellectual assets
  Qualifications of business managers (foresight, technological and managerial capabilities, management philosophy, reputation), expertise and technological capability, qualifications and settlement rate of human resources (employees), reputation in the industry and community, various advantages and intellectual assets of the company (brand, patent, etc.), network ⇒ Intellectual Assets

* Qualitative information also means inclusion of qualitative information from other materials than the content of financial statement
When small & medium enterprises obtain financing from financial institutes, they expect “stable sponsorship,” “low interest” and “intelligibility for potential and corporation business”. Then, how and what small & medium enterprises can promote to financial institutes to earn understanding and appraise of their current status and obtain loans in the way they wish?

Financial institutes are trying to lend money by assessing the actual conditions of corporations, leading to have closer ties with relationship banking and so on. By doing so, they can not only conduct traditional investigations from settlement sheet but also focus on non-financial information.

As a detailed activities to consider about non-financial information as their financing decision, systems to finance with advantageous interest for the companies working on CSR (Corporate Social Responsibility) has already begun. The reason is because financial institutes show their attitude toward CSR themselves as well as they consider such factor will actually leads future profit and creates reliability for the foundation of future business.
Importance of Intellectual Assets

• [1] Intellectual assets that turn to be the source of differentiation with competitors

In the time of mass production/mass consumption, goods and money were the source of differentiation. In recent years, assets that are hard to see (intellectual assets), including human resources, technology, know-how, speed, organizational capability, relationship with customers, community and business partners, reliability, tradition and brand became the sources of differentiation.

<Examples of Intellectual Assets>
Particularity for the detail of products, mainly seen in “sit down meetings” at the production stages and technologies that enables such requests, problem solving abilities through communication with customers, development speed of services and organization/system capability to enable such speed, high quality network with communities and consumers, secure and stable presence on quality as well as mid and long term perspective, products/service/corporate brand born from trust based on medium term business relationship, highly motivated employees, etc.

• [2] Future profit from the “management” utilizing intellectual assets

Intellectual assets themselves don’t create any value. However, since they are inherent peculiar assets accumulated on corporations and people as a result of long and continuous business, there are many assets that others can’t create imitations overnight. Therefore, if the future profit that will possibly be earned from “intellectual assets” can be explained, the probabilities of realization and sustainable growth will be evaluated highly.
Overall Picture of Intellectual Asset-Based Management Report

Stories A to H that Create Profits in Future

Based on the corporate philosophy,
A. Have been developing management policy by selecting and focusing in the past
B. And invested. As a result,
C. Intellectual assets particular to the company and strengths based on such assets were accumulated.
D. Then, started to make profits.
E. Collected intellectual assets were established in the company as a value chain to gain permanence.
F. The company specifically recognizes future uncertainty and risk and deal with them, while planning the management policy to make good use of the intellectual assets and value chain.
G. Making investment to maintain and/or develop intellectual assets necessary along with the management policy, or, the expiration date on their effective assets is not terminated.
H. The company can expect future profit (improvement of corporate value)

Backup guideposts that Show the Story is not an Armchair Theory (example)

(Qualitative Matter)
A. Past vision
B. Investment policy
C. Explanation of strength and poor points
E. Recognition of value chain and its sustainability
F. Recognition of risks and management policy
G. Policy for investment, etc.

(Quantitative Matters)
B. Achievements on investment, etc.
C. Guideposts related to intellectual assets
D. Achievements, including profit, to the point
F. Guideposts related to risks
G. Investment plan and guideposts related to intellectual assets

Explain the actual condition of a company and its potential with the stories to create future profit to each company (qualitative) + guideposts to prove
Guideposts to Prove the Intellectual Asset-Based Management Report (Example)

1. Attitude toward the management/Leadership
   Penetration of management philosophy to employees, investors and customers/Leadership
2. Selection and focus
   Selection and condition of focus on products/service, technology, customer, market, etc.
3. External bargaining ability/Relationship
   Bargaining ability, persuasiveness with upstream and downstream
4. Creation of knowledge/Innovation/Speed
   Ability/Efficiency to create new values, including innovation and speed
5. Teamwork/Organizational intelligence
   Conjunction as an organization, including organizational (total) capability and individual capabilities
6. Risk management/Governance
   Recognition and assessment of risks, responses, management, announcement, etc.
7. Coexistence with the society
   Forming good images by contributing to the community and society

Guideposts for Proof (Example)

- Domestic penetrance of management philosophy, etc. in the company
- Method to nurture leaders in next generation (average ages of representatives in subsidiary companies)
- Advantage of main business (comparison on sales and profit, rate of return)
- Weighted average of competitors that provide main products and service
- Achievements of reviewing loss-making divisions
- Weighted average of shares on main products and service on the main business
- Change of per customer transaction
- Value of elasticity on shipment price against the change of initial cost (ability to shift costs into prices)
- Value of elasticity on wholesale cost against the change of raw material market (ability of negotiation)
- Research and development cost against amount of sales (or skill development cost)
- Number of intellectual assets holding, expiration date (period economically meaningful)
- Ratio of new products
- Number of improvement domestically made
- Number of projects cross-sectional among divisions
- Incentive system (annual salary system, etc.)
- Ratio of moving out
- Number of announcement made on risk information and speed of making announcement
- Condition of diversification of risks
- Request of compensation on the cases on trial
- Risk of leaking confidential matters of sales
- Invested amount of environment related expenditure
- Number of adopting SRI (Social Responsibility Investment) fund
- Research of corporate image
Company’s Development Stage and Financing

Corporate Scale → Large
Corporate Age → Long
Information Volume → Large

Super small size enterprise
- No collateral
- No archive information

Small size enterprise
- Potential for high growth
- Limited archive information

Medium size enterprise
- Archive information
- Collateral available

Large enterprise
- Abundant collateral
- Abundant archive information

Internal Finance

Angel Finance → VC → Going Public

Company Credit

CP

Short-term loan from financial institutions

Mid-term loan from financial institutions

Mezzanine Fund

Mid and long term bond

Marketability debt
Small & medium enterprises exist in the thick layer of companies that challenge new business development. Even other than highly novel business like ventures, it is necessary for the government to support existing small and medium enterprises that don’t have sufficient financing and pioneer of sales outlet for economic vitalization of the country.

Small and medium enterprises working on new business development for small and medium enterprises/the second initiation

- 58% of small and medium enterprises are working on the management innovation (Small and medium enterprise white book)
  - Example: 11,670 corporations are approved for the Management Innovation Support Regulation.
  - 10,246 corporations are approved for the Creation Regulation.
  - Approx. 5,000 corporations attended cluster

Number of small and medium enterprises: 1.6 million

Early: 210,000 companies
Middle: 590,000 companies
Later: 800,000 companies

(Company Age)
10 years
Small and Medium Enterprises Intellectual Asset-Based Management Workshop Interim Report
(Announced on March 24, 2006)

1. Aspect of Study/Awareness of the Issues
2. What is the Intellectual Asset-Based Management at Small and Medium Enterprises?
3. Practice and Disclosure of Intellectual Asset-Based Management at Small and Medium Enterprises
4. Supporting Plans for Intellectual Asset-Based Management (proposal)

Organization for Small & Medium Enterprises and Regional Innovation
While the competition in and out of the country is becoming harder, it is necessary to work on the management to create profit in the future by using own unique “intellectual assets” and make difference with competitors to be able to deal with various business management issues, while constantly grow. (intellectual asset-based management)

However, previous discussions were subjected to large size enterprises, so that they were not quite going along with the actual condition and purposes of small and medium enterprises.

Established the “Small and Medium Enterprises Intellectual Asset-Based Management Workshop”
(Secretariat: Organization for Small & Medium Enterprises and Regional Innovation)
2. What is the Intellectual Asset-Based Management at Small and Medium Enterprises?

(1) Meaning of intellectual asset-based management at small and medium enterprises

① It is necessary for small and medium enterprises to recognize intellectual asset, which is their own strength, is the source of competitive capability and continue to differentiate themselves from competitors to heighten the quality of management.

② Along with the accounting guidance of small and medium enterprises, transparency on the financial side increases, while the original characteristics are not reflected on the financial statement as much as large enterprises. That is why it is necessary to disclose their intellectual assets.

③ Generally, small and medium enterprises lack management resources compare to large enterprises. It is necessary to conduct management in a way that they accurately take in the ability of involved people in and out of the company who understand the strength of the company.

④ At small and medium enterprises, there are many cases that management policy and strength are just described in the manager’s head, but not fully shown to their employees, business partners and financial institutes. It is meaningful to have feedback to the management from involved people who understand the issue.

⑤ A lot of small and medium enterprises that rooted in the local economy conduct their corporate activities in the relationships not only with business partners and customers, but in a wide range of relationships with local residents, social infrastructure, environment, tradition and culture. Therefore, it is important to earn empathy and support from these people and condition.
2. What is the Intellectual Assets-Based Management at Small and Medium Enterprises?

(2) Expected Effects
① Optimum use of limited management resources
② Managers start to get new “recognition” about strength of own company
③ Employees’ awareness, motivations for their work and sense of unity increase
④ Degree of trust from business partners and customers increases
⑤ Leading to secure manpower that empathize the management policy and business strategy
⑥ Getting advantageous financing from financial institutes
⑦ When newly going public, possibility of future growth can be appealed.

(3) Small & Medium Enterprises Considered to Be Subjects

There were debates about taking venture companies that create high added value in IT and bio fields into account, but in this report, we consider the concept of intellectual asset-based management is valid to all 4.3 million small and medium enterprises, so that basically, we consider willing small and medium enterprises that actively work on the improvement of their own business management.
3. Practice and Disclosure of Intellectual Assets at Small and Medium Enterprises (Flow Image)

Developing Intellectual Asset-Based Management Project System

Checking past management policy/achievement
(Type of investment made in the past)

Confirming the strength, weakness, opportunity and threat of the company
(SWOT Analysis, etc.)

Confirming what kind of intellectual assets and strength the company owns

Examine which intellectual assets to be combined to actualize the management philosophy
→ Design the story to create future value

Design internal management guideposts for intellectual asset-based management

Determine guideposts whether disclose or hide

Write down the intellectual asset guideposts in the value creating story to increase the credibility
(Do not write down confidential guideposts)

Examination and approval of intellectual asset-based management, publicity in the company

Practice the intellectual asset-based management based on the future value creation story

Disclose the intellectual asset-based management report
4. Supporting Plans for Intellectual Asset-Based Management (proposal)

Created leaflets to prevail and enlighten intellectual asset-based management for small and medium enterprises. (Please refer to separate document)

We will continue to hold the workshop and work on the support measures as follows:

(1) Creating “Intellectual Asset-Based Management Manual”
Creating the manual for small and medium enterprises to familiarize with intellectual asset-based management and practice it. It is scheduled to publish in March 2007. At the same time, manual for supporters of small and medium enterprises are scheduled to be made.

(2) Examining implementation of symposium/seminar
Examining to hold symposium and seminar to promote intellectual asset-based business management at various places in Japan as well as training sessions at Small & Medium Enterprise University.

(3) Examining implementation of consultancy and advice business
Making use of consultancy desks at Small & Medium Enterprise and Regional Innovation, Japan, and other places to implement general support regarding intellectual asset-based management.

(4) Examining introduction of support measures for Small and Medium Enterprise and Regional Innovation, Japan.
Examining intellectual asset-based management reports to be the judgment materials of review at debt guarantee tasks, etc.

(5) Examining development of software to support intellectual asset-based management
Intellectual Asset-Based Management Report of A Small/Medium Enterprise <Example>
Company: NeoChemir Inc.

Establishment: May 2001

Location: Kobe City in Hyogo Prefecture

Capital: 92 million yen

Content of Business: Research and development of pharmaceutical products, medical equipment and cosmetics

Sales and OEM supply of self-developed cosmetics under commissioning manufacture

<Composition of the Report>

- Management Philosophy
- Business Content and Achievement
- Management Policy
- Strength and Intellectual Assets
- R&D Strategy
- Business Strategy
- Intellectual Property Strategy
- Summary
- Attachment (Intellectual Asset Guideposts)
- Corporate Profile
We are aiming to realize “Scarless Healing” and develop the technology for painless treatment and beautiful outlook for life. To reach the goal, we set our corporate philosophy, “Conducting product development with high grade expert knowledge and excellent ideas that only professionals of professional fields can achieve.” Furthermore, we are aiming to contribute to the development of the country by transmitting the technology to the world from Japan.

Separating the process of our growth into 3 phases to clarify the policy

**Pioneer Days**
- Basic technology and research of commercialization of products
- Sales of cosmetics are mainly OEM.
- Sales of pharmaceutical products are mainly under license agreement

**Growth Period**
- Company became to be known
- Enlargement of commissioning agents
- Starting up new business
- Overseas business development (export)
- Fulfillment of cooperative Research and development

**Development Period**
- Establishing the company brand
- Going public
- Self-development, production and sales of pharmaceutical products
- Enlargement of plants and laboratories
- Exporting our products to the world

**Strength and Intellectual Assets**

1. Advantage of technology
   ① Percutaneous absorption of carbon dioxide – Technology that induces strong anagenetic process
   ② Thermodynamic DDS – Technology that shows effect of medicine just by applying it

   → **Appealing them as new breakthrough technology that had never existed in the world.**

2. Intellectual assets and their use
   ① Asset of human resources (Managers superior to R&D, superior research staff)
   ② Structural assets (Technology in new area: technological area that hardly any competitor exists)
   ③ Related assets (Good relationships with universities and pharmaceutical companies as well as OEM and sales agents)

   → **Using various guideposts and charts showing these superiority to very much increase the persuasiveness.**
**R&D Strategy**

A. Showing the relationship between percutaneous absorption of carbon dioxide and our products to explain the R&D toward commercialization of these products.

- Percutaneous absorption of carbon dioxide
  - Device to externally administer carbon dioxide
  - Wound healing drug
  - Cosmetics
  - Medical equipment
  - Beautification / Health equipment

B. Showing the relationship between thermodynamic DDS technology and our products to explain the R&D toward commercialization of these products.

- Percutaneous absorption medical product
  - Making medical products from DDS basis
  - Making cosmetic products from DDS basis

**Business Strategy**

Explaining the business strategy at each phase of growing process. Reinforcing it with the proven intellectual asset guideposts.

1. Pioneer Days: Regarding business operation by setting the technology in 2 major columns, we explain how our beautification/health field and medical field developed with charts.
   - Increasing persuasion with the guideposts that show superiority of our products
     - Success rate of customers buying products after receiving free samples: Over 60%
     - 0% complaint (Total sales: 30,633 boxes. Trial products: 38,372 units in 5 months)

2. Growth Period: Regarding going into the business operation of 2 major columns of our technology, we explain how to expand the business in beautification/health field and medical field with charts.

3. Development Period: We explain the future figure of beautification/health business and medical related business with charts.
Intellectual Property Strategy

① Basically, business arisen from the achievement of R&D is aimed to carry out exclusive manner, and we actively earn rights on patents on both basic and improved products.

② Patents are basically carried by ourselves and not transfer to other companies.

③ For the fields that exceeds self ability or non-core fields, intellectual assets will be used by transferring technologies.

④ Future development of pharmaceutical products will be brought into view when applying for patents. We’ll actively apply for patents in overseas countries.


Summary/Guidepost

1. Based on the explanation of business strategy up to the point, the value creating process utilizing intellectual assets will be shown with diagrams.

2. Specifying various guideposts that prove value creating processes.

   ① Sending out information by business manager for outside of the company (Number of publication on newspapers and magazines)

   ② Advantage of main business

       1) Percentage of main business against the entire sales (main business sales/entire company sales)

       2) Percentage of main business sales profit (main business sales profit/entire company sales profit)

       3) Sales profit rate of main business (main business sales profit/main business sales)

   ③ Concentration ratio of R&D

       1) R&D for main business and concentration ratio (Investment cost for R&D related to main products/Investment cost for all R&D)

       2) Patent concentration ratio (cumulative total of patent application on main business/cumulative total of all patent application)

   ④ Sales vs. cost for R&D (annual cost for R&D/annual sales)

   ⑤ Ratio of new products

   ⑥ Average age of employees

   ⑦ Number of ongoing lawsuit (0)
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