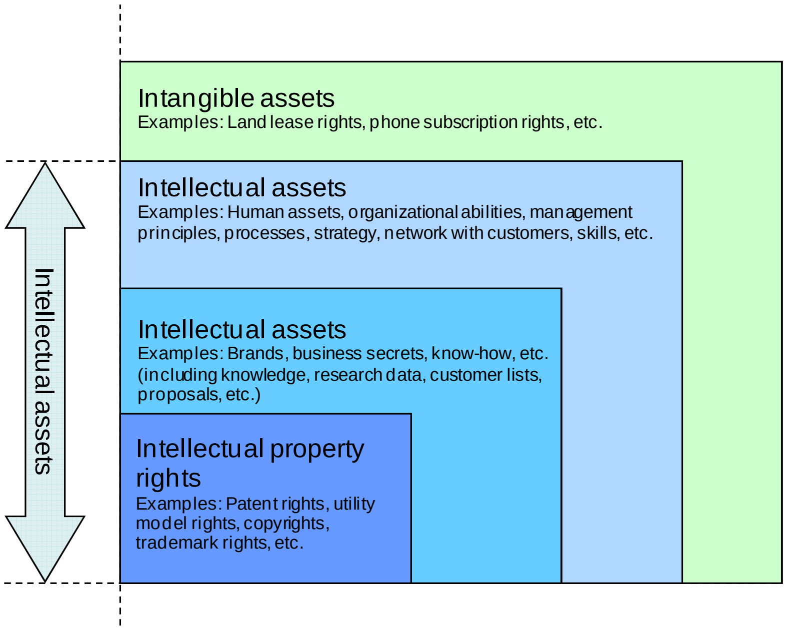
Chapter 1　Way of Thinking for Intellectual Asset-Based Management Evaluation Finance

Chapter 1 is broadly comprised of three parts.

■ The first part of this chapter (pages 4-14) first defines intellectual assets and intellectual asset-based management, and sorts out the discussion points and issues for investigating intellectual asset-based management evaluation finance.

To begin with, intellectual assets is a general term for "business resources which are difficult to show in the financial statements, such as staff, technology, skills, intellectual property (patents, brands, etc.), organizational abilities, enterprise principles and network with customers, which are sources of competitive strength for the enterprise". As shown in Figure 1-1, this does not only express intellectual property rights such as patents. In order for intellectual property to lead to earnings, there are many additional business resources and factors such as how to utilize, produce and sell technology which has legal protections. Thus one should instead focus on their existence and whether the enterprise has built a chain for how they are utilized towards creation of business value (intellectual asset-based management).

Figure 1-1　Relationship between Intellectual Assets and Intellectual Property



Note: The intangible assets above signify all intangible business resources held by the enterprise, which is not the same meaning as intangible fixed assets recorded in the balance sheet.

In order to aid understanding of the chain of utilization which creates value from intellectual assets (strengths, sources, relationship with weaknesses, etc.), intellectual assets are further classified into human assets, organizational assets and relationship assets, as shown in Figure 1-2. In this report, we want to suitably use and investigate these three classifications of intellectual assets.

Figure 1-2 Three Classifications of Intellectual Assets[1]

Human assets	Assets which employees take with them when they leave
Examples: Innovation abilities, imagination, know-how, experience, learning abilities, motivation, etc.	
Organizational assets	Assets which remain in the enterprise when employees leave
Examples: The organization's flexibility, databases, culture, systems, procedures, documents, services, etc.	
Relationship assets	All assets pertaining to external relationships of the enterprise
Examples: Customer loyalty, customer satisfaction, relation with suppliers, ability to negotiate with financial institutions, etc.	

Then, the way of thinking for financing decisions and management methods of financial institutions in order to handle small and medium enterprise finance techniques which consider intellectual assets is pointed out in the Financial Services Agency Finance Inspection Manual. Local financial institutions which support small and medium enterprises in both management and funding aspects really need to further promote locally rooted finance which focuses on non-financial information (intellectual assets management information) of small and medium enterprises.

However, issues are also surfacing concerning efforts at financial institutions in order for this to lead to "from intellectual asset-based management evaluation to smooth provision of finance", as was also pointed out in the "Guidelines for Practices of Intellectual Asset-Based Management for Small and Medium Enterprises – Intellectual Asset-Based Management Finance Survey & Research Edition" (below, "Intellectual Asset-Based Management Practice Guidelines")[2] by the Organization for Small & Medium Enterprises and Regional Innovation (for details, refer to pages 12-14).

This handbook for intellectual asset-based management evaluation finance was created with the aim to bring together the background and issues after study of such intellectual asset-based management evaluation finance, then arrange an overall image and points to consider for a way of thinking for intellectual asset-based management evaluation finance.

■ The middle part of this chapter (pages 15-26) explains how to do enterprise evaluations which accurately understand intellectual assets, while considering efforts until now by financial institutions for collection and evaluation of intellectual asset-based management information. The Ministry of

1 Made from Chitoshi Koga "Accounting of Intellectual Assets" (2005), and EU MERITUM Project (1998-2001)

2 http://www.smrj.go.jp/keiei/chitekishisan/037547.html

Economy, Trade and Industry brought together the chain of utilization which combines each enterprise's unique strengths leading to business earnings, into the Intellectual Asset-Based Management Report[3], and recommends that enterprises use external disclosure to encourage understanding by evaluators including financial institutions, and introduces a sample evaluation checklist as an attempt to resolve the asymmetry of non-financial information between financial institutions and enterprises. This also refers to survey results of "Intellectual Asset-Based Management Practice Guidelines", clarifies the actual situation of utilization in financial institutions of intellectual asset-based management information, and considers intellectual asset evaluation methods and practices suggested from these results.

■ The last part of this chapter (page 27 onwards) presents a framework for intellectual asset-based management evaluation finance when financial institutions evaluate intellectual assets and make financing decisions, while considering the finance examination process in financial institutions. For financial institutions which are very interested in the credit risks of the enterprise receiving finance, how enterprise cash flow forecasts can use non-financial information such as intellectual assets can be a most critical issue. This explains a way of thinking when financing investigations are done concerning the relationship between the business and the intellectual assets subject to evaluation, and relationships between intellectual asset values and intellectual asset information and future cash flows.

The basic way of thinking for intellectual assets is that, in order to recognize the values of intellectual assets, intellectual assets can be considered as the source of business earnings, and value as a business is created and first recognized in the mutual chain of relationships with other intellectual assets (human assets, organizational assets, relationship assets).

[3] http://www.meti.go.jp/policy/intellectual_assets/index.html

1. Efforts for Intellectual Assets in Locally Rooted Finance

In order to encourage active small and medium enterprise financing by financial institutions, the Financial Services Agency is pursuing an initiative for locally rooted finance. This initiative specifies the importance of doing evaluations (appraisals) of intellectual assets and technical abilities for providing finance.

■Financial Service Council, "Initiatives for Locally Rooted Finance: Evaluation and Future Action[4]", (Excerpt from pages 8-9. Underlines are marking by the Intellectual Property Policy Office, Ministry of Economy, Trade and Industry)

2. Thorough Implementation of Finance Techniques Focused on Business Value, and other Finance Provision Techniques which Suit Small and Medium Enterprises

(1) Enhancement of appraisal function and finance focused on business value (Thorough implementation of finance without excessive reliance on real estate collateral and personal guarantees)

The basis of locally rooted finance is cultivation of information locally including qualitative information, and focus on the business value of enterprise customers in providing finance.

There is general recognition that in real estate collateral and personal guarantees, there is effective smooth provision of funds and application of rules to debtors. This in itself is not necessarily problematic, but excessive reliance on these deviates from the original aims of locally rooted finance, clearly leading to a decline in the financial intermediation function. Above all, there is often the poor practice of a third party other than the manager bearing responsibility for management failure.

Therefore, it is important to thoroughly implement financing techniques focused on business value, which do not overly rely on customer real estate collateral and personal guarantees.

(Enhancement of "Appraisal Function")

In order to provide finance focused on business value of the customer enterprise, it is basic that the financial institution first enhance its "appraisal function", while also utilizing various finance techniques.

Above all, it is also pointed out that among small and medium enterprises, especially small size enterprises, locally rooted finance techniques are not being utilized sufficiently, due to cost aspect restrictions. Under proper allocation of roles with public finance and credit guarantee systems, especially among these small and medium enterprises and cooperative financial institutions which

[4] http://www.fsa.go.jp/singi/singi_kinyu/tosin/20070405.html

mainly have small sized customers, it is important to work to enhance the appraisal function utilizing daily communication, while also considering cost. Specifically, there is a need to fill in the asymmetry of information in cooperation with various local parties, such as the chamber of commerce and society of commerce, under the principle of mutual aid.

(Proper evaluation of qualitative information, enhance quality of quantitative information)

In performing the "appraisal function", it is also especially important to cooperate with related institutions, and properly evaluate qualitative non-financial information of customer enterprises. For example, one possible means to do this is to systematize non-financial qualitative information of certain sizes of small and medium enterprises, and utilize an intellectual asset-based management report on patents, brands, organizational abilities, and network with customer and suppliers. Where enhanced quality of quantitative financial information is also an issue, encouraging wider utilization of an accounting counselor system and the "Guidelines on the Accounting of Small and Medium Enterprises" is also thought effective among small and medium enterprises, especially for small enterprises.

Also, the Financial Services Agency's "Comprehensive Supervisory Guidelines for Small & Medium Enterprises and Local Financial Institutions" pointed out the necessity of establishing financing techniques focused on business value and enhancing the appraisal function, while recommending the following as one technique.

(The following is an excerpt from the Financial Services Agency's "Comprehensive Supervisory Guidelines for Small & Medium Enterprises and Local Financial Institutions, Main Edition[5]", page 101)

- Utilization of an intellectual asset-based management report which systematized non-financial qualitative information evaluation such as patents, brands, organizational abilities, and network with customers & suppliers
- Initiative in cooperation with technology evaluations promoted by the Ministry of Economy, Trade and Industry

Note: The above techniques are only examples. Each financial institution must consider that it should independently determine its emphasis for its efforts.

As described above, in locally rooted finance, there is a strong need to establish finance techniques (intellectual assets management-based finance) which consider the characteristics of small and medium enterprises, properly evaluate non-financial information and focus on business value (appraise).

[5] http://www.fsa.go.jp/common/law/guide/chusho.pdf

2. Way of Thinking in the Financial Inspection Manual

The relationship between credit to the enterprise and intellectual assets evaluation is an important item of interest for financial institutions, and of course must be consistent with credit controls for finance of the financial institution. Here, we aim to sort out points related to intellectual asset-based management evaluation finance, from content of the "Financial Inspection Manual Supplement (Small & Medium Enterprise Finance Edition)[6]" (referred to below as only "Financial Inspection Manual").

(1) Debtor Classification Verification Points (Enterprise Rating)

The Financial Inspection Manual clearly writes that for small and medium enterprise debtor classification, one considers potential technology abilities of the small and medium enterprise in comprehensively judging the actual situation of its management. Even for self-assessment (separate Table 1)[7], similar content is written in examples which judge debtor classification while considering intellectual assets such as enterprise technical abilities, sales abilities, manager qualities, and growth potential based on these, written as "practical examples 5 and 6" in the Financial Inspection Manual.

Debtor classification[8] based on characteristics of small and medium enterprises and verification points is specifically described as follows.

■ Verification Points of the Financial Inspection Manual Supplement (Small & Medium Enterprise Finance Edition)"
(the following is an excerpt from the "Financial Inspection Manual Supplement (Small & Medium Enterprise Finance Edition)", pages 3 to 7)

2. Verification Points

In debtor classification of medium, small and very small enterprises, it is necessary to judge based on their characteristics, with the following verification points.

Also, the following characteristics of medium, small and very small enterprises must be considered.

(1) Medium, small and very small enterprises are generally easily affected by the economy, and can easily run losses due to a temporary decline in earnings.

(2) They have less stockholders' equity than large enterprises, and can easily build up excessive debt due to temporary factors.

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6 http://www.fsa.go.jp/manual/manualj/manual_yokin/bessatu/y1-01.pdf

7 http://www.fsa.go.jp/manual/manualj/yokin.pdf

8 "Debtor classification" signifies judging its repayment ability due to the debtor's financial conditions, cash flow, earnings ability etc., and based on that situation etc., classifying the debtor as a normal borrower, borrower requiring special caution, potentially bankrupt borrower, substantially bankrupt borrower, or bankrupt borrower (refer to "Self-Assessment (Attached Table 1)" and "Items to consider for Attached Tables").

They also have less leeway for restructuring than large enterprises, and can take a long time to return to profitability and eliminate excess debt.

(3) As one characteristic of financing forms for medium, small and very small enterprises, one can see cases of long term funding for equipment funds handled by reborrowing short term funds.

As described above, considering management and financial characteristics of medium, small and very small enterprises, and financing forms unique to medium, small and very small enterprises, it is inappropriate in judging debtor classification to only look at surface aspects such as losses, excess debt and changed loan conditions.

Therefore, when judging debtor classifications, one must emphasize and verify transaction results and cash flow, and check the reasons for changed loan conditions and uses and characteristics of funding.

For inspections, in addition to these verification points, to judge debtor classification, it must strive to understand various materials used for judging when the financial institution does self-assessment, and comprehensively consider the actual business situation of the debtor.

[Debtor Classification in the Financial Inspection Manual]

(Omitted)

(3) Debtor Classification

1. Credit Classification Methods

For debtor classification, investigate the actual content of the debtor's finances, cash flow, earnings ability, and its repayment ability, confirm loan conditions for the debtor and the situation of its performance, industry characteristics, etc. Based on these, judge by <u>estimating the potential for the business to continue and create earnings, and its debt repayment ability through cash flow</u>, and comprehensively considering whether the business improvement plan is reasonable and the financial institution's support situation.

In particular, <u>for medium, small and very small enterprises, judge based on the actual business situation of that enterprise, comprehensively considering not only that enterprise's financial situation, but also that enterprise's technical abilities, sales abilities and growth potential</u>, situation of remuneration paid to the representative and other officers, representative's income situation and asset details, guarantee situation and guarantee abilities.

(Omitted)

(2) Borrowers requiring special caution

b. In the case of an enterprise which is running losses, for the following debtors, there is no problem with judging it as normal for debtor classification.

(Omitted)

(b) A medium, small or very small enterprise debtor which is running losses, but deemed to have no particular problems in its repayment ability.

(3) Potentially bankrupt borrowers

Especially for medium, small and very small enterprises, there are cases where a business improvement plan is not necessarily made. In this case, do not only look at that enterprise's financial situation, but comprehensively consider its technical abilities, sales abilities and growth potential, situation of remuneration paid to the representative and other officers, asset details, guarantee situation and guarantee abilities. Investigate based on the actual business situation of that enterprise, and do not immediately judge as potential bankrupt those debtors which have not made a business improvement plan.

[Verification Points in the Finance Inspection Manual]

(Omitted)

2. Enterprise Technical Abilities, Sales Abilities, Manager Qualities, and Growth Potential Based on these

Enterprise technical abilities, sales abilities, manager qualities, and growth potential based on these are important factors in considering the enterprise's growth and development potential. Even among medium, small and very small enterprises, there may be many borrowers which have plenty of potential and competitive strength in terms of technical abilities, and one must also pay attention to such points in inspections.

It is not necessarily easy to objectively evaluate an enterprise's technical abilities, and reflect those in the enterprise's future earnings estimates. But in inspections for judging debtor classification, it is necessary to strive to understand various materials for making judgment regarding the enterprise's technical abilities, and comprehensively consider those including the following points.

(1) Enterprise Technical Abilities, Sales Abilities, etc.

(a) Prospects for contracts for new orders, considering intellectual property rights such as patent rights, utility model rights, trademark rights and copyrights held by the enterprise and employees

(b) Future business plan based on development and sales situation for new products & services, etc.

(c) Mass media articles which show reputations in the industry of products & services it handles, etc.

(d) For products & services it handles, future market size, industry market share growth trend, etc.

(e) Advantageous sales terms and procurement terms based on the situations and evaluations of customers and suppliers of products & services it handles, and comparisons with competitors

(Omitted)

In evaluations of technical abilities, sales abilities, manager qualities and growth potential based on these for the following enterprises, verify the situation of the financial institution's visits to the enterprise and management guidance implementation, business recovery performance, etc. If these are deemed good, then that financial institution's evaluation based on information that the financial institution collected through enterprise visits and management guidance shall in principle be respected.

Also consider:

(a) Plans approved considering technical abilities and sales abilities, based on laws, etc. (for example, "Management Reform Plan" and "New Business Sector Development Plan with Cooperation between Sectors" of the Act for Facilitating New Business Activities of Small and Medium-sized Enterprises, etc.)

(b) <u>Evaluation of a Small and Medium Enterprise Management Consultant etc., concerning the enterprise's technical abilities, sales abilities, manager qualities, etc.</u>

■ Practical Examples Concerning Verification Points

(The following is an excerpt from the "Financial Inspection Manual Supplement (Small & Medium Enterprise Finance Edition) 3. Practical Examples Concerning Verification Points", Example 5, pages 30-31)

(Example 5)

✓ ***General Situation***

This is the main bank of the debtor (100% share of its debt, credit amount as of March 31, 2001: 100 million yen). Metal mold manufacturer which receives orders to make metal molds for plastic for home electronics manufacturers. It has more than 20 years experience. It has a representative and 4 other staff

✓ ***Business Situation***

Due to the recession, declining mold demand and production bases shifted overseas by home electronics manufacturers, order volume fell dramatically, and it was unable to halt sliding sales, for continuing losses every period and a slide into in excess debt (75 million yen as of the end of the previous period). Our bank is responding to requests for funds to buy manufacturing machines and raw materials, etc., but regarding funds to buy manufacturing machines, changed terms have been provided to defer repayment of principle.

✓ ***Self-Assessment***

This company has not made late payments, the representative and two of the employees have a reputation in this industry as skilled mold professionals. The representative has obtained five patent rights and utility model rights, and employees have applied for two patents. Therefore, our bank judges it to be relatively certain to continue receiving orders from home electronics manufacturers, and it is treated as a borrower requiring special caution.

(Verification Points)

About Technical Abilities

(Explanation)

1. In deciding debtor classification for medium, small and very small enterprises, if the enterprise has plenty of potential abilities such as technical abilities, and these are likely to make great contributions to the enterprise's future continuance and profitability, then it is useful to consider these as factors in deciding debtor classification.

2. As in this example, for a debtor which records repeated losses due to industry recession, and slides into excess debt, if future industry recovery is deemed unlikely and it is in a situation where it is thought likely to fall into bankruptcy, then it is thought likely to be a potentially bankrupt borrower.

   However, if the debtor is expected to certainly continue receiving orders from manufacturers etc. due to its excellent technical abilities, then one can forecast future improved performance. Further consider various other factors, and if there are no concerns about its future business continuity and enhanced profitability, then it is thought likely to be a borrower requiring special caution.

   On the other hand, if future industry conditions are not expected to improve, and considering the enterprise's cash flow situation and even leeway of the personal assets of the representative etc., for example if future delayed payments are expected to occur and there are concerns about business continuity, then one must investigate whether it is a potentially bankrupt borrower.

3. For investigating technical abilities, if there is a certificate by which one can confirm patent rights or utility model rights which the debtor already obtained or is currently applying for, then one can consider this as one example showing the debtor's advanced technical abilities, and it can be considered one positive factor in its future performance.

   However, for investigating forecasts of future business continuity and profitability, one must not only investigate the existence of such patent rights. For example, specifically investigate what level of new orders received can be expected due to those patent rights, and to what degree those would contribute to future earnings improvements.

(The following is an excerpt from the "Financial Inspection Manual Supplement (Small & Medium Enterprise Finance Edition) 3. Practical Examples Concerning Verification Points", Example 6, pages 32-33)

(Example 6)

- ✓ ***General Situation***

  This is the main bank of the debtor (100% share of its debt, credit amount as of March 31, 2003: 250 million yen). The debtor is a textile company with a local headquarter.

- ✓ ***Business Situation***

  As a long time textile (fabric) company, the debtor is a mainstay local company with special fabric technologies, but due to large volume imports of cheap textile goods from China, it has been forced to reduce prices due to harsher price competition, resulting in a situation of continuing business losses and excess debt in recent years.

  However, its technical abilities are not only for textiles. Its technical abilities are highly regarded. Also in application to a non-textile product, it was introduced in a trade journal as doing joint R&D with a local major paper manufacturer, and product manufacturing is possible after two years if steady progress is made.

  Our bank is frequently in contact with the debtor via continual company visits and management consultation, and we are confident of our evaluation and analysis of that debtor's technical abilities. We also have plenty of information and analytic ability concerning the local textile industry, due to our solid daily liaison activities. We have utilized such market survey ability for this project, and we judge that commercialization is expected, thus our policy is to continually support the debtor.

- ✓ ***Self-Assessment***

  We have sufficient understanding of the debtor's technical abilities, and there is also strong expectation of improved earnings after commercialization, thus it is classified as a borrower requiring special caution.

(Verification Points)

Concerning technical abilities, situation of transactions with major companies and preparations for evaluation by financial institution

(Explanation)

1. <u>For deciding on debtor classification of medium, small and very small enterprises, if the enterprise's technologies have sufficient potential and competitive abilities, and are likely to make large contributions to its future business continuity and enhanced earnings, then it is useful to</u>

consider them as factors in the debtor classification decision.

2. As in this example, for a debtor which records repeated losses due to industry recession, and slides into excess debt, if future industry recovery is deemed unlikely and it is in a situation where it is thought likely to fall into bankruptcy, then it is thought likely to be a potentially bankrupt borrower.

   However, if as in this example the financial institution has close communication with the debtor via visits to the company and management consultation, and it properly evaluates and analyzes that debtor's technical abilities as verified in trade journals etc., and further improved performance can be specifically forecast due to its advanced technical abilities, then further consider various other factors, and if there are not concerns about its future business continuity and enhanced profitability, then it is thought likely to be a borrower requiring special caution.

3. For investigating technical abilities, even if there are no patent rights or utility model rights, if the actual situation of specific product commercialization or technical cooperation with a major company can be confirmed, then one can consider this as one example showing the debtor's advanced technical abilities, and one must not only do a simple evaluation of technical abilities, rather for example investigate specifically to what degree new orders can be expected, and to what degree it will contribute to future improved earnings.

(Considerations for Investigation of Debtor Classification)

As noted above, it is clearly written in the Finance Inspection Manual that considering the business finance aspects and forms of financing unique to medium, small and very small enterprises, it is inappropriate to classify debtors by only surface phenomena. For classifying debtors, in addition to an emphasis on the verification points of transaction results and cash flow, the financial institution must strive to understand materials used for judgment when doing self-assessment, and comprehensively consider the actual business situation.

The important point for intellectual asset-based management evaluation finance is to comprehensively consider the actual situation of the enterprise built from human assets, organizational assets, relationship assets, etc., in the same manner as the perspective of the Finance Inspection Manual described above. By using information which the financial institution obtained in visits to the enterprise and evaluations of experts etc., the process of understanding and verifying the business cash flow which backs the enterprise's intellectual assets can be considered a process of "Classifying debtors by striving to understand the materials used for judgment when doing self assessment, and comprehensively considering the actual business situation."

3. Issues in Financial Institutions efforts for Intellectual Asset-Based Management Evaluation Finance

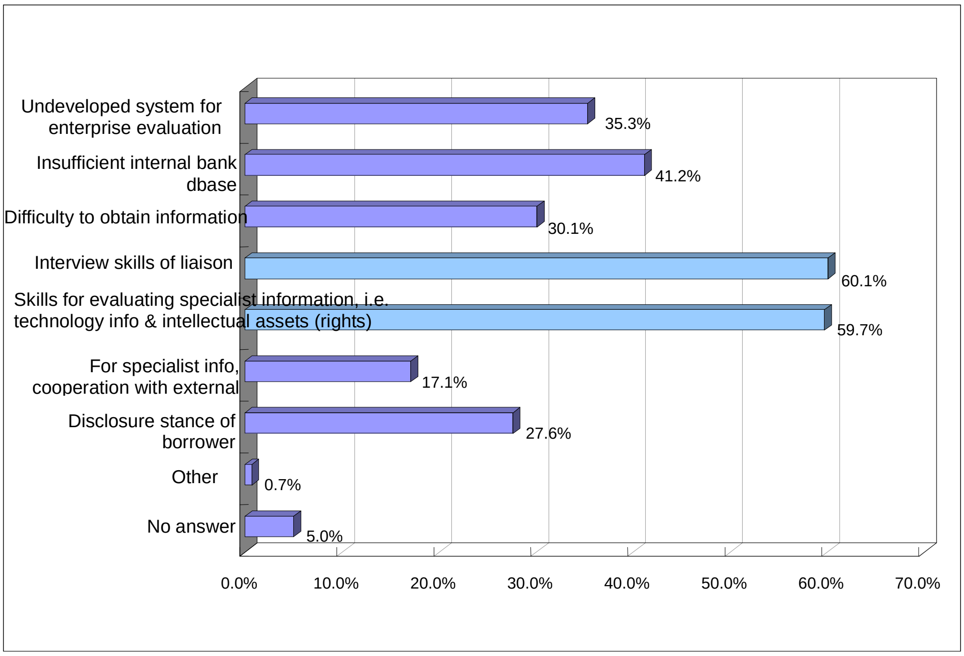
Here, we sort out issues concerning financial institution efforts in finance which evaluates intellectual assets. As described above, in locally-rooted finance efforts and the Financial Inspection Manual, the financial institution focuses on growth potential and business value of the small and medium enterprise, and the financial institution's own evaluation should be respected when making the finance decision by understanding the actual situation of the enterprise. Considering this, we want to clarify practical issues for the financial institution.

In finding the issues for financial institutions, one can refer to the survey in the "Guidelines for Practices of Intellectual Asset-Based Management". This survey makes it clear that for financing decisions, even financial institutions are utilizing not only financial information, but also non-financial information such as on intellectual assets.[9] However, this also highlights financial institution issues in providing financing utilizing non-financial information (Figure 1-3).

Specifically, about 60% of financial institutions recognize that in performing investigations utilizing non-financial information for financing small and medium enterprises, they face the issues of "Enhancing interview skills of the person in charge of sales" and "Enhancing skills for evaluation of technology information, intellectual property information, etc." It is conjectured that they lack skills in collection of information on intellectual asset-based management.

Figure 1-3

Issues in Small & Medium Enterprise Finance Utilizing Non-Financial Information



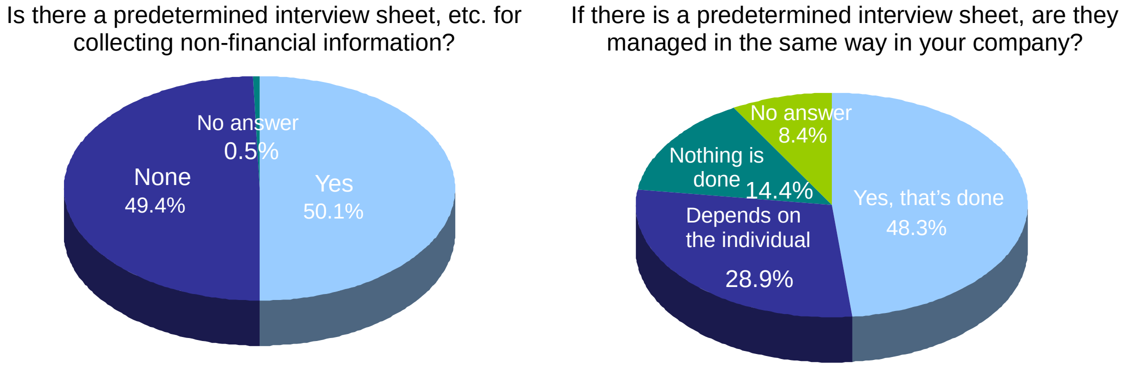
Source: Organization for Small & Medium Enterprises and Regional Innovation, "Guidelines for Practices of Intellectual Asset-Based Management" (October, 2008)

[9] The resulting main points of the situation of utilization of non-financial information are described in [Reference Materials 1-1], so one can refer there.

In addition, the survey results of "Guidelines for Practices of Intellectual Asset-Based Management" clarify issues concerning tools to collect non-financial information (interview sheet, etc.) (Figure 1-4).

- Less than half of the banks have prepared a predetermined interview sheet to collect intellectual assets information, so over half of the financial institutions still do not collect intellectual assets information in a standard way.
- Even for financial institutions which utilize interview sheets, less than half manage them in the same way, with the over half remaining using only individual management or no management at all.

Figure 1-4 System Developed and Management System in Bank for Utilization of Interview Sheets on Non-Financial Information



Source: Organization for Small & Medium Enterprises and Regional Innovation, "Guidelines for Practices of Intellectual Asset-Based Management" (October, 2008)

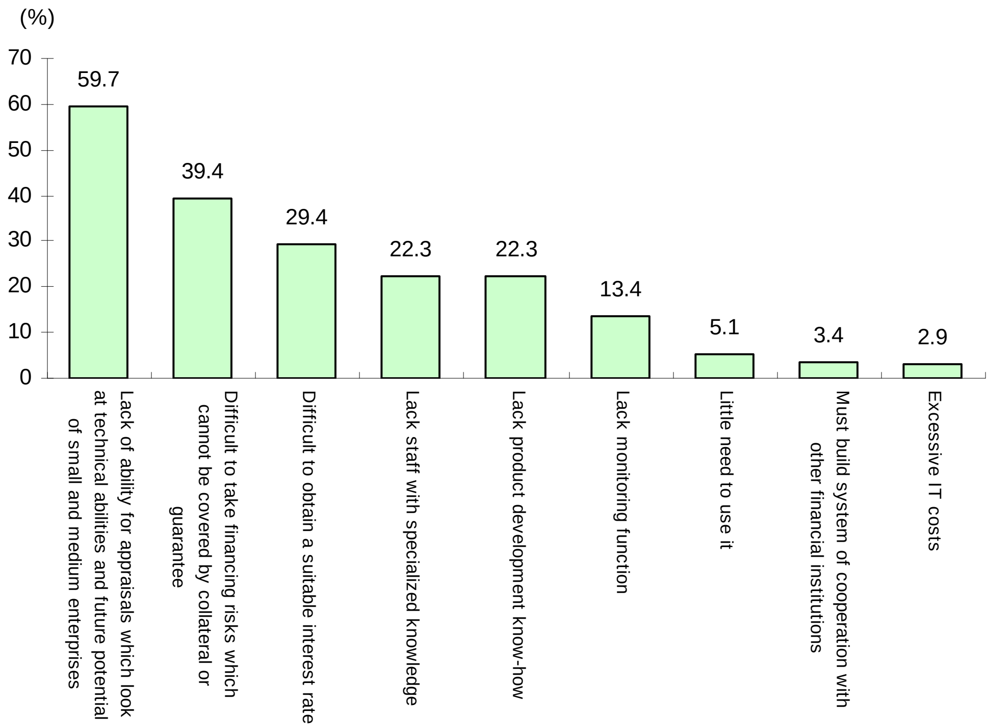
We see from this survey that still only 25% of all financial institutions both utilize a predetermined interview sheet and manage them in the same way internally.

In short, even though financial institutions recognize that enhancing their appraisal abilities is a big issue, in the majority of financial institutions, there is insufficient preparation of tools such as interview sheets which focus on non-financial information (intellectual asset-based management evaluation), nor have they reached the point of creating unified tools as an organization. Therefore one can say that in addition to the lack of individuals' skills in interviews, evaluations, etc. as described above, there is the issue of framework preparation from the aspect of organizational tools such as predetermined interview sheets and checklists.

From this current situation, one can consider that an effort needed by financial institution sales staff who support enterprises is to utilize tools like an intellectual asset-based management evaluation checklist as specific means to actually collect non-financial information focused on intellectual assets.

The same issues are also pointed out in the "2008 White Paper on Small and Medium Enterprises in Japan". The status survey of this white paper (Part 3, Chapter 2, Strengthen the Function of Local Finance for Small and Medium Enterprises) points out issues for promoting finance by local financial institutions which does not overly rely on collateral and guarantees. Among these, the greatest issue may be, "Lack of ability for appraisals which look at technical abilities and future potential of small and medium enterprises". Also, about 40% of financial institutions state that it is "difficult to take financing risks which cannot be covered by collateral or guarantee", which may also be an issue caused by a lack of appraisal ability.

Figure 1-5 Issues for Promoting Financing by Local Financial Institutions which does Not Overly Rely on Collateral and Guarantees



Materials: Tokyo Shoko Research, Ltd., "Survey on Actual State of Fundraising Environment for Small and Medium Enterprises" (December, 2007)
Source: 2008 White Paper on Small and Medium Enterprises in Japan

(Summary of Issues for Efforts by Financial Institutions)

Summarizing the surveys of the "Guidelines for Practices of Intellectual Asset-Based Management" and 2008 White Paper on Small and Medium Enterprises in Japan, the following issues are pointed out.

- Enhance interview skills for non-financial information
- Enhance skills for evaluating specialized information such as technical information and intellectual property rights
- Enhance skills for appraisals which look at technical skills and future potential

- Prepare tools such as predetermined interview sheets for non-financial information

Despite the current issues described above, by future enhancement of skills ranging from interviews through evaluation of intellectual asset-based management, there are expectations for the possibilities of expanded finance which focuses on the growth potential and business value of small and medium enterprises. Also, the lack of each skill and lack of prepared tools such as interview sheets are not unrelated. As one means of resolving this lack, there are strong expectations that using interview sheets leads to enhanced interview skills for specific projects, and continued use of interview sheets builds appraisal abilities and evaluation skills.

4. Current Efforts by Financial Institutions for Intellectual Asset-Based Management Evaluation Finance

Looking at the issues described above, we consider efforts until now for collection and evaluation of intellectual asset-based management information by financial institutions (and institutions providing services to financial institutions), and refer to them in considering how to provide intellectual asset-based management evaluation finance.

(1) Constant Communication

1) Collection of information on intellectual asset-based management to support management and sales

In the Financial Services Agency's "Evaluation of Locally Rooted Finance Efforts and Future Handling – Establishment of Sustainable Business Models which Utilize Accumulated Local Information – [10]", the essence of locally rooted finance is "Based on information obtained through long term transaction relationships, work for business improvements at an early stage via high quality face-to-face negotiations, and strengthen the lending function in small and medium enterprise finance, thereby working to enhance earnings of the financial institution itself".

Also, the specific content of locally rooted finance "responds to user needs and business chances, and the content of financial functions which individual local financial institutions should perform in each region will naturally vary depending on the region's characteristics, the size and form of its own business, etc. (omitted) Future efforts sought from all local financial institutions related to the essence of locally rooted finance are narrowed down to the following three points."

(1) Further strengthen support for client enterprises corresponding to lifecycles
(2) Thoroughly implement finance techniques focused on business value, such as techniques to provide funding suitable for small and medium enterprises
(3) Contribute to a sustainable local economy, utilizing accumulated local information

In other words, looking from a broad perspective at issues faced by local financial institutions, it is hoped that evaluation of non-financial fields will not only be in the for support providing finance in response to funding needs of small and medium enterprises, but also lead to stronger business and management support, building a foundation leading to sustainable local economic growth and vitality.

[10] http://www.fsa.go.jp/singi/singi_kinyu/tosin/20070405/02.pdf

Through daily communication, it is possible to collect non-financial information of an enterprise while also providing sales support and management support to the enterprise, and it is important to try to eliminate the asymmetry of information between both parties by such daily interaction of the enterprise with the financial institution. In order to understand individual intellectual asset information for evaluating sustainability and growth potential of the enterprise (human assets, organizational assets, relationship assets) which are difficult to show in financial information, and the chain of actions combining these, it is thought effective to collect non-financial information continually over a period time, not only in short term interviews. Daily communication with the enterprise is also expected to lead to added value of sales support and management support by the financial institution, in addition to information collection for the financing decision.

Also, as mentioned in the start of this chapter, the Ministry of Economy, Trade and Industry put together intellectual asset-based management reports for the chain of actions using each enterprise's unique strengths in intellectual assets leading to business profits, and recommends that enterprises disclose part or all of this to aid understanding of external evaluators including financial institutions. Use of such intellectual asset-based management reports is also a means to eliminate asymmetries in intellectual asset information between both parties, as an important initiative to reduce information acquisition costs of financial institutions, in addition to daily communication about intellectual assets information.

2) Utilization of Evaluation Checklist for Non-Financial Information

There are also examples where non-financial information (intellectual assets) evaluation checklists are utilized for understanding the actual situation of enterprises and providing support.

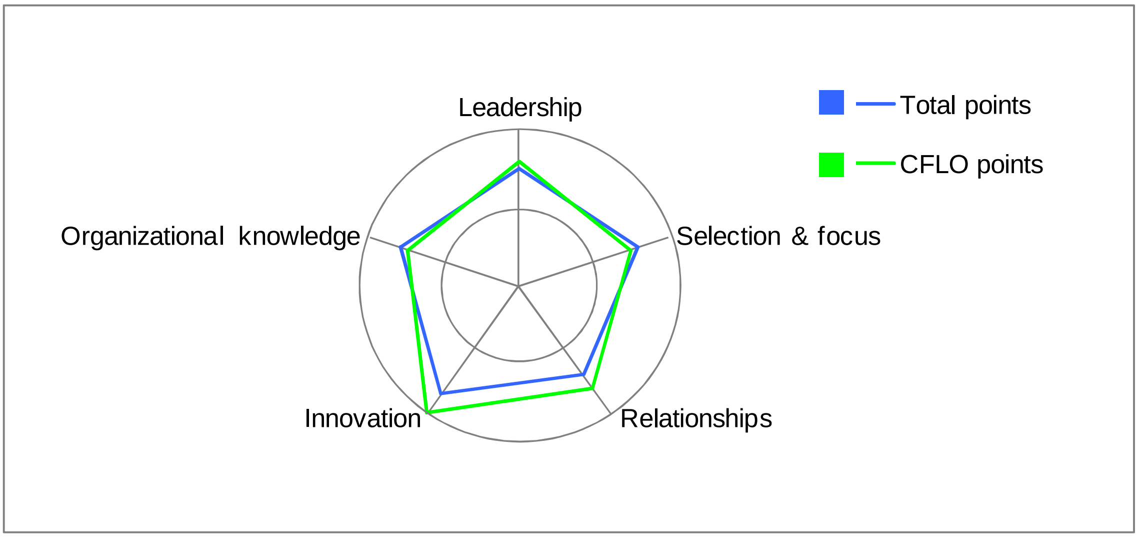
For example, the following intellectual assets scoring method evaluation tool[11] was developed and provided by The Japanese Institute of Certified Public Accountants and The Osaka Chamber of Commerce and Industry (Figure 1-6).

[11] http://www.osaka.cci.or.jp/hi_zaimu_ch/index.html

Figure 1-6　Sample Evaluation Results from Evaluation Checklist for Non-Financial Information (Intellectual Assets Information)

Company code	Company name	Prefecture	No.	Evaluation date
C1649	XXXX Co., Ltd.	Tokyo	A8653	2009-3-19 14：21

Category	Evaluation	CFLO evaluation
Management stance / Leadership	15	16
Selection & focus	16	15
External negotiating ability / Relationships	14	16
Knowledge creation / Innovation / Speed	17	20
Teamwork / Organizational knowledge / Risk management / Governance	16	15
	78 points	82 points



Sources: The Japanese Institute of Certified Public Accountants
The Osaka Chamber of Commerce and Industry

This evaluation checklist for non-financial information, evaluates 30 items of non-financial information in five categories, for the degree of their effects on both future potential and future cash flow creation.[12] While making the assumption that "There is not a certain standard for evaluation of non-financial information, nor can one expect that it will necessarily directly lead to financing", this provides a supplemental materials tool to financial institutions, aiming for the simplest evaluations possible in order to build new solutions utilizing non-financial information.

While utilizing such an evaluation sheet, one understands the factors of differentiation (strengths) of products and services provided by the enterprise. In cases where this clarifies the existence of management issues (weaknesses) faced by the enterprise, it can also be important to propose

[12] Refer to [Reference Materials 1-2], which shows the evaluation items in the non-financial information evaluation checklist of The Japanese Institute of Certified Public Accountants and The Osaka Chamber of Commerce and Industry.

improvement measures towards their resolution, continually supporting the management aspect and contributing as a positive initiative for enterprise growth, not immediately leading to negative evaluation.

(2) Collection of Non-Financial Information for Financing Decisions

1) Evaluation Items Emphasized by Financial Institutions Utilizing a Predetermined Interview Sheet

Survey results in “Guidelines for Practices of Intellectual Asset-Based Management” clarify the points of non-financial information emphasized by financial institutions which utilize a predetermined interview sheet during the financing decision, and the items of non-financial information which affect financing conditions.

According to this survey, financial institutions which use a predetermined interview sheet to collect intellectual asset information, put more emphasis on the non-financial information items shown in Figure 1-7 during their financing decisions, compared to financial institutions which do not use such sheets, and one can confirm that they actually utilize intellectual assets information to a greater degree[13] (Figure 1-7).

[13] Refer to [Reference Materials 1-1] for how to read the scores in Figure 1-7. Where there is a statistically significant difference between the averages of whether or not there is a predetermined interview sheet, they are ranked in order of the size of the difference. *** shows significant at 1% (both sides), ** shows significant at 5% (both sides), and * shows significant at 10% (both sides).

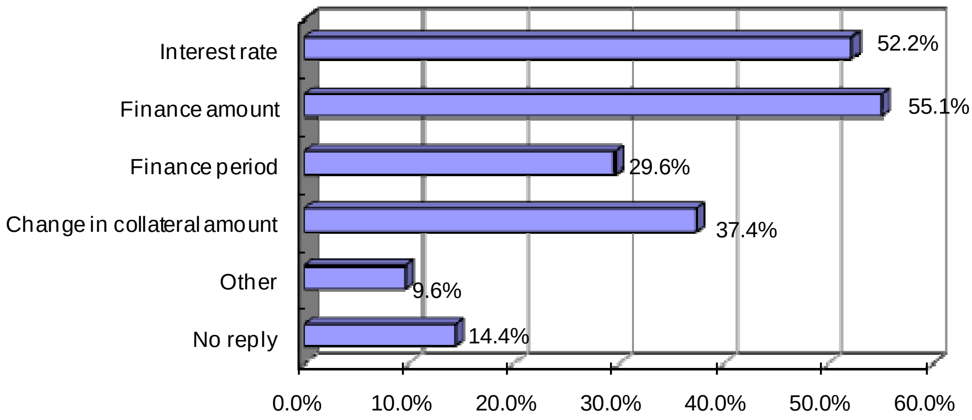
Figure 1-7 Non-Financial Information Emphasized During Financing Decisions by Financial Institutions which have a Predetermined Interview Sheet

Item name	Has a predetermined interview sheet (N=215)	No predetermined interview sheet (N=208)		
	Average	Average	Difference	Significance
Business model	3.52	3.33	0.18	***
Support system of parent company	3.74	3.58	0.17	***
Handling of legal risks	3.68	3.52	0.16	***
Customers and their situations	3.71	3.55	0.16	***
Internal company organization	3.36	3.20	0.16	***
Enterprise brand	3.40	3.25	0.15	***
R&D efforts	3.33	3.19	0.15	***
Related companies	3.95	3.81	0.14	**
Suppliers and their situations	3.48	3.36	0.12	**
Number of business locations	3.05	2.93	0.12	**
Personal assets of managers	4.05	3.93	0.12	**
Relationships with customers	3.47	3.36	0.12	**
Industry history	3.40	3.29	0.11	**
Superiority of main business	3.90	3.79	0.11	*
Business plan	4.00	3.89	0.11	**
Number of employees	3.18	3.07	0.11	**
Planning ability & imagination	3.41	3.31	0.11	**
Business management ability	3.98	3.88	0.10	*
Compliance system	3.69	3.59	0.10	*
Relationships with suppliers	3.36	3.25	0.10	**
Superiority of products, goods and services. Brands.	3.73	3.63	0.10	*
Economic trends and degree affected by state of economy	3.85	3.75	0.10	*
Management principles	3.50	3.41	0.09	*
Smooth labor relations	3.12	3.06	0.07	*

Source: Organization for Small & Medium Enterprises and Regional Innovation, "Guidelines for Practices of Intellectual Asset-Based Management" (October, 2008)

It is clear that intellectual asset information also affects financing conditions such as finance interest rate, finance amount and finance period. It has especially large affects on the finance interest rates (52.2%) and finance amount (55.1%), affecting financing conditions in over half of financial institutions (Figure 1-8).

Figure 1-8 Items which Non-Financial Information Affects Until Financing Decision



Source: Organization for Small & Medium Enterprises and Regional Innovation, "Guidelines for Practices of Intellectual Asset-Based Management" (October, 2008)

As non-financial information which affects the financing amount, we have "Superiority of business", "Profitability of services" & "Products", "Situations of customers" & "Relationships with customers". As items affecting the interest rate, we have "Superiority of products & services", "Superiority of technology", "Brands", and "Profitability of products and services".[14]

Also, in the interviews done for creating this handbook, as non-financial information considered until the financing decision, we have "Managers (management stance, etc.)", "Business foundations (business relationships with customers, etc.)", "Business content (competitive strength, market superiority, etc.)", "Technology abilities (superiority, originality, etc.), etc.[15]

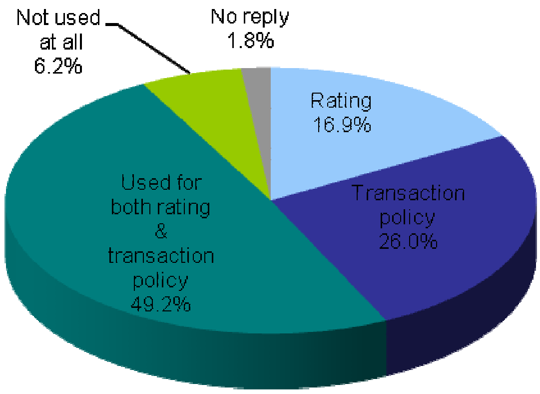
Considering these results, it is also important to arrange interview items corresponding to the characteristics of the company and business of the financial customers of each financial institution, and is thought that special investigation should be put into interview sheets for intellectual assets information which is easy to use during financing decisions.

[14] For details on the non-financial information which affected each finance project, refer to [Reference Materials 1-3].
[15] For an outline of the interviews done for creating this handbook, refer to [Reference Materials 1-4].

(2) Investigation Stages which Utilize Non-Financial Information in the Financing Examination Process[16]

Survey results of "Guidelines for Practices of Intellectual Asset-Based Management" clarify the following points concerning non-financial information for financial institutions in the financing examination process.

Figure 1-9 In which Parts of the Financing Process Do You Use Non-Financial Information?

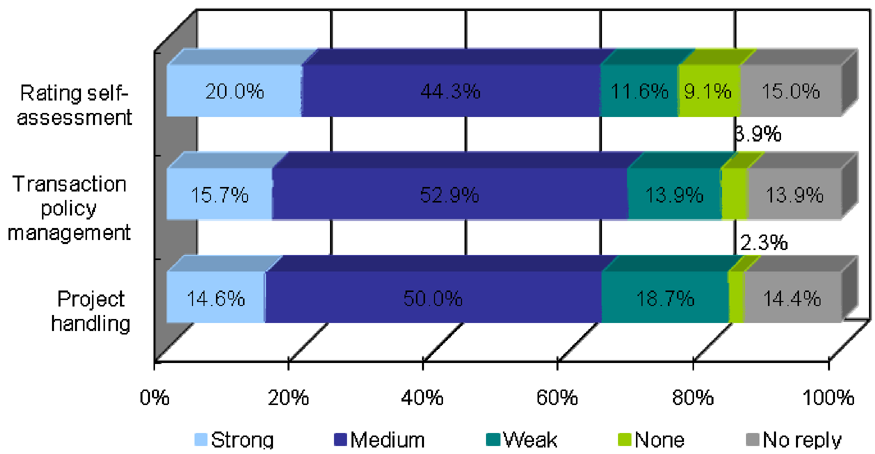


Source: Organization for Small & Medium Enterprises and Regional Innovation, "Guidelines for Practices of Intellectual Asset-Based Management" (October, 2008)

In survey results (Fig.1-9) concerning utilization of non-financial information in company ratings and transaction policy, 92.1% utilize non-financial information in company ratings or transaction policy, which is almost all financial institutions, thus one can interpret that non-financial information is being utilized in company ratings or transaction policy. In particular, a high 66.1% overall utilized it in company ratings.

[16] For a general financing flow, refer to page 27.

Figure 1-10 Level of Utilization of Non-Financial Information in Financing Process[17]



Source: Organization for Small & Medium Enterprises and Regional Innovation, "Guidelines for Practices of Intellectual Asset-Based Management" (October, 2008)

Also, for the three items of rating self-assessment, transaction policy and project handling, in results of a survey on the degree that non-financial information is utilized (Figure 1-10), it is clear that utilization in rating self-assessment and transaction policy management is very frequent, with "Medium" + "Strong" equal to 60.2% and 68.3%, respectively. Also, the degree of utilization in project handling (project examination) has similar frequency at 65.6%.

(3) Summary and Proposal Concerning Current Efforts in Financial Institutions

According to the above survey results, we see a tendency in financial institutions to emphasize collection of non-financial information and utilize interview sheets. These tools are also used frequently in the financing examination process: company ratings, transaction policy and project handling.

Considering together Figures 1-9 and 1-10, and Figure 1-4 "System Developed and Management System in Bank for Utilization of Interview Sheets on Non-Financial Information", in order to arrange in each financial institution the intellectual assets information which reflects the characteristics of the financing customer's company and its business, it is thought necessary to work on suitable interview items. Specifically, it is thought that there should be investigation of interview sheets which intend to collect intellectual assets information, and interview sheets which are easy to utilize during financing examinations and decisions, as decision material for company rating, etc. [18]

[17] Replies requested: "Strong" is if non-financial information is utilized plenty; "Weak" is for almost no utilization; "Medium is in between these two; "None" is if not used at all.

[18] In the financial institution interviews done for creating this handbook, each bank uses its own interview sheet and predetermined forms to arrange non-financial information such as intellectual assets, reflects this in ratings by a method such as assigning points, and these are clearly being used as investigation materials at the project examination stage (refer to [Reference Materials 1-4]).

Also, one cannot say it is uniform in all financial institutions, but as decision materials on company ratings etc., it appears that constantly collected intellectual assets information is utilized[19], one can say this is evidence which reconfirms the importance of constantly collecting information and the importance of intellectual asset-based management information disclosure.

This point also indicates the importance of constantly utilizing the checklist in the flow chart proposed in Chapter 2.

Above all, cost effectiveness should also be considered in various efforts, for example only utilize “(1) Simple Interview Sheet” and “(3) Intellectual Asset-Based Management Evaluation (Business Prospects) Interview Sheet”, and based on these, it seems important to work on reflecting the characteristics of companies to be financed by each bank and its own characteristics such as business size and form

[19] According to interviews of financial institutions etc. when creating the “Guidelines for Practices of Intellectual Asset-Based Management”, and financial institution interviews done for creating this handbook (refer to [Reference Materials 1-4]).

(A-1)
(YY/MM/DD)

(1) Simple Interview Sheet
Intellectual Asset-Based Management General Edition (Manufacturing Business)

1. Corporate profile

Company name		
Representative		
Contact person		
Contact		
Business description		
Human assets	Manager's career history and	
	Manager's business strategy	
	Manager's marketing expertise	
	Manager's financial management skills	

2. Business summary (core business)

Tangible assets	Core product	
Organizational assets	Product's intended purpose	
	Production system	
	Features of the technology	
	Competitors and their strengths and weaknesses	
	Presence of know-how	
Relationship assets	(Prospective) buyers	
	Advantage to the buyer in adopting the product	

3. Profitability

(Unit: million yen)

	Profitability	Term prior to the preceding term	Preceding term	Current term	Next term	Term following the next term
		(YY/MM)	(YY/MM)	(YY/MM)	(YY/MM)	(YY/MM)
Organizational assets	**Estimated revenue (Total)**					
	Unit price					
	Volume					
	Estimated expenses (Total)					
	Development costs					
	Production costs					
	Unit price					
	Volume					
	Balance					

4. Use of funds

5. Note

(A-3)
(YY/MM/DD)

(3) Intellectual Asset-Based Management Evaluation (Business Prospects) Interview Sheet
Intellectual Asset-Based Management General Edition (Manufacturing Business)

Company name	

■Business flow

1. Development phase

Interview items			Responses
Organizational assets	Past development efforts	Time frame of past development	
		Past development funds (Labor costs, number of plants, and parts & components)	
	Future development efforts (If in the middle of development or improvement stages)	Time frame for future development	
		Future development funds (Labor costs, number of plants, and components)	
		Existence of a development process chart	
		Future challenges to development (excluding funds)	

2. Manufacturing phase

(1) In-house manufacturing

Interview items		Responses
Organizational assets	Breakdown of production costs (Variable costs such as materials and labor costs)	
	Manufacturing equipment costs (Initial adoption costs, capacity utilization rate, and depreciation period)	
	Production capacity (Plants and equipment)	
	Maintenance system	
Relationship assets	Raw materials suppliers	
	Manufacturing equipment suppliers	

(2) Outsourced manufacturing

Interview items		Responses
Relationship assets	Contract manufacturers	
	Production costs	
	Existence of a manufacturing license agreement (Provision of now-how and product liability)	
	Maintenance system	

3. Sales phase

Interview items		Responses
Relationship assets	Existing buyers	
	Confirmed buyers (Time to start selling)	
	Prospective buyers under negotiation (Time to start selling)	
	(Monthly) sales volume and sales	
	Contract distributors (If any)	
Organizational assets	Selling price	

■Business features

1. Customer analysis

Interview items		Responses
Relationship assets	Grounds for product demand (Costs, added value, and substitute demand)	
	Stability of customers' needs (One-time order/periodical order and adoption cycle)	
	Target customers and market size (Fields, sales figures, regions, etc.)	
Organizational assets	Sales system	

(A-5)

2. Competitor analysis

Interview items			Responses
Organizational assets	Company product's advantages	Known competing products	
		Competing products' prices	
		Competing products' sales and customers	
		Competing products' advantages and disadvantages	
		Known substitutes	
		Company's strengths and weaknesses	

3. Self-analysis (Analysis of technology, know-how, and manager)

(1) Analysis of technology

Interview items		Responses
Organizational assets	Reasons for the establishment of the company's proprietary technology	
	Features of the technology (Strengths and weaknesses) (Cost barriers and adoption barriers)	
	Comparison with competing technologies	
Human assets	Primary developer's career outline	

(2) Analysis of know-how

Interview items		Responses
Organizational assets	Unpatented know-how (Trade secrets, etc.)	
Human assets	Unpatented technology	

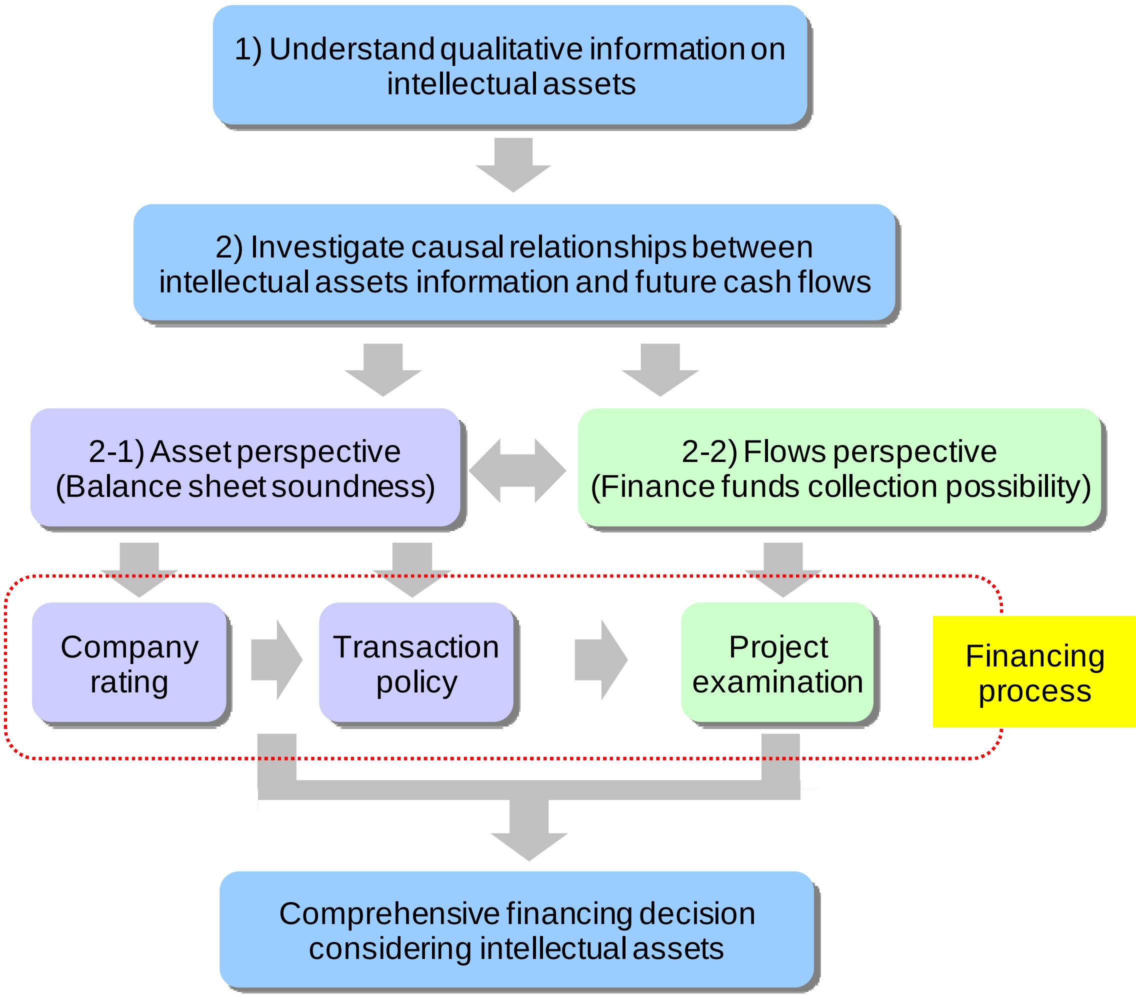
(3) Analysis of manager

Interview items		Responses
Human assets	Manager's business strategy	
	Manager's marketing expertise	
	Manager's financial management skills	

5. Framework of Intellectual Asset-Based Management Evaluation Finance in the Financing Examination Process

This handbook investigates a framework of intellectual asset-based management finance as seen in Fig.1-11, as the financing evaluation process in each financial institution.

Figure 1-11 Framework of Intellectual Asset-Based Management Evaluation Finance



This is a framework for utilizing intellectual assets information in financing decisions in line with the financing process, sorting out information which can be obtained on intellectual assets. Its aim is to form one basis for the financing decision by understanding the actual situation of the company from the perspective of intellectual assets, thereby obtaining a more accurate actual situation of the company including future prospects. Specifically, it is built from investigating causal relationships between qualitative information on intellectual assets and future cash flows, from the perspectives of flows and assets, and utilizing this in company rating, transaction policy and project examination.

In the financing process which is inside the dotted line (company rating, transaction policy, project examination), first the “company rating (bank’s internal rating by confirming financial information

& non-financial information, corporate risk examination, etc.)[20]" and transaction policy[21] based on company rating and "relationship level[22]" are decided. Next, we assume that "project examination" is done for the individual project of financing, according to the company rating and transaction policy, corresponding to the specific fundraising needs of a company with which there is a policy to do continual transactions or with which continual transactions are already being done.

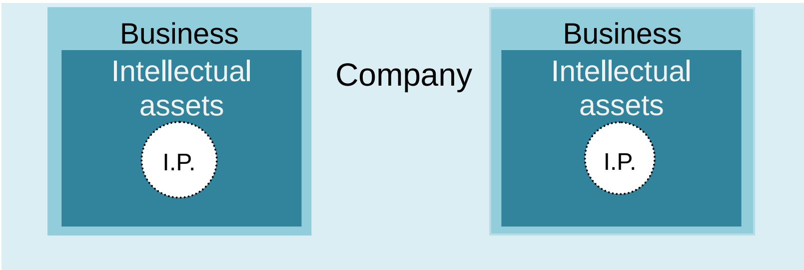
(1) Understanding Qualitative Information on Intellectual Assets

Intellectual assets are comprised of human assets, organizational assets and relationship assets, which are assumed to have a close relationship to the actual situation of the business (Figure 1-2). It is important to use daily communication and utilization of interview sheets to collect information on the customer's intellectual assets and objectively understand these factors, and thereby evaluate its business prospects.

● Relationship between Intellectual Assets and Company/Businesses

There is generally more than one business in a company, but there are various intellectual assets as factors which are the cores of those businesses. For example, there is intellectual property (brand, know-how, etc.). Thus the relationship between intellectual assets and the company/businesses can be understood by making it into a diagram as shown below (Figure 1-12), and intellectual assets which are the business core are contained in the business framework.

Figure 1-12 General Relationship between Intellectual Assets and Company/Businesses



For example, this could apply in the case of a company manufacturing machining drills which has unique drill technology (patent rights, know-how, etc.), the case of a restaurant chain which has a brand (store name trademark rights) and know-how (cooking methods and recipes), and the case of a cinema production company which holds copyrights and distribution routes in the industry.

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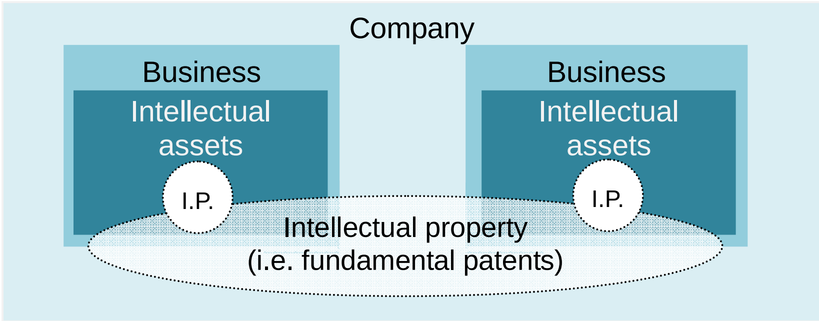
[20] As pointed out on page 21, it is not done by all financial institutions, but for the company rating, through daily communication etc., information collected while supporting the company's sales and management support may often make a certain amount of contribution.

[21] Transaction policy is generally decided by comprehensively considering the company rating and relationship level, along with conditions given to the customer for establishing collateral, performance in the long term transaction relationship, transaction's profitability, etc.

[22] Relationship level expresses the level of the relationship between the financial institution and the customer, that is whether it is the main bank or sub-main bank.

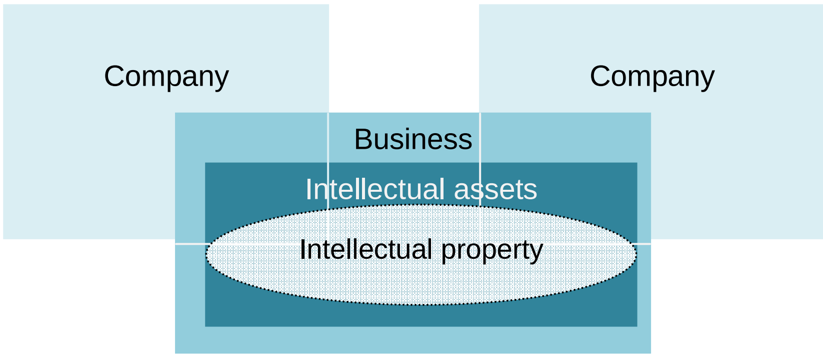
Figure 1-13　Case of One Intellectual Asset Used in Multiple Businesses



One technology or patent is sometimes used for several purposes (Figure 1-13). For example, there is the case of inkjet technology and patents which are not only used for printers, but also for printing semiconductor circuits. In such cases, the common technology and patents become a fundamental technology and fundamental patent, and technology and patents developed for an individual business become applied technology and patents.

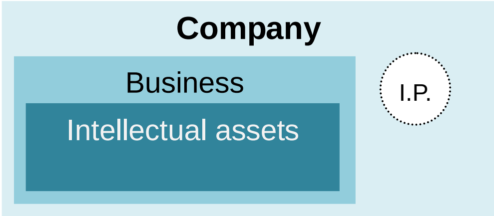
This applies in the same way to the case of a confectionary maker which uses a trademark as a common brand for multiple candies (products), and the case of an animation company which uses characters in goods other than animations.

Figure 1-14　Case of One Intellectual Asset and Business Held and Used by Multiple Companies



For joint development and joint business, when one business is carried out by two or more related parties, it is generally in a form like Figure 1-14. For example, there is the case of water treatment technology jointly developed with a university which is shared by the company and TLO (university). This would also apply to the case of sharing the trademark of a private brand (such cases often also including patent rights) jointly developed by a food manufacturing company and retailing company, and to the case of making a movie by a joint investment with copyrights shared between investors.

Figure 1-15　Value of Intellectual Assets which are Outside the Business Framework



Also, as in Figure 1-15, intellectual property outside the business framework are difficult to evaluate (only when disposable value cannot be confirmed). For example, this applies to dormant patents (technologies), unused trademarks (brands), incomplete movie copyrights, etc.

(2) Analysis of Causal Relationships between Intellectual Assets Information and Future Cash Flows

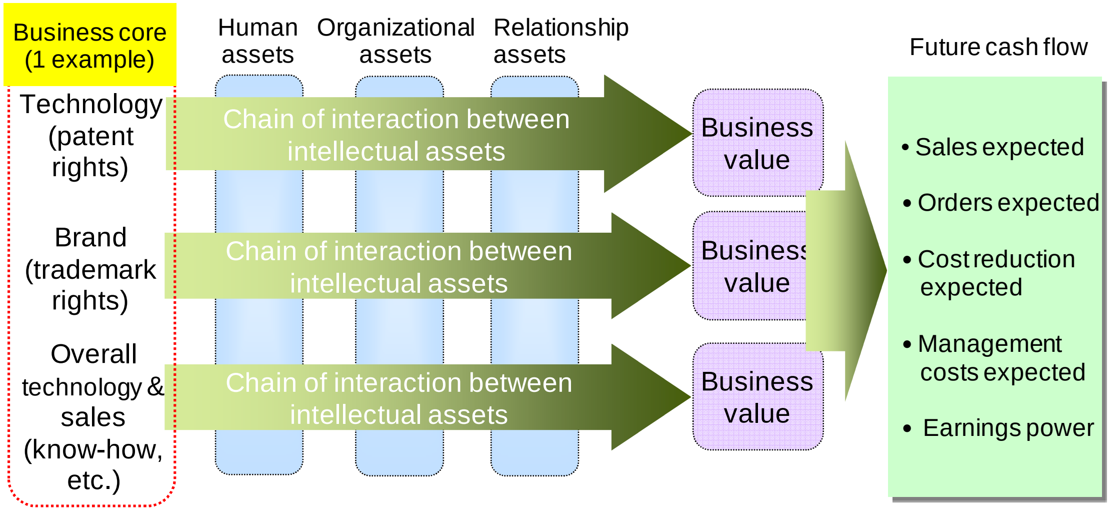
Sort out specifically what kind of effects there are on future cash flows of the financing candidate, according to qualitative information on intellectual assets confirmed by the financing candidate, and analyze causal relationships.

It is necessary to do mutual causal relationship analysis. For example, in the case that sales are established through relationships with customers and superiority of technology, sort out necessary intellectual asset factors in order to create business value, such as that there is a sales manual and service process for higher customer satisfaction in order to achieve continual sales.

In doing this, one can sort them out as follows (Figure 1-16). In short, the relationships between intellectual assets which become the business core and other intellectual assets (human assets, organizational assets, relationship assets) is important. For example, if technical abilities, brands and sales abilities are the source of business earnings, then resulting business value may be created in the process of the chain of interactions between core patents and know-how intellectual property, with other intellectual assets (human assets, organizational assets, relationship assets).

In the relationship between intellectual assets with intellectual property, both are not necessarily the same level of assets, and if doing business development utilizing technology (patent rights), brand (trademark), or know-how such as business secrets, in order to create business earnings, one must keep in mind that human assets, organizational assets, and relationship assets are all necessary (of course, while having good technology, know-how of technical staff is required in order to utilize that technology in the production process, and support of a sales network and advertisements which make consumers widely recognize the wonderful quality of goods produced based on these, thereby enhancing value of the brand (trademark), for interrelationship which is actually more complex than shown in Figure 1-16).

Figure 1-16 Process Creating Business Value



We next explain how one should view sorting out of the factors necessary in the process which creates business value from intellectual assets, analysis of the causal relationship between intellectual assets information and future cash flows, and verification of prospects for collection of financing based on future cash flow analysis and profitability analysis, at each stage in the financing process (company rating, transaction policy, project examination).

(1) Perspective for Intellectual Asset-Based Management Evaluation in Company Ratings and Transaction Policy (Asset Perspective)

● Company Ratings and Transaction Policy

Company ratings usually are made based on internal bank criteria focused on financial data such as the balance sheet (for relatively small companies, non-financial data is sometimes used to revise company ratings). Also, transaction policy is determined by considering soundness according to company rating, relationship level, collateral, etc.

This company rating and transaction policy are closely related to the debtor classification by self-assessment in the Financial Inspection Manual, and the resulting classification of credits.

● Importance of Obtaining Intellectual Assets Information

Financial data is the basis for company rating and transaction policy, but there are cases where financial data alone is insufficient for judging the actual situation of a company. The Financial Inspection Manual mentioned above also clearly writes that "Considering the characteristics of the business finance aspect of medium, small and very small companies and their unique forms of financing, it is inappropriate to judge debtor classification by only surface phenomena".

As one approach for this, it is thought effective to obtain qualitative information on non-financial aspects by intellectual asset-based management evaluation. Understanding the actual situation by intellectual asset-based management evaluation also enables review of the company rating and transaction policy which were evaluated mainly based on financial data such as balance sheets, so it is expected that these can be established more appropriately.

● Consideration of Intellectual Assets Value in the Balance Sheet

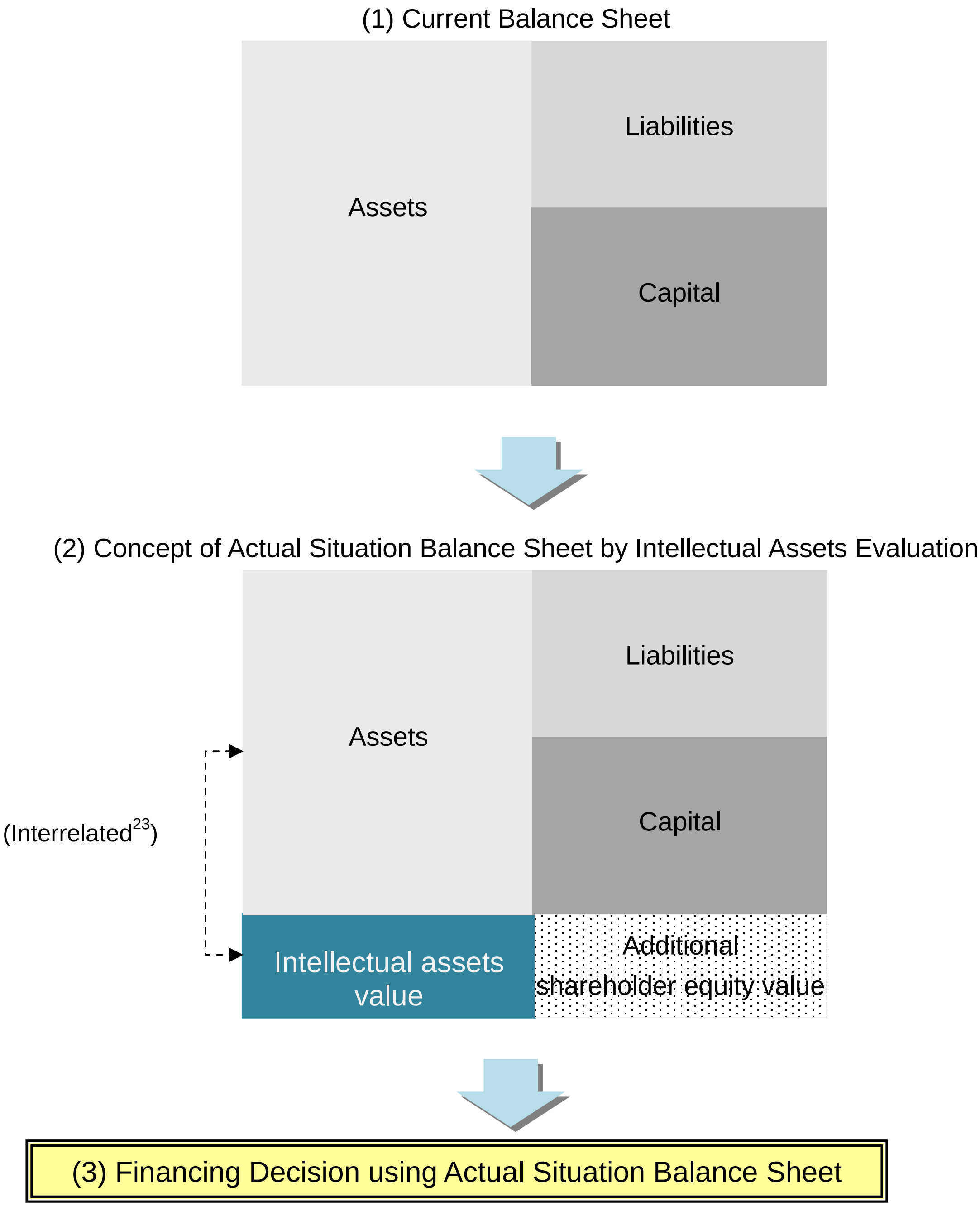
Moreover, quantitatively forecasting value while utilizing qualitative information on intellectual assets, and reflecting the actual situation in the balance sheet, may also be an effective perspective in the practice of investigating company rating and transaction policy.

Accounting does not record intellectual assets such as technology and intellectual property rights developed in the company, excellent human resources, etc. A source of intellectual property is R&D expense for building intellectual assets, which is fully expensed each accounting year (excluding its recognition in some software companies), thus it is not reflected in balance sheets which are emphasized when deciding company ratings.

In short, incorporating as much as possible quantitative values of intellectual assets into financial data which company rating and transaction policy is thought one effective means towards obtaining an actual situation balance sheet. For example, we can hypothesize the actual situation balance sheet shown in Figure 1-17, but by using an actual situation balance sheet which quantitatively applies the values of intellectual assets as the basis for the comprehensive judgment made for financing, one moves from a stance of only evaluating performance of past business results, to an understanding of the company's actual situation such as its potential, enabling more appropriate establishment of company ratings and transaction policy.

In this way, by investigating intellectual asset value from the perspective of the actual situation balance sheet, one creates the possibility of intellectual asset-based management evaluation finance including potential.

Figure 1-17 Concept Diagram of Actual Situation Balance Sheet by Intellectual Assets Evaluation



[23] Keep in mind that on-balance sheet assets have individual economic book values, but intellectual asset value moved off balance sheet for accounting purposes only creates value in its interaction with on-balance sheet assets.

● Business Value of Intellectual Assets

For calculating values of intellectual assets in the actual situation balance sheet, it is difficult to investigate without deciding on their starting points to a certain degree, so this handbook adopts the approach of starting from intellectual property rights.

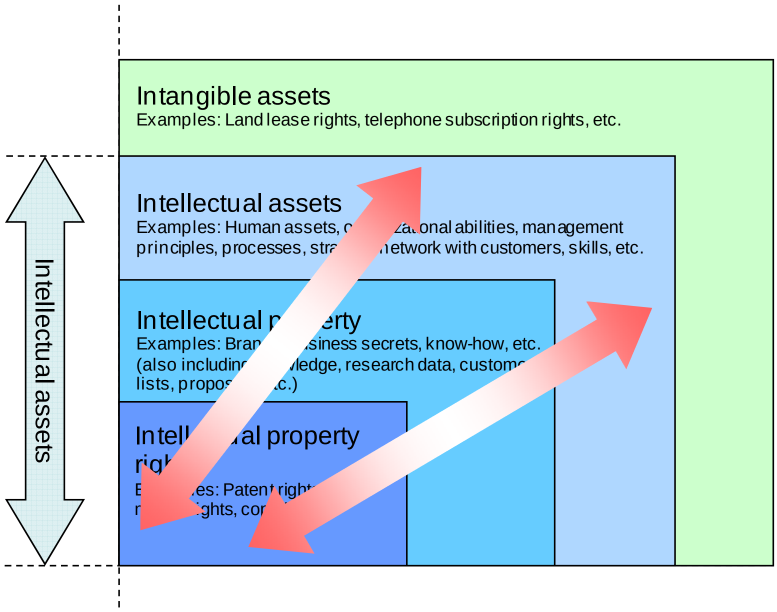
Of course as written above, intellectual property rights are not necessarily recorded as assets for accounting, and can be thought of as one factor which creates cash flows only by combining with tangible assets and commercialization strategy and organizational abilities and network with customers: intellectual assets such as the linkage of human assets, organizational assets and relationship assets (Figure 1-18).

However, in contrast to other intellectual assets, intellectual property rights are legal rights, and registration prepares them as legally stable assets with the requirements of perfection against third parties.

In short, if intellectual property rights can be thought of as a source of earnings after being connected with the business, then compared to other intellectual assets, investigation starting from intellectual property rights can be thought of as an option which is a relatively easy approach.[24]

Considering these points, the evaluation techniques introduced in this handbook use "intellectual property rights" as their starting points, adopting techniques which investigate other intellectual assets (human assets, organizational assets, relationship assets) required in the process by which intellectual property rights create business value, evaluating their asset and business potentials, while considering their importance and relationships.

Figure 1-18 Relationship between Intellectual Assets and Intellectual Property Rights



Note: The intangible assets above signify all intangible business resources held by the enterprise, which is not the same meaning as intangible fixed assets recorded in the balance sheet.

[24] For specific evaluation methods, refer to the cases shown in Chapter 3, and to Chapter 4.

(2) Perspective of Intellectual Asset-Based Management Evaluation in Project Examination (Perspective of Flow)

After or at the same time as determining the company rating and transaction policy, financing project examination is done by request of the financing customer investigated. The perspective then is the probability of recollecting the financing based on analysis of causal relationships between intellectual assets information and future cash flows, and it verifies the business profitability and cash flows.

Company rating and transaction policy focused on recognizing intellectual assets as assets, but project examination should place focus on the effects of intellectual assets on flow.

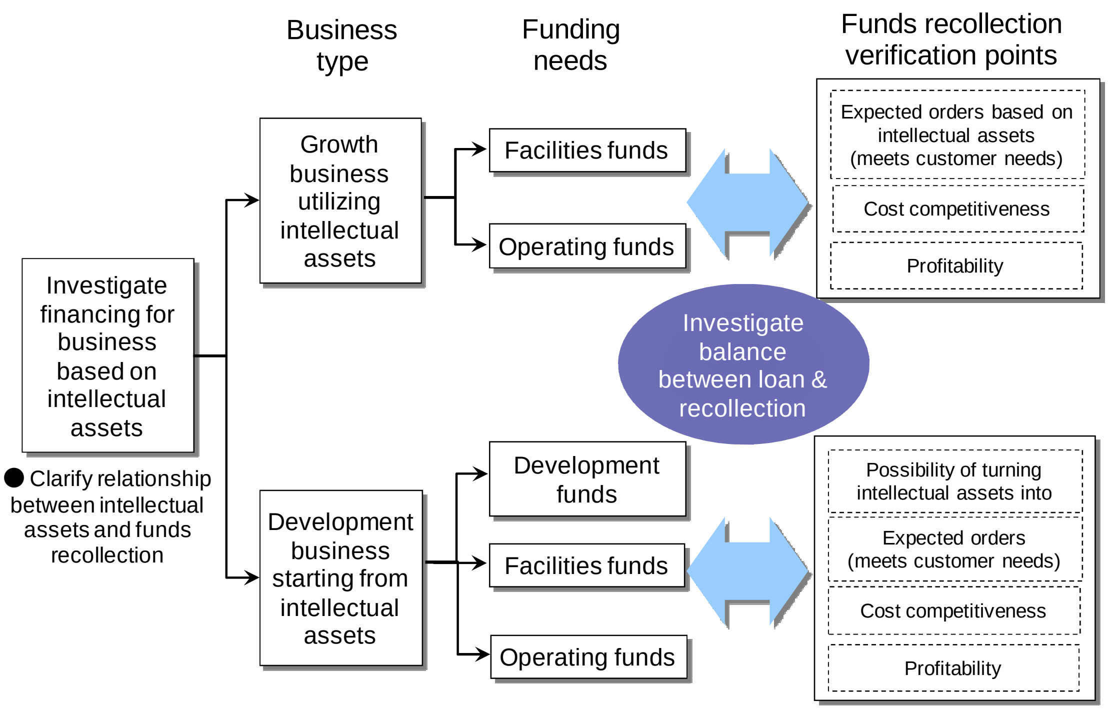
● Verification of Profitability and Understanding Future Cash Flows, Based on Intellectual Assets

Verification of earnings is, so to speak, the investigation of probability of sales and the accuracy of expenses, and careful examination of the certainty of earnings and cash flows created. As written above, sales are confirmed by the factors of price and volume, while cost factors are initial costs and cost of sales, and in the background of these factors there are many causal relationships with factors which comprise intellectual assets. For example, a company's handbag can be sold at a higher price than a similar competing product, because it has brand strength and technical performance. Also, human assets can result in higher efficiency and yield than other companies, holding unit costs down.

Thus, when deciding a company rating and transaction policy, project examination verifies the business revenues and future cash flows based on intellectual assets, from the relationship between intellectual assets and profitability, while referring to intellectual assets which are assumed to be a basis of the company rating and transaction policy. This enables close examination of the possibility of recollecting funds by intellectual asset-based management finance.

When investigating financing for business based on intellectual asset-based management, we can imagine two business types as in Figure 1-19. Chapter 2 describes this in detail, but the funding needs and fund collection verification points differ by each type, with different hypothesized patterns of fund collection from future cash flows. We divide them into each case below, and explain their characteristics.

Figure 1-19 Funding Needs and Funds Repayment Verification Points, by Business Type



● Growth Business Utilizing Intellectual Assets

Many businesses which work to expand business based on trademarks and manufacturing know-how correspond to a growth business utilizing intellectual assets. Few such business require development funds, but facilities funds and operating funds are required along with business expansion. For example, in the case of adding a large facility to manufacture and sell to new customers in addition to existing customers, or the case of working to expand sales regions by expanding into new stores, it requires facilities funds and expanded operating funds for additional facilities and additional stores. Future cash flow projections are made by assuming the past sales trend plus the expanded business, but one can verify achievability of funds repayment and expected sales and profitability in the expanded business, from the perspective of intellectual assets.

For example, if the bank funding client's brand strength and product functions (quality) which fulfill existing customer needs are intellectual assets which also apply to the segment in which it intends to expand (region or customer segment), then one can explain sales and profitability of the expanded business from intellectual asset information.

Intellectual property information on superior quality and cost compared to the competition could also be an explanatory material. In extending existing intellectual assets, depending on the situation, new intellectual asset factors are added, and if one can confirm the factors of intellectual assets which comprise expanded business, this can deepen understanding of future cash flows and firm up probabilities.

If it is a growth business, facilities funds for business expansion can be recovered out of long term cash flow, or operating funds may steadily grow along with sales growth over the short or medium to long term, and various patterns of loan and collection can be imagined.

● Development Business Starting from Intellectual Assets

Almost all business related to patent rights and technology can be classified as a development business towards development and commercialization of new products starting from such technology (intellectual property). In such cases, funding needs are mainly for funds to develop products created from intellectual assets.

Also, entering into the mass production stage after development is complete, facilities funds are needed to buy facilities to handle mass production, and operating funds for the period from paying for parts and materials and labor costs until collecting on sales. Funds repayment verification points also differ for these funding needs.

For development funds, one must first of all verify the possibility of developing it into a product and commercializing. At the development stage, it is a difficult task to look into the possibility of commercialization, but one can obtain positive proof of achievability from the perspective of intellectual assets. Also, for development funds and the facilities funds in the mass production stage, expectations for repayment of financing are based on long term cash flow and profitability. Two factors in long term profitability are sales and cost structure, which can be confirmed from the causal relationship between continual customer needs for products and functions, and intellectual asset information such as relative superiority over competing quality and costs.

For operating funds at the sales stage, there are funding needs along with new sales, but their repayment assumes that product prices and functions match the needs of customers from which it expects to receive orders in the short term. Here one can also verify that utilizing intellectual assets, there are human assets which meet functional needs, organizational assets supporting cost competitiveness enabling it to set advantageous prices, etc.

In the case of a development business, repayment of fund expenditures (funding needs) in the company (expenditures for development funds and facilities funds) shall be paid for out of future cash flows (profitability), thus a long term funding repayment pattern is hypothesized.

(Supplemental Discussion) Collateral Aspect of Intellectual Assets

The intellectual asset-based management evaluation finance described until now has been only considered from the aspect of the degree that intellectual assets contribute to business earnings. It should be kept in mind that this differs from intellectual property collateral finance which holds it as collateral, with a focus on the so-called disposal value of intellectual property.

Naturally, even among intellectual property, if one can confirm its disposal value, it is effective to provide finance which holds it as collateral. And even for intellectual property with little disposal value, one can expect to have a psychological effect on the business by holding it as collateral.

With this we consider the collateral ability of intellectual assets, while referring to the Financial Inspection manual.

As described below, for “adjustment by collateral” in self-assessment, regarding taking measures to preserve by collateral, verification is done on suitability of self-assessment criteria for collateral and accuracy of self-assessment results.

(The following is an excerpt from “Financial Inspection Manual, Confirmation Audit Checklist for Asset Assessment Management Preparations, ‘Self-Assessment’ (Attached Table 1) ”, page 11)

(2) General Collateral

(Verification of Suitability of Self-Assessment Criteria)

This signifies collateral which is not good collateral, but which is objectively possible to dispose of.

Examples are real estate collateral, factory foundation collateral, etc.

Another example is movable collateral with proper management and objective and reasonable evaluation ensured, for certain conversion value.

Another example is debt collateral, with proper debt claim rights management ensured, for certain collection.

(Verification of Accuracy of Self-Assessment Results)

Verify that the collateral noted above is general collateral. Items such as real estate collateral for which mortgage rights registration is withheld are in principle not treated as general collateral, but there is no problem with treating it as general collateral only in the case that a reasonable reason exists for withholding registration, and all required registration documents are arranged, and the situation enables immediate registration.

Even in this situation, in order to perfect against third parties, it is proper to do certain registration, and proper management is required concerning the situation of establishing that real estate collateral's mortgage rights.

Also, in the case that a movable is collateral, verify that corresponding to the movable's characteristics, proper management and objective and reasonable evaluation is ensured, and whether value conversion can be objectively and reasonably expected to be certain, including: that requirements for perfection are properly prepared, that quantity and quality are continually monitored, that evaluation by an objective and reasonable evaluation method is possible and such evaluations are actually being obtained, that an appropriate means of converting value is ensured for that movable, and that a proper procedure is established to secure that movable when collateral rights are executed.

Also, in case debt claims are provided as collateral, verify whether it is objectively and reasonably expected that repayment is certain (including converting its value by transfer to a third party), i.e. that the requirements for perfection are properly prepared, that information can be obtained at any time required in order to determine the credit strength of the third party debtor (debtor of the debt claimed concerned), that the third party debtor's financial situation is continually monitored, that one can reasonably calculate bankruptcy probability, etc.

(Considerations for Collateral Ability of Intellectual Assets)

In the Financial Inspection Manual, movables and debt claims differ, intellectual assets and intellectual property rights are not given as examples of general collateral, and they are currently not understood to be considered as general collateral. However, summarizing the points regarding suitability of self-assessment criteria for general collateral and accuracy of self-assessment results, the following three points are considered, and regarding just these points, the collateral ability of intellectual assets does not appear to be rejected. We narrow this down to the following three points, and verify the collateral ability of intellectual assets.

(1) Objective possibility of disposal
(2) Ensuring proper asset management
(3) Preparation of requirements for perfection against third parties, such as by registration

(1) Objective Possibility of Disposal

Trading of intellectual assets and trading of intellectual property rights (patent rights, trademark rights, copyrights, etc.) are actually done in the form of business transfers, and it is not the case that intellectual assets and intellectual property rights have absolutely no liquidity. However, liquid markets for trading are undeveloped, and there is actually no trading data which is public. Also, each intellectual asset has its own unique characteristics, so there is no liquidity like in commodity markets, and one imagines that trading is generally by negotiated transactions.

(2) Ensuring Proper Asset Management

Management of know-how and intellectual property rights such as patent rights can be done by a management technique such as handling in the company's intellectual property department. On the other hand, business aspects management of intellectual property rights and management of intellectual assets such as human assets are done in a form similar to management of the actual business, and one assumes these are verified together with periodic monitoring of the business.

(3) Preparation of Requirements for Perfection Against Third Parties, Such as by Registration

Among intellectual assets defined at the start of this chapter, perfection against third parties is prepared by the current recording and registration system, only for intellectual property rights such as patent rights and trademark rights which are registered in the government agency with jurisdiction. In a broad sense, there is no system which prepares requirements for perfection against third parties for these. Consequently in the current recording and registration system, intellectual assets which can be established as collateral are narrowed down to intellectual property rights.

From consideration of the above three points concerning collateral ability, we see that items fulfilling the minimum criteria for general collateral are intellectual property rights which can be registered to show proper asset management and objective possibility of disposal. While fulfilling these criteria at the time of deciding on financing, asset management (monitoring) and disposal possibility of rights become practical issues after financing is provided, but by a series of intellectual asset management techniques from the financing until monitoring in intellectual asset-based management evaluation finance, partial solution is thought possible in the future.

However, it is currently thought difficult to widely and completely affirm the collateral ability of intellectual property rights, thus rather than investigate financing which assumes the collateral ability of intellectual property rights, it is desirable to place more emphasis on understanding of actual management which places emphasis on intellectual assets and their contribution to business earnings, according to debtor classification and verification points (company rating), and on investigating self-assessment and financing based on such actual management.

But on the other hand, efforts to use intellectual property rights as collateral are actually being made practically in each region’s financial institutions. In such cases, it is thought that though intellectual property rights have low collateral abilities, they are handled as quasi-collateral below general collateral. Using intellectual property rights which are a source of business earnings as collateral for protecting financing has the effect suppressing moral hazard by the company after providing financing, which is thought one reason for establishing collateral.

For example, the December 1, 2006 report by the Bank of Japan Kobe Branch “Concerning Funding Demand Trends Focused on Small and Medium Companies in Hyogo-ken”[25] notes the example of the “Hyogo Small and Medium Company Technology Evaluation System” led by the Hyogo Economic Development Center. It is thought that technical abilities etc. of small and medium companies evaluated by this system become “Supplemental Materials” (conservatively positioned as quasi-collateral) when a financial institution’s loan examination investigates whether or not to make a loan.

(Certificate of Contract Establishing Collateral: Reference Example)

As sample certificates of contracts establishing collateral, two types are shown on pages 40-43, establishing a collateral right of pledge against patent rights, and establishing a transferred collateral right.

[25] http://www3.boj.or.jp/kobe/omiyage1811.pdf

Contract Document Establishing Collateral Right of Pledge (Patent Rights)

Article 1 (Provision of Collateral)

(1) Based on the money lease contract document concluded on Month Day, Year between XXXXXX, Co., Ltd. (below, "Party A") and YYYYYY Bank Co., Ltd. (below, "Party B"), as collateral for the yen debt principal and all incidental debts currently owed to Party B, Party A consents to each Article and paragraph of the bank transaction agreement and other agreements which Party A provided separately, and established first right of pledge (below, "These Pledge Rights") against the patent rights written below (below, "These Patent Rights").

(2) Based on the agreement of the previous paragraph, Party A shall quickly complete registration procedures for These Pledge Rights, and provide to Party B a certified copy of that patent registration ledger.

(3) Regarding These Patent Rights, Party A guarantees payment of the patent fees, and that absolutely no rights exist with priority over These Patent Rights nor which should harm These Patent Rights.

Article 2 (Invalidation Judgment of These Patent Rights)

(1) If there was a request for invalidation judgment against These Patent Rights, or if concerning These Patent Rights a rights infringement or possibility of rights infringement by a third party is recognized, then Party A shall immediately notify Party B of this.

(2) If a report of the previous paragraph was made, then Party A shall without delay discuss with Party B, and eliminate infringements and take measures for risk prevention and other necessary measures, and when there are instructions of Party B, shall follow them.

(3) In the case of the two above paragraphs, Party A shall not respond to mediation or settlement with a third party without the consent of Party B.

(4) When there was an invalidation decision against These Patent Rights, or when Party B deems there was a remarkable decline in the value of These Patent Rights and makes a demand, then according to Party B's instructions, Party A shall provide increased collateral or replacement collateral and/or make early repayment of all or part of the debt based on the original contract.

Article 3 (Addition of Collateral)

Until all debt based on the original contract is repaid, if Party A applied for related industrial property rights concerning These Patent Rights such as an improvement invention, or if it obtained the establishment of a related license (below, "Related Application, Etc."), then according to instructions of Party B, it shall provide the Related Application, Etc. as collateral for debt based on the original contract.

Article 4 (Preservation of Collateral)

(1) Party A must continually pay patent fees concerning These Patent Rights.

(2) If Party A transfers or abandons These Patent Rights, or establishes a right of pledge or other collateral rights, or if it provides a license concerning These Patent Rights to a third party, then it must obtain prior consent of Party B.

(3) When Party A obtains a right to receive money or other payment from a third party such as the price for a license of the previous paragraph concerning These Patent Rights, it shall immediately notify Party B of this, and when Party B demands, shall transfer those rights to Party B.

(4) When Party B has received money etc. from a third party based on provisions of the previous paragraph, regardless of the repayment period determined in the original contract, Party B can apply it to repayment of debt based on the original contract.

Article 5 (Exercise of Collateral Rights)

(1) When Party A neglects to discharge its debt based on the original contract, Party B can dispose of These Patent Rights by a method, period, price, etc. generally recognized as suitable, and apply the amounts obtained after deducting disposal costs to repayment of debt based on the original contract, regardless of the repayment period determined in the original contract.

(2) In addition to according to the previous paragraph, after notifying Party A, as replacement for repayment of debts of Party A based on the original contract, Party B can obtain These Patent Rights by a method, period, price, etc. generally recognized as suitable, regardless of the repayment period determined in the original contract.

(3) When amounts obtained under paragraph one have exceeded the debt claims of Party B, Party B shall repay that excess amount to Party A, or when they are less than the debt claims of Party B, Party A shall immediately repay the amount lacking to Party B. This shall also apply correspondingly in cases of the previous paragraph.

Article 6 (Procedure of Rights Transfer Accompanying Collateral Rights Execution)

If These Patent Rights transfer according to provisions of the previous Article, then Party A shall deliver to the receiving party all documents required in transfer registration procedures of These Patent Rights.

Article 7 (Bearing of Costs)

(1) Party A shall bear the costs for creation of this document and all other costs related to this contract.

(2) When Party B temporarily pays costs of the previous paragraph instead of Party A, for the amounts paid by Party B, Party A shall repay to Party B the costs plus damages, calculated from the date Party B paid at an annual rate of   % (prorated calculation with one year as 365 days).

Article 8 (Application and Application Mutatis Mutandis of the Original Contract)

Concerning this contract, in addition to items determined separately from this document, each Article and Paragraph certified as written in all original contracts shall apply or apply mutatis mutandis.

As evidence of this contract, one certified document is made, and Party B shall retain it.

Month Day, Year

Party A

Party B

Note

Description of patent rights subject to the right of pledge

Name of invention

Registration number

Patent rights holder

(Partially revised excerpt from the “Intellectual Property Rights Collateral Finance Manual”, Organization for Small & Medium Enterprises and Regional Innovation, JAPAN)

Contract Document Establishing Transferred Collateral Rights (Patent Rights)

Article 1 (Provision of Collateral)

(1) Based on the money lease contract document concluded on Month Day, Year between XXXXXX, Co., Ltd. (below, “Party A”) and YYYYYY Bank Co., Ltd. (below, “Party B”), as collateral for the   yen debt principal and all incidental debts currently owed to Party B, Party A consents to each Article and paragraph of the bank transaction agreement and other agreements which Party A provided separately, and transferred to Party B the patent rights it owns as written below (below, “These Patent Rights”).

(2) Party B licensed These Patent Rights to Party A without compensation.

(3) Party A guaranteed that no rights of pledge nor other rights exist which bring harm to These Patent Rights.

Article 2 (Patent Fee Payment for These Patent Rights)

Party A shall bear the patent fees concerning These Patent Rights, and their payment methods shall be according to instructions of Party B.

Article 3 (Invalidation Judgment of These Patent Rights)

(1) If there was a request for invalidation judgment against These Patent Rights, the Party A shall immediately inform Party B of this, and cooperate with Party B in making great efforts so that These Patent Rights are not invalidated.

(2) If concerning These Patent Rights a rights infringement or possibility of rights infringement by a third party is recognized, then Party A shall immediately notify Party B of this, Party B shall establish an exclusive license for Party A, and Party A shall strive to preserve These Patent Rights by a demand for injunction, etc.

(3) In the case of the two above paragraphs, Party A shall not respond to mediation or settlement with a third party without the consent of Party B.

(4) When there was an invalidation decision against These Patent Rights, or when Party B deems there was a remarkable decline in the value of These Patent Rights and makes a demand, then according to Party B’s instructions, Party A shall provide increased collateral or replacement collateral and/or make early repayment of all or part of the debt based on the original contract.

Article 4 (Addition of Collateral)

Until all debt based on the original contract is repaid, if Party A applied for related industrial property rights concerning These Patent Rights such as an improvement invention, or if it obtained the establishment of a related license (below, “Related Application, Etc.”), then according to instructions of Party B, it shall provide the Related Application, Etc. as collateral for debt based on the original contract.

Article 5 (Preservation of Collateral)

(1) If Party A provides a license concerning These Patent Rights to a third party, then it must obtain prior consent of Party B.

(2) When Party A obtains a right to receive money or other payment from a third party such as the price for a license of the previous paragraph concerning These Patent Rights, it shall immediately notify Party B of this, and when Party B demands, shall transfer those rights to Party B.

(3) When Party B has received money etc. from a third party based on provisions of the previous paragraph, regardless of the repayment period determined in the original contract, Party B can apply it to repayment of debt based on the original contract.

Article 6 (Exercise of Collateral Rights)

(1) When Party A neglects to discharge its debt based on the original contract, Party B can dispose of These Patent Rights by a method, period, price, etc. generally recognized as suitable, and apply the amounts obtained after deducting disposal costs to repayment of debt based on the original contract, regardless of the repayment period determined in the original contract.

(2) If These Patent Rights were disposed under the previous paragraph, then when those amounts obtained have exceeded the debt claims of Party B, Party B shall repay that excess amount to Party A, or when they are less than the debt claims of Party B, Party A shall immediately repay the amount lacking to Party B.

Article 7 (Procedure of Rights Transfer Accompanying Collateral Rights Execution)

If These Patent Rights transfer according to provisions of the previous Article, then Party A shall deliver to the receiving party all documents required in transfer registration procedures of These Patent Rights.

Article 8 (Bearing of Costs)

(1) Party A shall bear the costs for creation of this document and all other costs related to this contract.

(2) When Party B temporarily pays costs of the previous paragraph instead of Party A, for the amounts paid by Party B, Party A shall repay to Party B the costs plus damages, calculated from the date Party B paid at an annual rate of   % (prorated calculation with one year as 365 days).

Article 9 (Application and Application Mutatis Mutandis of the Original Contract)

Concerning this contract, in addition to items determined separately from this document, each Article and Paragraph certified as written in all original contracts shall apply or apply mutatis mutandis.

As evidence of this contract, one certified document is made, and Party B shall retain it.

Month Day, Year

Party A

Party B

Note

Description of patent rights

Name of invention

Registration number

Patent rights holder

(Partially revised excerpt from the “Intellectual Property Rights Collateral Finance Manual”, Organization for Small & Medium Enterprises and Regional Innovation, JAPAN)

[Reference Materials 1-1] Main Points in Survey Results of the "Guidelines for Practices of Intellectual Asset-Based Management[26]

Figure 1-20 % Utilization of Non-Financial Information During Financing Decision

Non-financial information utilization ratio	N	% of total	Cumulative
0% to under 10%	9	2.5%	2.5%
10% to under 20%	51	14.4%	17.0%
20% to under 30%	110	31.2%	48.2%
30% to under 40%	127	36.0%	84.1%
40% to under 50%	29	8.2%	92.4%
50% or higher	27	10.0%	100.0%

* During financing decisions in financial institutions, on average, the utilization ratio of financial information is 72%, compared to 28% for non-financial information. The distribution of each financial institution's non-financial information utilization ratio is shown above.

Figure 1-21

Non-Financial Information which is Highly Useful in Taking Financing Decisions

No.	Item name	Average	Standard deviation
1	44. Fundraising leeway	4.01	0.6227
2	24. Personal assets of managers	3.99	0.5924
3	43. Situation of transactions with other bank	3.96	0.6029
4	22. Existence of successor	3.95	0.5667
5	52. Business plan	3.95	0.6058
6	14. Business management ability	3.93	0.5865
7	64. Related companies	3.88	0.6408
8	42. Existence of main financial institution	3.86	0.6257
9	30. Changes in content of business	3.85	0.5916
10	31. Superiority of technologies	3.85	0.5964
11	35. Superiority of main business	3.84	0.6200
12	34. Profitability of products, goods and services	3.81	0.6251
13	28. Economic trends, degree of sensitivity to economy	3.80	0.6222
14	17. Character	3.78	0.6558
15	29. Situation of other competing companies	3.73	0.5971
16	33. Superiority and brands of products, goods & services	3.68	0.5854
17	63. System of support by parent company	3.66	0.6286
18	67. Compliance system	3.64	0.7594
19	36. Customers and their situations	3.63	0.6257
20	23. Health situation	3.61	0.6025

* Of 54 items of non-financial information, the 20 most emphasized items during financing decision-making are shown above (3.57 average for non-financial information). The average value for financial information items is 3.60, and one can say that the 20 items of non-financial

[26] A survey was sent by post to 575 financial institutions throughout Japan (6 city banks, 64 regional banks, 45 secondary regional banks, 282 shinkin banks, 145 credit unions, and 33 other financial institutions), and 439 financial institutions responded (76.3% valid response rate). In selecting 13 items of financial information and 54 items of non-financial information, they obtained responses with 5 point evaluations of whether or not they are emphasized during the financing decision (one "Do not emphasize at all," 3 "Usual," and 5 "Emphasize very much").

information are emphasized as much or more than financial information.

[Reference Materials 1-2] Sample Checklist for Non-Financial Information (Intellectual Assets Information)

(The Japanese Institute of Certified Public Accountants KINKI Chapter and The Osaka Chamber of Commerce and Industry)

Figure 1-22 Questions to Managers Concerning Intellectual Assets Information

Management Stance, Leadership

- Do management principles pervade the company?
- Are profit plans made and utilized in the company? (Monthly budget system)
- Is business information such as basic policies communicated outside the company?
- Are there future manager candidates? Are they being cultivated?
- Is periodic training provided to upper management and employees?
- Do you actively participate in economic organizations and industry organizations, and work on interacting with other managers?

Selection and focus

- Have you established and are you implementing a clear business model?
- Do you recognize the strengths and weaknesses of your own management?
- Do you clearly recognize companies competing with your current main businesses, and do you differentiate?
- Are you reviewing unprofitable products, businesses, etc.? (Including possible withdrawal)
- Do you establish and use easily understood indices to measure the degree that business goals are achieved?
- Are you investing in future growth markets?
- Are you conscious of building and maintaining your own brands?

Negotiating ability, relations

- Is there a price setting policy?
- Can you explain the attraction of their own products, goods and services?
- Do you raise and lower sales or purchase prices in response to the market environment?

Knowledge, innovation, speed

- Do managers maintain constant and good communication with experts inside and outside the company?
- Is there a department to develop new products, goods and services?
- When did you recently release new products, goods and services?
- Do you think that your decision making process is fast?
- What level of monthly financial reports are produced?

Teamwork, organizational knowledge, risk management, governance

- Have you adopted a system to boost employee motivation? (Bonus system, flextime system, etc.)
- Are you utilizing IT?
- Is there common purpose in the company?
- Is external knowledge actively utilized?
- Do you rely on officers or employees who have specific know-how?
- Do you understand the laws and regulations concerning your company, and are they explained to employees?
- Are there rules on how to handle claims against the company?
- Are labor problems handled properly? (Service overtime, social insurance payments)
- What is the situation of controlling information leak risks? (sales information, personal information, etc.)

[Reference Materials 1-3] Financing Terms Affected by Non-Financial Information[27]

Figure 1-23 Non-Financial Information Effect on Interest Rate

Items	Has effect (N = 223) Average	No effect (N = 203) Average	Difference	Significance
Business plan	4.03	3.86	0.16	***
Superiority & brands of products, goods & services	3.74	3.62	0.12	**
Health situation	3.67	3.55	0.12	**
Leadership	3.54	3.43	0.11	**
Person holding qualifications and technologies	3.29	3.19	0.10	**
Profitability of products, goods and services	3.86	3.75	0.10	*
Planning ability, imagination	3.41	3.31	0.10	**
Business model	3.47	3.37	0.10	*

Figure 1-24 Non-Financial Information Effect on Financing Amount

Items	Has effect (N = 233) Average	No effect (N = 195) Average	Difference	Significance
Customers and their situations	3.74	3.49	0.24	***
Handling of business secret leak risks	3.44	3.21	0.23	***
Relationships with customers	3.51	3.29	0.22	***
Superiority of main business	3.94	3.73	0.21	***
Compliance system	3.73	3.52	0.21	***
Character	3.87	3.67	0.21	***
Internal organization	3.37	3.17	0.20	***
Company brand	3.41	3.22	0.10	***
Suppliers and their situation	3.50	3.31	0.19	***
Personnel evaluation system	2.90	2.71	0.19	***
Fundraising leeway	4.10	3.91	0.18	***
Profitability of products, goods and service	3.89	3.71	0.18	***
Smoothness of labor/management relations	3.17	2.99	0.18	***
Market share and position in industry	3.61	3.43	0.18	***
Superiority of technology	3.93	3.75	0.18	***
Employee turnover rate	3.12	2.95	0.17	***
Business history	3.49	3.32	0.17	***
Efforts in research and development	3.33	3.17	0.17	***
Relationships with suppliers	3.38	3.21	0.17	***
Leadership	3.56	3.40	0.17	***
Public relations activities	3.15	2.99	0.16	***
Health situation	3.68	3.52	0.16	***
Internal improvement proposal system & number of improvements implemented	2.95	2.78	0.16	***
Number of employees	3.20	3.04	0.16	***
Incentive system	2.84	2.68	0.16	***
Economic trends, degree of sensitivity to economy	3.87	3.71	0.16	**
Know-how	3.30	3.14	0.15	**
Business management ability	4.00	3.85	0.15	***
Person holding qualification and technologies	3.31	3.16	0.14	**
Intellectual property (rights)	3.50	3.36	0.14	**

[27] Items with positive average difference between “Has effect “and “No effect” and p value of 0.1 or less, ranked by difference. * shows significant at 10% (both sides), ** shows significant at 5% (both sides), and *** shows significant at 1% (both sides).

[Reference Materials 1-4] Interviews with Financial Institutions concerning Non-Financial Information Utilization

Multiple government and private financial institutions. Done January – March, 2009.

Figure 1-25 Financial Institution Interview Results Summary

Collection of non-financial information

- Salespeople are utilizing interview information in their daily work, and collect new information in some cases.
- In financial institutions which consider it difficult to judge non-financial information at the salesperson level, the branch manager judges it in some cases. In some cases, whether the branch manager judged it or not is reflected in the rating.

Information referred to at the stages of company rating and transaction policy

<u>Degree that financial information and non-financial information are reflected</u>

- At the stages of company rating and transaction policy, focus is on financial information, with supplemental study of non-financial information (financial : non-financial ratios = 8:2, 7:3, 6:4, etc. Differs by financial institution.)
- Each uses their own predetermined format.

<u>Reflection in company ratings</u>

- At the stage where it is reflected in the company rating, points are assigned to non-financial information by a predetermined format. The way to assign points differs by item (Does not take a form of uniformly assigning 5 point evaluations).
- Depending on the content of non-financial information, items differ as to adding or subtracting points. Items with a large risk of bringing losses to the company are evaluated as subtracting points.

<u>Reflection in transaction policy</u>

- At the stage of transaction policy, there is additional investigation of loan leeway (including protection aspect), relationship level, etc.

Information referred to at the project examination stage

- Handling differs according to funding needs.
- In many cases, for response to regularly arising funding needs such as normal reborrowing of operating funds, seasonal funds (bonuses, etc.), etc., if the company rating and transaction policy have been decided and this is within its scope, then specially detailed investigation is not done.
- For financings requiring judgment on business prospects, such as new business, R&D, etc., non-financial information is investigated in detail separately. In some of such cases, a specialized department of headquarters is in charge.

Figure 1-26 Information Referred to at Stages of Company Rating and Transaction Policy

External environment	Growth potential of industry, market, goods, services	
	Competitive situation of industry, market, goods, services	
	Stability of market conditions for products and services handled	
Managers	Way of thinking (business strategy, etc.)	Do they have their own opinions and analyses of the business environment? Do they constantly maintain a spirit of challenge?
	Character	Are they able to humbly listen to the opinions of low ranking people outside company?
	Management stance	Are they devoted to the business? Do they mix business and private matters?
	Decision making	Do they take decisions quickly?
	Business management	Do they accurately understand and explain data and plans? Do they understand business risks and have proper alternative plans? Are management policy and plans thoroughly implemented in the company? Execution of cash flow management. Is it properly managed?
	Other	Health situation, successors, officer candidates, career history, etc.
Business foundations	Customers, suppliers	Do customers and suppliers have stable businesses? Are customers well distributed?
	Transaction & procurement projects	Are transaction terms and supplier terms disadvantageous?
	Industry position	What position does it occupy in the industry?
	Parent company	Can it expect support from its parent company? Stability of parent company.
Employees	Skills, know-how	Are there employees who have technology, skills or know-how?
	Staff	Are there sufficient staff? Also, are there sufficient facilities?
Business content	Causes of earnings	Competitive strength, market superiority, technical abilities, know-how, originality, price competitiveness, sales ability, barriers to entry.

Figure 1-27 Information Referred to at the Project Examination Stage

Decision items in case of financing for commercialization of intellectual property (example)	
Technical abilities	Newness, superiority, originality, alternative technologies, period that superiority and originality can be maintained, etc.
Market prospects	Market needs, future trends, etc.
Commercialization outlook	Network with customers, etc. (market and technology network), situation of facilities, etc.
Intellectual property (rights)	Period required until they are turned into rights, costs (evaluate management will and business perspective), rights holders, etc.
Estimate items to calculate cash flow (example)	
Sales	Rapid growth forecasts, product lifecycle, etc.
Cost prices	Calculated on a previous results basis
Expenses	Calculated on a previous results basis, license costs, etc.
Capital outflows	Dividends, etc.
Maintenance expenses	Expenses to maintain value, such as new models
Depreciation	Depreciation based on tax law
Operating funds	Operating funds demand