

Chapter 3 Case Studies in Intellectual Asset-Based Management Evaluation Finance

Chapter 3 summarizes case studies, in which we will make financing decisions for fictitious model companies by utilizing each standard format sheet applicable for their business flows, based on the ideas developed in intellectual asset-based management evaluation finance.

In case (1), a small-to-medium-sized electronic parts manufacturer needs to make investment so it can capitalize on its production know-how and gain new customers. From the point of view of financial institutions, we will discuss financing that meets the funding needs. This case assumes that the company has incurred a loss in the previous fiscal year due to its main long-time client, a major electric company, being in a business slump. It also assumes that the company attempts to break away from loss by bringing in other prospective major electronics companies, thereby expanding its current business. By examining the capital investment loan needed to close a deal with new customers, we will review credit approval and outlook for funds collection, based on the future cash flow projections of the enterprise as a whole.

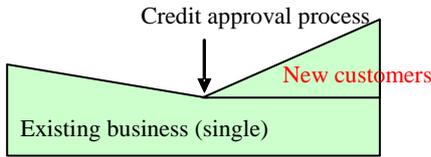
In case (2), a small- to medium-sized mechanical enterprise is tackling new business that uses its patented new technology as its core intellectual assets. We discuss its financing needs, in terms of development (including development materials) and operation. This case assumes that the subject enterprise attempts to grow by conducting new business with the technology it has developed, under circumstances wherein it is difficult to secure the profitability of the existing business. From the standpoint of financial institutions, financing for the new business is evaluated, comprehensively considering such factors as business prospects of the new business based on intellectual asset-based management evaluation, trial projections of future cash flows, and valuations of intellectual assets. In this case, we utilize valuation reports on patent rights prepared by a third party institution.

In case (3), we review an emerging new outdoor leisure products enterprise in its growth stage. We will discuss its financing needs in terms of expanding the existing business flows based on its brand power (trademark) as the core of the intellectual assets. The subject enterprise is like a new fabless business, in that it does not possess such mortgage assets as land or buildings, and thus from the standpoint of financial institutions, we analyze credit approval based on the prospects of the future business and valuation of trade mark rights, and then we discuss financing for the enterprise. In this case, we utilize valuation reports on trade mark rights prepared by a third party evaluating institution.

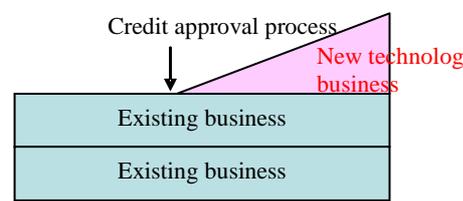
The outline below shows the business assumed for the enterprise in each case, the status of the financing needs, and a sales projection diagram.

Figure 3-1 Assumptions on Business and Financing Demands for the Subject Enterprises, and Sales Projections

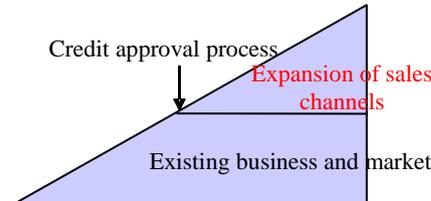
Case (1): Manufacturing and sales know-how (manufacturing business)

<p>Assumptions</p> <ul style="list-style-type: none"> · Industry: Manufacturing (electronic parts) · Core Intellectual Assets: manufacturing know-how and sales · Business Plan: Business expansion through contracts with new customers · Funding Demands: Investment in plant and equipment · Evaluation of Intellectual Assets: Business feasibility and future cash flows 	<p>[Sales Projection]</p> 
<p>Judgment on finance is made based on an Intellectual Asset evaluation for the entire corporate master business plan, including the business plan for new customers.</p>	

Case (2): Technology (Patent Rights Edition)

<p>Assumptions</p> <ul style="list-style-type: none"> · Industry: Manufacturing (Mechanical Industry) · Core Intellectual Assets: Patents · Business Plan: New business based on new technology · Funding Demands: Development and parts expenses · Evaluation of Intellectual Assets: Business prospects, future cash flows and evaluation of intellectual property 	<p>[Sales Projection]</p> 
<p>Judgment on finance is made by comprehensively reviewing an Intellectual Asset evaluation and the profitability of individual finance deals to be made for the new business, and a comparative analysis of such assets and profitability from the perspective of existing business.</p>	

Case (3): Brand Power (Trademark Rights Edition)

<p>Assumptions</p> <ul style="list-style-type: none"> · Industry: Retail (clothing industry) · Core Intellectual Assets: Trademark Rights · Business Plan: Business expansion capitalizing on the brand · Funding Demands: New shops and operating funds · Evaluation of Intellectual Assets: Business prospects, future cash flows and evaluation of intellectual property 	<p>[Sales Projection]</p> 
<p>An Intellectual Asset evaluation is made for the business expansion plan accompanied by an expansion of sales channels, and the credit approval process based on this Intellectual Assets evaluation is used to make judgment on the finance.</p>	

Case Study (1)
Credit Approval Process by Evaluation of
Intellectual Asset-Based Management
Know-how (Intellectual Asset-Based Management
General Edition [Manufacturing Business])

1. Case Study (1)

Credit Approval Process by Evaluation of Intellectual Asset-Based Management Know-how (Intellectual Asset-Based Management General Edition [Manufacturing Business])

(About this case study)

In this case study, we make finance decisions for a fictitious company, based on interview sessions and fiscal information etc. through the use of the sales flow chart for intellectual asset-based management evaluation finance and sales tools. It should be noted that this case study is a simulated case study for training purposes and supplements the explanation material for sales tools, and therefore the descriptions shown are not factual.

Case

Mr. Yamano, a sales representative at Kyosan Bank, has been in charge of Fujimoto Electric Company (hereinafter called FM), which manufactures printed circuit boards (hereinafter called PCBs), for one-and-a-half years. FM delivers prototype PCBs to be used in prototypes of electronic equipment developed by a major electronics company. The current president of the company, who had worked as an engineer for a PCB manufacturer, was recruited to the company fifteen years ago by his predecessor.

FM started operations twenty years ago. Although it was a small subcontractor factory at that time, it began to grow fifteen years ago when major manufacturing Company S started running its manufacturing subsidiary in the Tohoku area and became a large trade client for FM. However, FM has suffered since Company S withdrew from the small notebook computer business two years ago. Despite top management's efforts to expand sales by gaining new customers, FM was unable to make up for the loss in sales to Company S, and posted a loss in the previous fiscal year.

Mr. Yamano was impressed by the management policies of FM's president and the sales efforts of the top management, and he recognized that gaining a new customer base was a major issue for the company's management. Therefore, Mr. Yamano introduced Company P, which Kyosan Bank finances, to FM. Company P is a major electronics company whose main business is the manufacture of large flat-panel displays (FPDs) and its flagship factory is located in the Tohoku Region. Mr. Yamano was told by the president of Company P that the company had noticed FM's technology, and the president indicated that Company P may consider making a contract with FM. According to the president, if FM wished to obtain a contract with Company P, it would be necessary for FM to invest in partial improvement of its prototype manufacturing line in order to accommodate Company P's request to produce large PCBs. Such investment would cost 90 million yen. Against this background, FM has now requested Kyosan Bank to conduct a feasibility study regarding financing the investment. Mr. Yamano, in making the evaluation, is concerned with the issue of whether FM can continue to obtain contracts with Company P.

(Points of consideration)

Company P is paying attention to FM's technological competence, but one of the issues in evaluating the finance is judgment on whether credit can be approved through verification of the business prospects, in terms of whether FM could capitalize on its technological power to obtain continuing contracts from Company P, a new customer for FM. The land and the buildings of FM have already been pledged as collateral to the full extent of their appraised value. As for the facilities to be purchased, the market for such facilities is so limited that it would be difficult for FM to repay the loan by selling the facilities after collateralization. So we need to examine the feasibility of the business and its profitability.

In this case, the point is to estimate overall aspects of know-how and intellectual assets and thereby make final judgment on credit approval for the finance, where risks concerning development and sales are inherently involved.

(Assumptions)

(1) Corporate profile

Company name: Fujimoto Electric Company

Establishment: Established in May 19XX

Employees: 41 staff

Capital: 15 million Yen

Share holders: Current president: 50%; previous president: 50%

Major clients: Major Electronics Manufacturer

(2) Financial Information

Balance Sheet

(Unit: thousand)

	The 18th term	The 19th term	The 20th term
Assets			
Cash and deposits	23,454	23,148	20,103
Accounts receivable-trade	45,000	42,000	38,000
Merchandise/finished goods	29,000	28,000	27,000
Other current assets			
Current assets	97,454	93,148	85,103
Tangible fixed assets	197,000	191,000	185,000
Intangible fixed assets	2,000	2,000	2,000
Investments, etc.	3,000	3,000	3,000
Total assets	299,454	289,148	275,103
Liabilities			
Accounts payable-trade	37,000	36,000	36,000
Accounts payable-other	14,000	13,000	13,000
Short-term loans payable	80,000	120,000	120,000
Other current liabilities			
Current liabilities	131,000	169,000	169,000
Long-term loans payable	120,000	110,000	100,000
Non-current liabilities	120,000	60,000	50,000
Total liabilities	251,000	229,000	219,000
Shareholders' equity			
Capital stock	15,000	15,000	15,000
Capital surplus	33,454	45,148	41,103
Total shareholders' equity	48,454	60,148	56,103
Total liabilities and shareholders' equity	299,454	289,148	275,103

Profit and Loss Statement

(Unit: thousand)

	The 18th term	The 19th term	The 20th term
Net sales	487,305	468,562	442,040
Cost of sales	324,578	318,214	315,063
Gross profit	162,727	150,348	126,977
Selling, general and administrative expenses	126,628	124,757	123,522
Operating income	36,099	25,591	3,455
Non-operating income			
Non-operating expenses	5,790	5,100	4,500
Ordinary income	30,309	20,491	-1,045
Extraordinary income			
Extraordinary loss	1,000	1,000	3,000
Income before income taxes	29,309	19,491	-4,045
Income taxes	11,723	7,797	
Net income	17,586	11,694	-4,045
Retained earnings brought forward	15,868	33,454	45,148
Unappropriated retained earnings	33,454	45,148	41,103

Summary of Interview Sheets etc.¹

(1) Simple Interview

Responding to the request for finance, Mr. Yamano, in order to grasp the outline, carried out a simple interview. In the business unit of FPD of Company P, the task has been to generate demand in the market by introducing products at key times during sales promotions. However, with the current trend of increasing the size of PCBs to be installed in electronic parts, there have been mounting problems due to warped and twisted PCBs, and thus it is difficult to carry out development according to time schedules, which is of paramount importance to the company.

On the other hand, FM is very competent in manufacturing PCBs with little warping or twisting. Company P has been paying attention to this technological competence and has started relevant technological study and verification. FM's technological competence is its know-how, which it has established through continuing innovations in heat treatment to prevent warping and twisting in the process of manufacturing PCBs, taking advantage of the engineering experience of the president, who is a material engineer. According to the interview, few of the comparable specialist manufacturers of prototypes have been able to improve the technology beyond the initial crafting stages.

An interview was held regarding the outlook of profitability of PCBs to be sold to existing clients and new customers. As a result, Mr. Yamano has reached the conclusion that it is highly likely the profitability of the enterprise as a whole will be improved through increased orders from Company P and by efficient cost reduction with regard to existing clients if new facilities are introduced.

Mr. Yamano received the impression that FM could improve its business by obtaining contracts from Company P, but it requires financing of 90 million yen. He has realized that it is necessary to verify the elements of intellectual assets, other than the manufacturing know-how, that could support continuing contracts from Company P, and to continue identifying details for business prospects.

(For the interview results, please refer to (1) Simple Interview Sheets.)

(3) Intellectual Asset-Based Management Evaluation (Business Prospects) Interview

A detailed interview in accordance with the Intellectual Asset-Based Management Evaluation (Business Prospects) Interview Sheet was also carried out. First, by using the business flow chart, we captured in detail how technological study and verification was made with Company P and the specific prospects for sales in the business.

There was significant progress, in that technical meetings between Company P and FM, and a quality examination and mounting test were completed for samples of the three types of PCBs after

¹ Numbers for the interview sheets that are not used in this case study have been skipped so as to maintain consistency with the interview sheets numbers for the Patent Rights Edition and the Trademark Rights Edition.

delivery, and although conditions apply, the samples were approved in a substantial sense. In the next step, it is necessary to conduct a confirmation test using samples manufactured in the facilities that are planned to be newly introduced.

The business unit of FPD of Company P is in the process of making the decision to adopt FM, in lieu of one of the three manufacturers they are currently using, whose quality in terms of warping and twisting is not good enough. In an authorization test of parts, FM's technological competence received a high evaluation, but in order to avoid risks stemming from concentrating contracts in one manufacturer, Company P considers that some 30% of the types of equipment under development by Company P should be contracted to FM. Company P also considers that it may increase the contracts to 50% or more of the equipment types depending on FM's future track record.

However, continuing contracts of prototypes may not be stabilized, unless time schedules for deliveries to Company P are strictly adhered to. Therefore, FM's sales and services system was also confirmed. The design division of Company P and the sales, design, and manufacturing divisions of FM, showed progress in consultations in an attempt to share a communication system chart for use when problems arise and a manual on problem-solving measures. The above chart and the manual are forms of FM's know-how that supports its high rate of making deliveries according to time schedules, and the contents thereof are similar to those FM shares with its other clients. In the interview, FM also explained that it has data showing that this sales and services system has enabled it to have a track record of almost 100% on-schedule deliveries.

(For interview results, refer to the Interview Sheet for (3) Intellectual Asset-Based Management Evaluation (Business Prospects))

(5) Intellectual Asset-Based Management Evaluation (Profitability) Check

Analysis was made of future cash flows of FM as a whole, based on business plans for orders from Company P for products already proposed by Company P, and orders from the existing clients. The underlying scenario for future cash flows has been chosen from those estimated in a conservative manner and has been set as the standard scenario.

According to the business outlook, if experienced analysts of sales and design data were stationed (in places designated by Company P), the entire staff cost for FM would increase, but by transferring some of the staff dealing with the existing clients, the additional cost would be kept low. Also according to the outlook, the profit margin of the overall company's sales would improve thanks to profits from Company P being made possible by the new facilities in addition to profits from existing customers.

It is expected that the deals between FM and Company P will progress in a stable manner and the subject for the use of the funds is definite. According to the results of the profitability analysis, it is possible to collect the loan of 90 million yen within four years even based on the standard scenario conservatively conceived given the sales plan proposed by FM.

(For details, refer to (5) Intellectual Asset-Based Management Evaluation (Profitability) Check Sheet)

(6) Intellectual Asset-Based Management Evaluation Finance Check

In order to process the work for corporate credit approval that factors in the expected orders from Company P, and before sending out a circular to receive approval of the decision, we began to prepare a check sheet for intellectual asset-based management evaluation finance.

Although it would be the first deal between FM and Company P, it appears that Company P is firmly committed to placing orders, considering that the manufacturing know-how would resolve Company P's technological problems, FM's sample products passed Company P's strict parts authorization test, and much progress has been made in the plan to switch from rival Company M to FM.

It was confirmed with an expert marketing survey institution that the outlook for the FPD market is holding steady and Company P has a high global share, so it is unlikely that the company will withdraw from the business in the short future, although competition in the market is fierce.

Further, at the initial stage of the deal FM will receive 30% of Company P's orders related to the products it is developing, and if FM builds up a track record of maintaining quality and delivery schedules, it is unlikely that the initial agreed share of 30% will decrease. Rather, it is highly likely that the share would rise in the future due to FM's products being of higher quality than those of its rivals.

In order to thoroughly implement the principle of quality-first and adhering to delivery schedules, management has been making progress in consultation between each division of FM and the design and purchase divisions of Company P so as to enable them to share a communication system chart that reflects know-how regarding problem prevention and a manual on problem-solving measures. Thus, FM has been gaining the confidence of Company P concerning FM's organization. Therefore, once sales begin, it is expected that sales activities and manufacturing work will be conducted in a stable manner in order to ensure that deliveries of prototypes adhere to schedule, based on a sophisticated tie-up with Company P.

From the above, it is considered highly likely that the cash flows from Company P will be achieved, taking into account, with comprehensive judgment, customer needs, market outlook, relationships with competitors, and the status of persons involved who may affect the subject business.

(For details, refer to (6) Intellectual Asset-Based Management Evaluation Finance, Check Sheet)

Process in line with Finance Flow

- (1) Direction of Intellectual Asset-Based Management Evaluation Finance
(Day-to-day collection of business information)

Responding to the request for finance, an interview was conducted, utilizing (1) Simple Interview Sheet, in order to deepen the understanding on FM's technological competence and on the status of the consultation made with Company P.

FM's manufacturing know-how is technology that cannot be easily duplicated by people from other expert manufacturers of PCB prototypes and the technology fulfills Company P's needs, as confirmed by the interview. A further interview was made with attention focused on the outlook for improvement in profitability due to orders from Company P, a major electronics company. The president is enthusiastic about quality control and has been active in responding to requests for improvement from clients. If FM succeeds in obtaining new orders from Company P, its business with Company P will most likely continue.

In response to the request for the finance for the facilities investment, a consultation was held with related persons from the bank. As a result, we came to the conclusion that progress should be made in finance, in view of the point that it is highly likely that the new business will be successful, taking into account FM's manufacturing know-how, which is its core intellectual asset of major importance.

(2) Use of intellectual asset information in corporate rating and trading policy

A detailed interview was conducted on business prospects for FM by utilizing (3) Intellectual Asset-Based Management Evaluation (Business Prospects) Interview Sheet. It is very likely that FM's technology will meet the needs of Company P due to the fact that substantial approval was obtained in the parts authorization work. The outlook for FM's technology is bright, in that it will most likely be utilized as the core element for the business. Further, we confirmed that the systems of well-managed personnel control and quality control are reflected in the communication system chart and the manual on problem-solving measures. By combining these sets of intellectual assets, the business with Company P will be organized and it appears more certain that the scenario for future cash flows based on the business expansion plan will be realized. Despite a loss in the previous fiscal year, if profit can be expected by installing new facilities to gain orders from Company P and by improving the profitability of the existing business, then examination of the possibility of the loan collection by reviewing the future cash flows of the company as a whole is possible.

(3) Use of intellectual asset information in the process of credit approval

Utilizing (5) Intellectual Asset-Based Management Evaluation (Business Profitability) Checksheet, we prepared the projections of the future cash flows based on the entire sales volume of the company by summing up the business for Company P and that for the existing customers. Then we reviewed the prospects for repayment of the funds.

The issues of utmost importance in evaluating stability in the forecast of the future cash flows are how likely it is that Company P will place orders with FM and the extent of the volume of the orders.

We made a review based on the standard scenario (conservative scenario for customer plan) that takes into account, possible reductions in the orders received from Company P and the existing customers. As a result, the funds for the facilities' investment will be repaid within four years, according to the review. Although we need to conduct periodic reviews on such matters as order plans for prototypes from Company P, we consider that the business situation will improve if business is started with the new customer, Company P.

(4) Comprehensive judgment of creditworthiness

By utilizing (6) Intellectual Asset-Based Management Evaluation Financing Checksheet, we identified inherent risks involved in the business concerning profitability, risks regarding concerned persons and competition. Coupled with the information from the Intellectual Asset-based Management Evaluation (Business Prospects) Interview Sheet, we completed a comprehensive study, which led to the following considerations.

We completed a comprehensive review of the information on FM's intellectual assets. The results show that competitive manufacturing know-how could serve as a source of revenue and that synergies are produced among such related intellectual assets as the manual on problem-prevention measures for the purpose of thorough adherence to delivery schedules, and human assets of the executive manager. Thus it is very likely that the business with the new customer, Company P, will be successful. Further, FM's customer-related assets could be improved significantly, in consideration of the marketability of Company P's FPD business, and Company P's position in the entire industry. Hence it is expected that FM's entire sales will expand as a result of the business.

As for this finance case, there is an inherent risk regarding development: a final authorization test for sample delivery may be imposed after the facilities are invested in and such samples are produced thereby. However, there is little technological difference between the existing facilities and the manufacturing facilities to be introduced, in terms of temperature control, which is a part of FM's know-how. So it is considered that the development risk could be mitigated to a certain degree. On the other hand, there is also an inherent risk regarding sales, namely, that Company P has not yet placed firm orders. However, taking into account, in a comprehensive manner, the progress made in consultation with Company P, it is estimated that the risk is low.

There is a causal relationship between the qualitative information on intellectual assets and the underlying assumptions of the future cash flows. From now on, it is necessary to periodically confirm the status of the order plan from Company P. Based on the standard, conservative scenario of the future cash flows, it is highly likely that the funds invested will be collected within four years. We of the bank, have decided to execute the financing of 90 million yen as proposed by FM and enter final fine-tuning negotiations regarding the detailed terms and conditions for the finance.

(1) Simple Interview Sheet**Intellectual Asset-Based Management General Edition (Manufacturing Business)****1. Corporate profile**

Company name	Fujimoto Electronics Company
Representative	Hidenobu Matsukake
Contact person	Yasuyuki Suzuki
Contact	03-1234-5678
Business description	Manufacturer specialized in prototypes of printed circuit board
Human assets	<p>Manager's career history and qualifications</p> <p>The current president of the company, who had worked as an engineer for a PCB manufacturer, was recruited to the company fifteen years ago by his predecessor who was impressed by his skills. He has knowledge on material characteristics. He contributed to improving quality control system. He conducts sales activities to expand customer base. (Other information concerning the manager will be collected at the time of Interview (3).)</p>

2. Business summary (core business)

Tangible assets	Core product	Specialized in manufacturing trial products on highly dense, multi-layer printed circuit board (= printed basal boards)
Organizational assets	Product's intended purpose	Traditional main products are prototypes (trial products) of electronic devices developed by major electric companies (mobile phones, liquid crystal televisions, flat-screen notebook personal computers, etc.) The company plans to supply large-size flat-panel display (FPD) for Company P.
	Production system	Nearly all the steps of the manufacturing of prototypes of printed basal boards are closed in house in Prefecture A in the Tohoku region. (Circuit light exposure, circuit forming etching, through-via hole, high multi-layer, electrical insulation coating, silk-screen print for identifying mounting machinery.) The design center is located in Ota ward where the design data for CAD (Computer-Aided-Design) are taken in from customers.
	Features of the technology	Specialized in manufacturing printed basal boards with restricted warps and twisting at finishing stage. Normally, warps and twisting could be easily caused in a short-time delivery in which heat treatment and water-washing treatment are repeatedly conducted.
	Competitors and their strengths and weaknesses	Most of specialist manufacturers of prototypes impose press processing forcibly after the product finishing. However, warps and twisting could be easily reproduced and troubles occur eventually in component mounting, during the heat treatment of Handa reflow process at the component mounting stage. Further, it is not desirable to add the press process in view of super-short time delivery.
Relationship assets	Presence of know-how	The selection of material and the method of controlling temperatures and time to restrict the warps and twisting. The current president established the current technological know-how, through accumulating technological data tested by requests from manufacturers of printed basal boards since he was involved in manufacturing printed basal boards when he was a material engineer, and through making use of such data for the manufacturing of the printed basal boards.
	(Prospective) buyers	Some 40% of the entire orders are made by a major electric manufacturer, Company S, which is a large order customer (thin flat type for mobile phones, and high multi-layer type for liquid crystal television). Another customer, Company P, which is a second largest manufacturer of large-size FPD built-in-televisions requested that trial products be delivered and conferences are in progress. When the orders from the Company P become firm, the entire order volume will likely increase by some 15 to 20%.
	Advantage to the buyer in adopting the product	The printed basal boards with little warps and twisting at the finishing stage would not cause warps and twisting even at Handa reflow process of automatic component mounting. As a result, there are few problems in automatic component mounting and the automatic component mounting can be made with precision.

3. Profitability

(Unit: million yen)

Profitability	The 18th term	The 19th term (Preceding term)	The 20th term (Preceding term)	The 21st term (Current term)	The 22nd term (Next term)
	March XX	March XX	March XX	March XX	March XX
Estimated revenue (Total)	487,305	468,562	442,040	419,040	470,340
Unit price	1,249	1,260	1,364	1,184	1,307
Volume	390	372	324	354	360
Estimated expenses (Total)	456,996	448,071	443,085	402,047	427,869
Development costs					
Production costs	324,578	318,214	315,063	296,675	316,407
Unit price	832	856	972	838	879
Volume	390	372	324	354	360
Balance	30,309	20,492	-1,045	16,993	42,471

4. Use of funds

The funds of 90 million yen are needed for facility investment for improving manufacturing cost for large-size multi-layer basal boards of Company P and for the existing clients.

- (1) 35 million yen for light exposure devices for plating printed circuit boards.
- (2) 45 million yen for devices of circuit forming etching
- (3) 10 million yen for workstations tailored exclusively for taking in design data from Company P.

5. Note

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

Company name	Fujimoto Electronics Company
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Business flow**1. Development phase**

Interview items		Responses	
Organizational assets	Past development efforts	Time frame of past development	The company implemented manufacturing a model trial product which is identical to the printed basal boards of the three traditional types of Company P's large FPD. The company obtained substantial component authorization from Company P in delivery tests for such components as can be produced in the existing manufacturing lines. As for actual mounting tests, actual component mounting was conducted for sample components and it has been verified that sound features of basal boards are identified and less warps and twisting are caused than other basal boards.
		Past development funds (Labor costs, number of plants, and parts & components)	Particular cost for the development is not incurred because the trial products are manufactured in the existing manufacturing lines. The additional material cost is less than 300 thousand yen.
	Future development efforts (If in the middle of development or improvement stages)	Time frame for future development	It Plans to manufacture prototypes of large basal boards to be sold for the future, after five years, by using the subject manufacturing equipments to be newly introduced.
		Future development funds (Labor costs, number of plants, and components)	The funds for the subject manufacturing equipments to be newly introduced. The required amount is 90 million yen. No funds are required for the development.
		Existence of a development process chart	The schedule control chart for the development was prepared and according to the chart, internal test will be conducted after one month after the new equipment is introduced. Further, when the orders are actually received for the prototypes, strict delivery control will be implemented. For the implementation, conferences are already made with Company P concerning the matter of the order flow chart, covering inter-relations among the design team of Company P, D Electric Company, each department of FM (sales, design and taking-in of data, and manufacturing of basal boards), for the management of the flow chart such as the preparation of the chart.
		Future challenges to development (excluding funds)	Although there was a need to execute technological verification on the samples to be made by the new facilities, but the verification step would not give a large impact on the manufacturing know-how on warps and twisting and so the verification can be replaced by a level of confirmation test.

2. Manufacturing phase**(1) In-house manufacturing**

Interview items		Responses
Organizational assets	Breakdown of production costs (Variable costs such as materials and labor costs)	The rate of manufacturing cost in the fiscal record of the previous year is 75% and the general and administration cost for 25% and the profitability is in difficult conditions. However, by introducing new equipments, it is expected that both of the above rates will largely improve. (For details, refer to the cost table of the customer)
	Manufacturing equipment costs (Initial adoption costs, capacity utilization rate, and depreciation period)	The additional manufacturing equipment cost is 90 million yen in total. The term for accounting depreciation is planned to be five years. Together with the depreciation cost of the existing manufacturing facilities, the total depreciation is estimated at some 18 million yen annually.
	Production capacity (Plants and equipment)	The existing manufacturing lines of prototypes of basal boards, located in Prefecture A, have sufficient capacity for the subject operation. The subject operation is well within the maximum capacity of the past. Even in case the orders from Company P on large-size FPD share 70% of the total, still the existing facilities plus the subject equipments newly planned can accommodate the operation.
	Maintenance system	Periodical maintenance on the equipment is required once in half year and the maintenance is managed according to the maintenance manual.
Relationship assets	Raw materials suppliers	It is planned that the same materials will be purchased with those for the existing customers. (Copper plated external components, internal components, and adhesives)
	Manufacturing equipment suppliers	Planning to purchase light exposure devices which is for plating of distribution circuit to be newly bought, and etching devices for circuit forming. Both of the devices are planned to be purchased from the same manufacturers of the traditional equipments.

(2) Outsourced manufacturing

Interview items		Responses
Relationship assets	Contract manufacturers	There are no outsourcing consignments for the manufacturing of prototypes of basal boards, as the manufacturing is all in house. (There is an outsourcing consignment for surface treatment after the completion of basal boards. However, Company P's specifications do not require this surface treatment.)
	Production costs	Same as above
	Existence of a manufacturing license agreement (Provision of know-how and product liability)	Same as above
	Maintenance system	Same as above

3. Sales phase

Interview items		Responses
Relationship assets	Existing buyers	The main client is Company S, a major electric manufacturer. FM mainly delivers thin type basal boards for mobile phones and multi-layer type basal boards for liquid crystal television. This client occupies some 40% of the entire sales, but the current sales from the client are less than 200 million yen, down from 300 million at its peak time.
	Confirmed buyers (Time to start selling)	(Conferences are in progress on new orders from Company P as explained below.)
	Prospective buyers under negotiation (Time to start selling)	Company P, a major electric manufacturer, is the second largest manufacturer of large-size FPD in terms of global share. The test on product features has been completed in the existing manufacturing lines, and obtained informal but substantial authorization. After one month, delivery of samples for confirmation tests will be made by the new equipments. The delivery of prototypes is planned after six months.
	(Monthly) sales volume and sales	In the latter half of 2009, it is planned that four prototypes will be ordered per month, and sales will be some 7 million per month. For the coming year, based on the development plan of Company P, it is planned that the orders will have a share of 30% in the large-size FPD prototypes market.
	Contract distributors (If any)	(Direct sales system)
Organizational assets	Selling price	(See the attached table.)

Business features

1. Customer analysis

Interview items		Responses
Relationship assets	Grounds for product demand (Costs, added value, and substitute demand)	Printed basal boards with little warps and twisting can significantly reduce troubles at automatic mounting stages of the client's components, thereby contributing to keeping the client's development schedule of the prototype equipment. High temperature heat is produced when components are mounted automatically at client's sides in manufacturing steps of Handa reflow, and warps and twisting at the time of delivery of basal boards will be deteriorated. Such troubles at the actual mounting stages have been causing time loss in actual mounting stages of prototypes.
	Stability of customers' needs (One-time order/periodical order and adoption cycle)	
	Target customers and market size (Fields, sales figures, regions, etc.)	Prototypes of large-size flat display of Company P. The subject market is at growing stage even globally, and Company P plans to expand development models.
Organizational assets	Sales system	Internal interplay among sales, design, and manufacturing is respected in the business and the business is a timeliness-oriented business and of direct sales. It plans to share with the design division of Company P, the communication chart and the manual for measures for claims or troubles at the time when troubles occur. These things constitute the know-how that supports strict delivery performance rate of FM.

2. Competitor analysis

Interview items		Responses	
Organizational assets	Company product's advantages	Known competing products	The business units of large-size FPD of Company P are employing K Company, L Company, and M Company—manufacturers specialized in prototypes of printed basal boards. P Company authorizes D Electric Company as a mounting factory which enables high dense mounting, and installation of structural components. Unlike, other departments of the P Company, the business unit of P Company has no intention of employing a specialist manufacturer on short-term delivery basal plates and component mounting and no intention of employing a prototype specialist company of one stop type.
		Competing products' prices	The prices of the estimates for the subject business of other competitors are almost in the same range. (The unit price of trial basal board and the expenses for light exposure films and each type of mask films required for the manufacturing of trial basal boards and the total of the prices)
		Competing products' sales and customers	The breakdown of share by the prototype manufacturers in terms of the number of prototypes of large-size flat panels ordered from the business unit of Company P, under the current situations, K Company for 40%, L Company and M Company for 30% respectively. However, it is planned that M Company will be replaced by FM because the finishing quality of M Company's products is low.
		Competing products' advantages and disadvantages	The rival manufacturers specializing in prototypes of printed basal boards have not crafted details yet to prevent warps and twisting and it is expected that Company M will fail to obtain authorization. Company L also has finishing troubles and the company has received requests from Company P to improve its quality.
		Known substitutes	Nothing in particular.
		Company's strengths and weaknesses	Crafting technology to avoid causes for warps and twisting as much as possible in the process of manufacturing.

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	Since he was a material engineer of glass-epoxy plastics, the current president has long been accumulating technological data through conferences and inquiries from mass manufacturers of printed basal boards for preventing warps and twisting. The president thus established manufacturing and technological know-how on heat treatment at manufacturing stage of printed basal boards and on heat control methods.
	Features of the technology (Strengths and weaknesses) (Cost barriers and adoption barriers)	The strength is that the company can manufacture basal boards with little warps and twisting at a cost equivalent to that of other competitors. Unlike other competitors, the company is superior in terms of delivery schedule control of manufacturing, for there is no step of flattening pressurization.
	Comparison with competing technologies	Mass manufacturers of basal boards are practicing manufacturing products to prevent warps and twisting. However they do not have much competence on such manufacturing in super-short time frame of delivery schedule, as their delivery is based on massive manufacturing schedule with relatively thick allowances.
Human assets	Primary developer's career outline	The principal developer of the manufacturing know-how is the president of FM. He has thorough knowledge on material technology as he has been involved for 15 years in material development of printed basal boards.

(2) Analysis of know-how

Interview items		Responses
Organizational assets	Unpatented know-how (Trade secrets, etc.)	The core of the know-how is the heat control method on heat treatment, washing/cleaning, and drying treatment. Specific methods of temperature control are in area with certain nature that may not allow for patent applications. The know-how of the temperature control methods are written in the manufacturing specifications, but it would not be easy to emulate the methods, as the methods have certain relations with manufacturing facilities.
Human assets	Unpatented technology	The design of the facilities between each manufacturing step is supported by experience of the general manager of manufacturing and technology.

(3) Analysis of manager

Interview items		Responses
Human assets	Manager's business strategy	Quality and delivery time are considered important. The manager aims to maintain the relationship with the existing clients.
	Manager's marketing expertise	He obtained confidence from clients in the attitude whereby connecting requests from the existing clients to the business improvement. It appears that from new customers, confidence is nurtured step by step in daily communications.
	Manager's financial management skills	In response to the order reduction in the past, the reduction of labor has not caught up, because there is only small room for such reduction in the labor cost.

(5) Intellectual Asset-Based Management Evaluation (Profitability) Checksheet
Intellectual Asset-Based Management General Edition (Manufacturing Business)

Company name	Fujimoto Electronics Company
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1. Future cash flow (trial balance sheet attached)

(1) Company's business plan-based scenario

Estimated sales	Order volume received from existing customers: 300 sets annually (for the current year and thereafter) Order volume received from new customer (Company P): 48 sets (for the current year and thereafter) 54 sets (for the second year), and 60 sets (for the third year) Unit price for existing customers: 1,260 thousand yen Unit price for Company P: 1,710 thousand yen.
Estimated expenses	The rate of manufacturing cost for existing customers: improve from 76% to 71%. The rate for new customers: 52%. The rate of general and administration expenses for existing customers and new customers: 21% (for the current year and thereafter)
Other	

(2) Conservative scenario

Estimated sales	Order volume received from existing customers: 300 sets annually (for the current year) and 276 sets (for the second year and thereafter) Order volume received from new customer (Company P): 36 sets (for the current year), 36 sets (for the second year), and 48 sets (for the third year and thereafter) Unit price is set the same level as that for the company's plan.
Estimated expenses	The rate of manufacturing cost for existing customers: improve from 76% to 71%. The rate for New Customer is 52%. General and administration cost for existing customers and new customers: 21% (for the current year and thereafter)
Other	

(3) Common underlying assumptions (based on the company's business plan)

Terms of collection and payment

Interview items		Responses
Organizational assets and relationship assets	Terms of collection from buyers	The price for prototypes of basal boards to be delivered in the current month will be paid in the next month.
	Terms of payment to suppliers	The expenses for the material purchased in the current month will be paid in the month after the next. As for the liquidation material needed in manufacturing prints, the payment will be made in the same way.

Use of funds

Interview items	Responses
Use of funds (Development and mass production launch expenses)	(1) 35 million yen for light exposure devices for plating wiring circuits. (2) 45 million yen for etching devices for circuit forming. (3) 10 million yen for workstations specifically tailored to take in CAD design data from Company P. Total of 90 million yen will be required.
Use of funds (Money for purchasing materials, etc.)	The expenses for material procurement will be increased for purchasing materials needed in manufacturing basal boards for Company P. However, it is estimated that there will be no particular increase in the funds for operation with the payment of the materials to the material manufacturers made after the payments are collected from Company P.
Use of funds (Promotion expenses)	(No expenses for sales promotion)
Fundraising scale and repayment schedule (Consistency with profitability)	Trial estimation has been made for making a cash flow chart by the basis of the customer business plan (conservative estimation is made for customer planning) and the standard scenario. In case of the standard scenario, it is expected that the funds will be collected in the four-year repayment term. (For each scenario and respective cash flows, refer to the attached information.)

Future Cash Flow Trial Balance (Manufacturing Business)

(1) Company's business plan

(Unit: 1,000 yen)

		Unit price	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Current fiscal year	
Existing customers	Number of product sets		25	25	25	25	25	25	25	25	25	25	25	25	300	
	Average unit price		1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	
	Net sales (from existing customers and business)		31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	378,000
	Materials and labor costs, and other manufacturing costs	941	23,525	23,525	23,525	23,525	23,525	23,525	22,349	22,349	22,349	22,349	22,349	22,349	22,349	282,300
	Cost of sales (to existing customers)		23,525	23,525	23,525	23,525	23,525	23,525	22,349	22,349	22,349	22,349	22,349	22,349	22,349	275,243
	Sales-related expenses	217	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	65,000
	Miscellaneous expenses	45	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	13,500
	Logistics and other expenses	33	833	833	833	833	833	833	833	833	833	833	833	833	833	10,000
	General and administrative expenses		7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	88,500
	(Cash flow profit from existing business)		600	600	600	600	600	600	1,776	14,258						
New customer	Number of product sets								4	4	4	4	4	4	24	
	Average unit price								1,710	1,710	1,710	1,710	1,710	1,710	10,260	
	Net sales (from new customer Company P)		0	0	0	0	0	0	6,840	6,840	6,840	6,840	6,840	6,840	41,040	
	Materials and labor costs, and other manufacturing costs	893	0	0	0	0	0	0	3,572	3,572	3,572	3,572	3,572	3,572	21,432	
	Cost of sales (to new customer Company P)		0	0	0	0	0	0	3,572	3,572	3,572	3,572	3,572	3,572	21,432	
	Sales-related expenses	125	0	0	0	0	0	0	500	500	500	500	500	500	3,000	
	Miscellaneous expenses	45	0	0	0	0	0	0	180	180	180	180	180	180	1,080	
	Logistics and other expenses	33	0	0	0	0	0	0	132	132	132	132	132	132	792	
	General and administrative expenses (spent to serve new customer Company P)		0	0	0	0	0	0	812	812	812	812	812	812	4,872	
	(Cash flow profit from the new customer)		0	0	0	0	0	0	2,456	2,456	2,456	2,456	2,456	2,456	14,736	
Total	Number of product sets		25	25	25	25	25	25	29	29	29	29	29	29		
	Average unit price		1,260	1,260	1,260	1,260	1,260	1,260	1,322	1,322	1,322	1,322	1,322	1,322		
	Net sales (existing customers and businesses)		31,500	31,500	31,500	31,500	31,500	31,500	38,340	38,340	38,340	38,340	38,340	38,340	419,040	
	Materials and labor costs, and other manufacturing costs		23,525	23,525	23,525	23,525	23,525	23,525	25,921	25,921	25,921	25,921	25,921	25,921	296,675	
	Cost of sales (existing customers)		23,525	23,525	23,525	23,525	23,525	23,525	25,921	25,921	25,921	25,921	25,921	25,921	296,675	
	Sales-related expenses		5,417	5,417	5,417	5,417	5,417	5,417	5,917	5,917	5,917	5,917	5,917	5,917	68,000	
	Logistics and other expenses		833	833	833	833	833	833	965	965	965	965	965	965	10,792	
	General and administrative expenses		7,375	7,375	7,375	7,375	7,375	7,375	8,187	8,187	8,187	8,187	8,187	8,187	93,372	
	(Company-wide cash flow profit)		600	600	600	600	600	600	4,232	4,232	4,232	4,232	4,232	4,232	28,994	
	(Equipment expenses)															0
Newly introduced equipment							90,000								90,000	
Total development costs		0	0	0	0	90,000	0	90,000								
(1) Balance		600	600	600	600	89,400	600	4,232	61,007							
Funds raised					90,000										90,000	
(2) Cash receipt		0	0	0	90,000	0	90,000									
Repayment of loans payable (existing loans payable)		850	850	850	850	850	850	850	850	850	850	850	850	850	10,200	
Interest expenses (for existing loans payable)															6,434	
(3) Principal and interest payments for existing loans payable		850	850	850	850	850	850	850	850	850	850	850	850	7,284	16,634	
Repayment of loans payable (new loans payable)						2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	20,000	
Interest expenses (for new loans payable)															2,100	
(4) Principal and interest payments for new loans payable		0	0	0	0	2,500	4,600	22,100								
Total cash outlay (5) = (3) + (4)		850	850	850	850	3,350	11,884	38,734								
Total cash flow (1) + (2) - (5) = Cash balance		19,853	19,603	19,353	109,103	16,353	13,603	14,485	15,368	16,250	17,132	18,014	18,896	19,778	103,362	
(Balance of loans payable)																
New loans payable					90,000	87,500	85,000	82,500	80,000	77,500	75,000	72,500	70,000	70,000	70,000	
Existing loans payable		219,150	218,300	217,450	216,600	215,750	214,900	214,050	213,200	212,350	211,500	210,650	209,800	209,800	209,800	

Future Cash Flow Trial Balance (Manufacturing Business)

(1) Company's business plan

(Unit: 1,000 yen)

		Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Next year	Third year	Fourth year	Fifth year	Gross total	
Existing customers	Number of product sets	25	25	25	25	25	25	25	25	25	25	25	25	300	300	300	300		
	Average unit price	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	
	Net sales (from existing customers and business)	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	378,000	378,000	378,000	378,000	
	Materials and labor costs, and other manufacturing costs	22,349	22,349	22,349	22,349	22,349	22,349	22,349	22,349	22,349	22,349	22,349	22,349	22,349	268,185	268,185	268,185	268,185	
	Cost of sales (to existing customers)	22,349	22,349	22,349	22,349	22,349	22,349	22,349	22,349	22,349	22,349	22,349	22,349	22,349	268,185	268,185	268,185	268,185	
	Sales-related expenses	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	65,000	65,000	65,000	65,000	
	Miscellaneous expenses	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	13,500	13,500	13,500	13,500	
	Logistics and other expenses	833	833	833	833	833	833	833	833	833	833	833	833	833	10,000	10,000	10,000	10,000	
	General and administrative expenses	7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	88,500	88,500	88,500	88,500	
	(Cash flow profit from existing business)	1,776	21,315	21,315	21,315	21,315													
New customer	Number of product sets	4	4	4	4	4	4	5	5	5	5	5	5	54	60	60	60		
	Average unit price	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	
	Net sales (from new customer Company P)	6,840	6,840	6,840	6,840	6,840	6,840	8,550	8,550	8,550	8,550	8,550	8,550	8,550	92,340	102,600	102,600	102,600	
	Materials and labor costs, and other manufacturing costs	3,572	3,572	3,572	3,572	3,572	3,572	4,465	4,465	4,465	4,465	4,465	4,465	4,465	48,222	53,580	53,580	53,580	
	Cost of sales (to new customer Company P)	3,572	3,572	3,572	3,572	3,572	3,572	4,465	4,465	4,465	4,465	4,465	4,465	4,465	48,222	53,580	53,580	53,580	
	Sales-related expenses	500	500	500	500	500	500	625	625	625	625	625	625	625	6,750	7,500	7,500	7,500	
	Miscellaneous expenses	180	180	180	180	180	180	225	225	225	225	225	225	225	2,430	2,700	2,700	2,700	
	Logistics and other expenses	132	132	132	132	132	132	165	165	165	165	165	165	165	1,782	1,980	1,980	1,980	
	General and administrative expenses (spent to serve new customer Company P)	812	812	812	812	812	812	1,015	1,015	1,015	1,015	1,015	1,015	1,015	10,962	12,180	12,180	12,180	
	(Cash flow profit from the new customer)	2,456	2,456	2,456	2,456	2,456	2,456	3,070	33,156	36,840	36,840	36,840							
Total	Number of product sets	29	29	29	29	29	29	30	30	30	30	30	30	354	360	360	360		
	Average unit price	1,322	1,322	1,322	1,322	1,322	1,322	1,335	1,335	1,335	1,335	1,335	1,335	1,329	1,335	1,335	1,335		
	Net sales (existing customers and businesses)	38,340	38,340	38,340	38,340	38,340	38,340	40,050	40,050	40,050	40,050	40,050	40,050	40,050	470,340	480,600	480,600	480,600	
	Materials and labor costs, and other manufacturing costs	25,921	25,921	25,921	25,921	25,921	25,921	26,814	26,814	26,814	26,814	26,814	26,814	26,814	316,407	321,765	321,765	321,765	
	Cost of sales (existing customers)	25,921	25,921	25,921	25,921	25,921	25,921	26,814	26,814	26,814	26,814	26,814	26,814	26,814	316,407	321,765	321,765	321,765	
	Sales-related expenses	5,917	5,917	5,917	5,917	5,917	5,917	6,042	6,042	6,042	6,042	6,042	6,042	6,042	71,750	72,500	72,500	72,500	
	Logistics and other expenses	965	965	965	965	965	965	998	998	998	998	998	998	998	11,782	11,980	11,980	11,980	
	General and administrative expenses	8,187	8,187	8,187	8,187	8,187	8,187	8,390	8,390	8,390	8,390	8,390	8,390	8,390	99,462	100,680	100,680	100,680	
	(Company-wide cash flow profit)	4,232	4,232	4,232	4,232	4,232	4,232	4,846	54,471	58,155	58,155	58,155							
	(Equipment expenses)														0	0	0	0	
Newly introduced equipment														0	0	0	0		
Total development costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
(1) Balance	4,232	4,232	4,232	4,232	4,232	4,232	4,846	54,471	58,155	58,155	58,155								
Funds raised														0	0	0	0		
														0	0	0	0		
(2) Cash receipt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Repayment of loans payable (existing loans payable)	850	850	850	850	850	850	850	850	850	850	850	850	850	10,200	10,200	10,200	10,200		
														6,128	6,128	5,835	5,229		
(3) Principal and interest payments for existing loans payable	850	850	850	850	850	850	850	850	850	850	850	850	6,978	16,328	16,035	15,729	15,423		
Repayment of loans payable (new loans payable)	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	30,000	30,000	10,000	0		
														1,613	1,613	750	150		
(4) Principal and interest payments for new loans payable	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	4,113	31,613	30,750	10,150	0		
Total cash outlay (5) = (3) + (4)	3,350	3,350	3,350	3,350	3,350	3,350	3,350	3,350	3,350	3,350	3,350	3,350	11,091	47,941	46,785	25,879	15,423		
Total cash flow (1) + (2) - (5) = Cash balance	11,245	12,127	13,009	13,891	14,774	15,656	17,152	18,648	20,145	21,641	23,137	24,633	26,129	16,893	16,893	28,263	60,539	103,271	
(Balance of loans payable)																			
New loans payable	67,500	65,000	62,500	60,000	57,500	55,000	52,500	50,000	47,500	45,000	42,500	40,000	40,000	40,000	10,000	0	0		
Existing loans payable	208,950	208,100	207,250	206,400	205,550	204,700	203,850	203,000	202,150	201,300	200,450	199,600	199,600	199,600	189,400	179,200	169,000		

Future Cash Flow Trial Balance (Manufacturing Business)

(2) Conservative scenario

(Unit: 1,000 yen)

		Unit price	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Current fiscal year	
Existing customers	Number of product sets		25	25	25	25	25	25	25	25	25	25	25	25	300	
	Average unit price		1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	
	Net sales (from existing customers and business)		31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	378,000
	Materials and labor costs, and other manufacturing costs	941	23,525	23,525	23,525	23,525	23,525	23,525	23,525	22,349	22,349	22,349	22,349	22,349	22,349	282,300
	Cost of sales (to existing customers)		23,525	23,525	23,525	23,525	23,525	23,525	23,525	22,349	22,349	22,349	22,349	22,349	22,349	275,243
	Sales-related expenses	217	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	5,417	65,000
	Miscellaneous expenses	45	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	1,125	13,500
	Logistics and other expenses	33	833	833	833	833	833	833	833	833	833	833	833	833	833	10,000
	General and administrative expenses		7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	7,375	88,500
	(Cash flow profit from existing business)		600	600	600	600	600	600	600	1,776	1,776	1,776	1,776	1,776	1,776	14,258
New customer	Number of product sets								3	3	3	3	3	3	18	
	Average unit price								1,710	1,710	1,710	1,710	1,710	1,710	10,260	
	Net sales (from new customer Company P)		0	0	0	0	0	0	5,130	5,130	5,130	5,130	5,130	5,130	30,780	
	Materials and labor costs, and other manufacturing costs	893	0	0	0	0	0	0	2,679	2,679	2,679	2,679	2,679	2,679	16,074	
	Cost of sales (to new customer Company P)		0	0	0	0	0	0	2,679	2,679	2,679	2,679	2,679	2,679	16,074	
	Sales-related expenses	125	0	0	0	0	0	0	375	375	375	375	375	375	2,250	
	Miscellaneous expenses	45	0	0	0	0	0	0	135	135	135	135	135	135	810	
	Logistics and other expenses	33	0	0	0	0	0	0	99	99	99	99	99	99	594	
	General and administrative expenses (spent to serve new customer Company P)		0	0	0	0	0	0	609	609	609	609	609	609	3,654	
	(Cash flow profit from the new customer)		0	0	0	0	0	0	1,842	1,842	1,842	1,842	1,842	1,842	11,052	
Total	Number of product sets		25	25	25	25	25	25	28	28	28	28	28	28		
	Average unit price		1,260	1,260	1,260	1,260	1,260	1,260	1,308	1,308	1,308	1,308	1,308	1,308		
	Net sales (existing customers and businesses)		31,500	31,500	31,500	31,500	31,500	31,500	36,630	36,630	36,630	36,630	36,630	36,630	408,780	
	Materials and labor costs, and other manufacturing costs		23,525	23,525	23,525	23,525	23,525	23,525	25,028	25,028	25,028	25,028	25,028	25,028	291,317	
	Cost of sales (existing customers)		23,525	23,525	23,525	23,525	23,525	23,525	25,028	25,028	25,028	25,028	25,028	25,028	291,317	
	Sales-related expenses		5,417	5,417	5,417	5,417	5,417	5,417	5,792	5,792	5,792	5,792	5,792	5,792	67,250	
	Logistics and other expenses		833	833	833	833	833	833	932	932	932	932	932	932	10,594	
	General and administrative expenses		7,375	7,375	7,375	7,375	7,375	7,375	7,984	7,984	7,984	7,984	7,984	7,984	92,154	
	(Company-wide cash flow profit)		600	600	600	600	600	600	3,618	3,618	3,618	3,618	3,618	3,618	25,310	
	(Equipment expenses)															0
Newly introduced equipment							90,000								90,000	
Total development costs		0	0	0	0	90,000	0	90,000								
(1) Balance		600	600	600	600	2,89,400	600	3,618	7,64,691							
Funds raised					90,000										90,000	
(2) Cash receipt		0	0	0	90,000	0	0	0	0	0	0	0	0	0	90,000	
Repayment of loans payable (existing loans payable)		850	850	850	850	850	850	850	850	850	850	850	850	850	10,200	
Interest expenses (for existing loans payable)															6,434	
(3) Principal and interest payments for existing loans payable		850	850	850	850	850	850	850	850	850	850	850	850	850	16,634	
Repayment of loans payable (new loans payable)						1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	15,000	
Interest expenses (for new loans payable)															2,250	
(4) Principal and interest payments for new loans payable		0	0	0	0	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	17,250	
Total cash outlay (5) = (3) + (4)		850	850	850	850	2,725	2,725	2,725	2,725	2,725	2,725	2,725	2,725	2,725	33,884	
Total cash flow (1) + (2) - (5) = Cash balance		19,853	19,603	19,353	109,103	16,978	14,853	15,746	16,640	17,533	18,426	19,319	11,528	11,528		
(Balance of loans payable)																
New loans payable					90,000	88,125	86,250	84,375	82,500	80,625	78,750	76,875	75,000	75,000	75,000	
Existing loans payable		219,150	218,300	217,450	216,600	215,750	214,900	214,050	213,200	212,350	211,500	210,650	209,800	209,800		

Future Cash Flow Trial Balance (Manufacturing Business)

(2) Conservative scenario

(Unit: 1,000 yen)

		Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Next year	Third year	Fourth year	Fifth year	Gross total	
Existing customers	Number of product sets	23	23	23	23	23	23	23	23	23	23	23	23	276	276	276	276		
	Average unit price	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	1,260	
	Net sales (from existing customers and business)	28,980	28,980	28,980	28,980	28,980	28,980	28,980	28,980	28,980	28,980	28,980	28,980	28,980	347,760	347,760	347,760	347,760	
	Materials and labor costs, and other manufacturing costs	20,561	20,561	20,561	20,561	20,561	20,561	20,561	20,561	20,561	20,561	20,561	20,561	20,561	246,730	246,730	246,730	246,730	
	Cost of sales (to existing customers)	20,561	20,561	20,561	20,561	20,561	20,561	20,561	20,561	20,561	20,561	20,561	20,561	20,561	246,730	246,730	246,730	246,730	
	Sales-related expenses	4,983	4,983	4,983	4,983	4,983	4,983	4,983	4,983	4,983	4,983	4,983	4,983	4,983	59,800	59,800	59,800	59,800	
	Miscellaneous expenses	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	1,035	12,420	12,420	12,420	12,420	
	Logistics and other expenses	767	767	767	767	767	767	767	767	767	767	767	767	767	9,200	9,200	9,200	9,200	
	General and administrative expenses	6,785	6,785	6,785	6,785	6,785	6,785	6,785	6,785	6,785	6,785	6,785	6,785	6,785	81,420	81,420	81,420	81,420	
	(Cash flow profit from existing business)	1,634	19,610	19,610	19,610	19,610													
New customer	Number of product sets	3	3	3	3	3	3	3	3	3	3	3	3	36	36	36	36		
	Average unit price	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	1,710	
	Net sales (from new customer Company P)	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	5,130	61,560	61,560	61,560	61,560	
	Materials and labor costs, and other manufacturing costs	2,679	2,679	2,679	2,679	2,679	2,679	2,679	2,679	2,679	2,679	2,679	2,679	2,679	32,148	32,148	32,148	32,148	
	Cost of sales (to new customer Company P)	2,679	2,679	2,679	2,679	2,679	2,679	2,679	2,679	2,679	2,679	2,679	2,679	2,679	32,148	32,148	32,148	32,148	
	Sales-related expenses	375	375	375	375	375	375	375	375	375	375	375	375	375	4,500	4,500	4,500	4,500	
	Miscellaneous expenses	135	135	135	135	135	135	135	135	135	135	135	135	135	1,620	1,620	1,620	1,620	
	Logistics and other expenses	99	99	99	99	99	99	99	99	99	99	99	99	99	1,188	1,188	1,188	1,188	
	General and administrative expenses (spent to serve new customer Company P)	609	609	609	609	609	609	609	609	609	609	609	609	609	7,308	7,308	7,308	7,308	
	(Cash flow profit from the new customer)	1,842	22,104	22,104	22,104	22,104													
Total	Number of product sets	26	26	26	26	26	26	26	26	26	26	26	26	312	312	312	312		
	Average unit price	1,312	1,312	1,312	1,312	1,312	1,312	1,312	1,312	1,312	1,312	1,312	1,312	1,312	1,312	1,312	1,312	1,312	
	Net sales (existing customers and businesses)	34,110	34,110	34,110	34,110	34,110	34,110	34,110	34,110	34,110	34,110	34,110	34,110	34,110	409,320	409,320	409,320	409,320	
	Materials and labor costs, and other manufacturing costs	23,240	23,240	23,240	23,240	23,240	23,240	23,240	23,240	23,240	23,240	23,240	23,240	23,240	278,878	278,878	278,878	278,878	
	Cost of sales (existing customers)	23,240	23,240	23,240	23,240	23,240	23,240	23,240	23,240	23,240	23,240	23,240	23,240	23,240	278,878	278,878	278,878	278,878	
	Sales-related expenses	5,358	5,358	5,358	5,358	5,358	5,358	5,358	5,358	5,358	5,358	5,358	5,358	5,358	64,300	64,300	64,300	64,300	
	Miscellaneous expenses	866	866	866	866	866	866	866	866	866	866	866	866	866	10,388	10,388	10,388	10,388	
	Logistics and other expenses	739	739	739	739	739	739	739	739	739	739	739	739	739	8,728	8,728	8,728	8,728	
	General and administrative expenses	3,476	3,476	3,476	3,476	3,476	3,476	3,476	3,476	3,476	3,476	3,476	3,476	3,476	41,714	41,714	41,714	41,714	
	(Company-wide cash flow profit)	3,476	41,714	41,714	41,714	41,714													
(Equipment expenses)														0	0	0	0		
Newly introduced equipment														0	0	0	0		
Total development costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
(1) Balance	3,476	3,476	3,476	3,476	3,476	3,476	3,476	3,476	3,476	3,476	3,476	3,476	3,476	41,714	41,714	41,714	41,714		
Funds raised														0	0	0	0		
(2) Cash receipt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Repayment of loans payable (existing loans payable)	850	850	850	850	850	850	850	850	850	850	850	850	850	10,200	10,200	10,200	10,200		
Interest expenses (for existing loans payable)														6,128	6,128	5,835	5,529	5,223	
(3) Principal and interest payments for existing loans payable	850	850	850	850	850	850	850	850	850	850	850	850	850	6,978	16,328	16,035	15,729	15,423	
Repayment of loans payable (new loans payable)	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	22,500	22,500	22,500	7,500		
Interest expenses (for new loans payable)														1,884	1,884	1,238	563	113	
(4) Principal and interest payments for new loans payable	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	3,759	24,384	23,738	23,063	7,613	
Total cash outlay (5) = (3) + (4)	2,725	2,725	2,725	2,725	2,725	2,725	2,725	2,725	2,725	2,725	2,725	2,725	2,725	10,738	40,713	39,773	38,792	23,036	
Total cash flow (1) + (2) - (5) = Cash balance	12,279	13,031	13,782	14,533	15,284	16,035	16,786	17,537	18,289	19,040	19,791	20,542	21,293	22,044	22,795	23,546	24,297	25,048	
(Balance of loans payable) New loans payable	73,125	71,250	69,375	67,500	65,625	63,750	61,875	60,000	58,125	56,250	54,375	52,500	52,500	30,000	7,500	0	0	0	
Existing loans payable	208,950	208,100	207,250	206,400	205,550	204,700	203,850	203,000	202,150	201,300	200,450	199,600	199,600	189,400	179,200	169,000	158,800	148,600	

(6) Intellectual Asset-Based Management Evaluation Financing Checksheet
Intellectual Asset-Based Management General Edition (Manufacturing Business)

1. Check for profitability

Checked items		Criteria	Judgment and grounds
To examine business profitability (organizational assets) in all aspects	Cash flow stability	<ul style="list-style-type: none"> · Are the buyers stable? · Is the company's sales volume and sales plan appropriate? 	<ul style="list-style-type: none"> · Stable due to sales of large-size flat panel display to be directed at Company P, a major electric company. According to a marketing survey agency, the market is expected to grow. · It planned orders for prototypes based on the development plan chart of Company P. The company is expected to be awarded 30% of the large-size FDP products under the development by Company P
	Marketability (Customers and their needs)	<ul style="list-style-type: none"> · Does the company have clear customer targets? · Do the company's products match the needs of its customers? · Is the target market size large enough, compared with its sales plan? 	<ul style="list-style-type: none"> · The target customer is Company P, a major electric company · Manufacturing know-how of FM directly contribute to reducing troubles at the time of parts mounting in Company P and the know-how meets the needs of the customer. · It is expected that thin and highly condensed plates with little warps and twisting are demanded by an increasing number of major electric companies. Depending on the sales activities for the future, the market can be expanded.
	Underlying assumptions for income and expenditure plan	<ul style="list-style-type: none"> · Is the company's unit sales price at an adequate level? · Is its manufacturing unit price at an adequate level? · Are development and equipment expenses at an adequate level? · Are promotion expenses at an adequate level? · Are maintenance expenses at an adequate level? 	<ul style="list-style-type: none"> · Company P's products are priced higher than existing products, in consideration of the size of boards. · The manufacturing cost is about the same as that for the existing products. · New plant cost is at the market level and is deemed reasonable in terms of collection period. · It only requires simple tasks and will not increase expenses.
	Balance with fundraising efforts	<ul style="list-style-type: none"> · Does the amount of funds raised conform with the amount for use? · Does the company's cash management secure enough financial resources to repay? 	<ul style="list-style-type: none"> · The detailed prices of the new facilities are identified to be identical to the procurement prices. · By receiving continuous orders from Company P, the funds can be collected within four years (based on the conservative scenario).

2. Risk to parties concerned

Checked items		Criteria	Judgment and grounds
Examination of factors stemming from the developers (human assets)	Manager (Management team)	<ul style="list-style-type: none"> · Has he/she drawn up specific business plans and strategies? · Does he/she have marketing expertise and the ability to coordinate people to do business? · Does he/she have the financial management skills to manage cash flow and so on? 	<ul style="list-style-type: none"> · He carry out thorough control of the elements that strengthen its core competitive power—quality first, keeping delivery time, and improvement. Agreement was already made on order marks plan with Company P. Order management system was tailored for Company P and the system was authorized in agreement with Company P. · The manager has expertise to acquire confidence in technological aspects from customers. He is directly involved in negotiation of prices with customers and in quality control. · The manager has sufficient knowledge on financial management, but was unable to catch up with measures for personnel reductions in response to decreases in orders.
	Developer (The company)	<ul style="list-style-type: none"> · Do they have development know-how and technological skills? · Do they have the sufficient staff and equipment needed for development ? · Do they have development plans and are they proceeding as planned without delays? · Do they have enough funds to complete development? Are the funds raised enough for the planned development? 	<ul style="list-style-type: none"> · The president and the general manager of technology and manufacturing department established the manufacturing know-how based on their experiences and knowledge. The general manager of technology and manufacturing department plays a major role in parts identification with Company P. · The current technical staff have already produced products capitalizing on the know-how owned. · Parts authorization has been substantially completed for Company P. Although it is necessary to submit samples produced by the new facilities for the future for confirmation purposes, other development items are not specially required. · It is possible to install the facilities that meet the specifications of Company P by the use of the funds raised in the present finance.
Examination of factors underlying the partners (relationship assets)	Manufacturer (Contracted manufacturer)	<ul style="list-style-type: none"> · Do they have enough manufacturing experience and know-how? · Do they have the capacity and staff necessary to produce the projected sales volume? · Do they bear product liability under the contract with the company? · Do they have the capacity to bear financial burdens such as parts inventories and labor costs? 	(In-house manufacturing is planned)
	Distributor	<ul style="list-style-type: none"> · Do they have sales channels and marketing expertise? · Do they have a sales commitment under the contract with the company? · Have they presented their sales plan? · Do they have enough credibility? 	(In-house manufacturing is planned)

3. Competitors

Checked items		Criteria	Judgment and grounds
Examination of business advantages (organizational assets)	Competing products	<ul style="list-style-type: none"> · Are there any competing products in the market? · Are their prices lower than that of the company's products? · Are their qualities superior to that of the company's products? · Who are their target customers? 	<ul style="list-style-type: none"> · A number of competitors are present in the market of prototypes of basal plates manufacturing. · The company's prices of prototypes at delivery are at the same level with those of competitors, K Company, L Company, and M Company. · The quality of warps and twisting by Competitor K is comparatively good but not as good as that of FM. Competitor M does not possess satisfactory quality and FM's products will be adopted. · Major electric companies including Company P. Company P is a major client of Company K and Company L.
	Competitors	<ul style="list-style-type: none"> · Are they superior to the company in terms of sales, company size, or name recognition? · Do the company's products or manufacturing technologies infringe patent rights of other companies including competitors? 	<ul style="list-style-type: none"> · The order plan by Company P would give FM the same level of sales as those of other companies. · According to the research by FM, the company's products do not infringe other patents.
	Substitutes	<ul style="list-style-type: none"> · Are there substitutes or existing products that can serve as alternatives to the company's products available in the market? · Are their prices significantly lower than those of the company's products? · Are there any advantages in shifting from substitutes to the company's products? 	<ul style="list-style-type: none"> · Alternative products for printed basal plates are not available. · Same with above · Same with above

Case Study (2)
Credit Approval Process by Evaluation of
Intellectual Asset-Based Management
Technological Power (Patent Rights Edition)

2 . Case Study (2)

Credit Approval Process by Evaluation of Intellectual Asset-Based Management (Technological Power [Patent Rights Edition])

(About this case study)

In this case study, we make decisions on finance for a fictitious model company, based on the company's financial data and information provided during interview sessions, using business flow charts and manuals for IP evaluation-based finance. Please note that the case study contents are intended for training purposes to supplement the explanation of the marketing tools mentioned in Chapter 2 and they are not based on verified facts.

Case

Mr. Himura, a sales representative at Kyosan Bank, is in charge of Sanko Mechanical Industry Company (hereinafter called SK), one of the bank's clients. SK is an equipment manufacturer of press work machinery for special metals. The company was established by the current president twenty years ago after he became independent from a major machinery manufacturer. The company has been receiving orders periodically from major electronics companies and it has been selling pressing equipment as its main products. However, orders from major electronics manufacturers had been stagnant and are now shrinking, and the company has been facing sales battles with enterprises from emerging countries who bring in cheaper equipment. As a result, sales turned down temporarily and SK posted an interim loss. On the other hand, the president of SK started developing products with more value-added during such hard times, and five years ago, SK succeeded in developing press work machinery for special metals. In the process of the development, the company applied for a patent so that the technology cannot be stolen by competitors. After introducing partial test, orders have been coming step by step, and at the moment the sales of presswork machinery for special metals is on a rising trend.

The president of SK received an inquiry from major manufacturer Company X. The company wants to introduce equipment made by SK to their new factory's magnesium processing lines, and has been consulting with SK over the last six months. Company X has specified terms and conditions, and the president wishes to start development and manufacturing. However, the company required equipment with a higher speed than the traditional equipment and it is necessary to improve the design and make additional developments. Further, SK needs to deliver fifteen machines one-by-one, and also needs to consider financial measures to cover the cost of parts and personnel.

SK holds an account with our bank, and approached us for advice, so Mr. Himura swiftly began to study an appropriate finance scheme for such a request.

(Points of consideration)

One of the issues in the current study is: that credit approval for the finance needs to be made based on the prospects of future sales, because the business of magnesium processing at SK is still at the development stage. Company X has not yet fully committed to purchasing from SK, although they highly appreciate SK's press processing equipment technology and the finishing quality of a prototype at the present stage. On the other hand, SK requires funds in order to develop the product to completion and to procure relevant parts for the product etc., so it wishes to borrow such funds from a bank. However, SK has no typical assets that could serve as collateral for such lending and therefore the company is in a situation where it is necessary to supplement supporting material in order to receive credit approval for such finance.

In this case study, we make a comprehensive credit analysis for the requested finance by valuating the intellectual assets and technological competence of SK. The point is to evaluate the dominant powers of SK's technology and intellectual assets in the context of its business, in which inherent development risks are involved, and consequently to make a final judgment for credit approval for the finance.

(Assumptions)

(1) Corporate profile

Company name: Sanko Mechanical Industry Company

Establishment: May 19XX

Number of Employees: 18

Capital: 10 million yen

Shareholders: 100% owned by the president

Major clients: Major electronics companies

(2) Financial information

Balance Sheet

(Unit: thousand)

	The 18th term	The 19th term	The 20th term
Assets			
Cash and deposits	76,000	78,600	74,230
Notes	9,600	16,000	12,400
Accounts receivable-trade	38,000	71,500	43,600
Merchandise/finished	4,900	7,700	6,800
Work in process	2,900	52,800	19,000
Raw materials	30,000	41,000	76,000
Other current assets	35,600	11,000	6,200
Current assets	197,000	278,600	238,230
Tangible fixed assets	106,000	137,000	160,000
Intangible fixed assets	300	300	300
Investments, etc.	58,000	74,000	77,000
Total assets	361,300	489,900	475,530
Liabilities			
Accounts payable-trade	39,000	64,300	47,730
Accounts payable-other	4,100	50,000	56,000
Short-term loans payable	67,000	20,000	40,000
Other current liabilities	19,000	20,900	14,300
Current liabilities	129,100	155,200	158,030
Long-term loans payable	212,000	312,000	296,000
Non-current liabilities	212,000	312,000	296,000
Total liabilities	341,100	467,200	454,030
Shareholders' equity			
Capital stock	10,000	10,000	10,000
Other retained earnings	10,200	12,700	14,000
Total shareholders' equity	20,200	22,700	21,500
Total liabilities and shareholders' equity	361,300	489,900	475,530

Profit and Loss Statement

(Unit: thousand)

	The 18th term	The 19th term	The 20th term
Net sales	381,000	405,000	525,000
Cost of sales	296,000	313,000	410,000
Gross profit	85,000	92,000	115,000
Selling, general and administrative expenses	75,000	80,000	100,000
Operating income	10,000	12,000	15,000
Non-operating income	6,200	5,000	5,300
Non-operating expenses	6,700	8,400	8,800
Ordinary income	9,500	8,600	11,500
Extraordinary income	0	0	0
Extraordinary loss	0	4,000	0
Income before income taxes	9,500	4,600	11,500
Income taxes	2,100	1,000	2,700
Net income	7,400	3,600	8,800
Retained earnings brought forward	1,700	9,100	12,700
Unappropriated retained earnings	9,100	12,700	21,500

Summary of Interview Sheets, etc.

(1) Simple interview

We conducted a simple interview regarding the business of magnesium press processing equipment, which is under development by SK. The interview shows that the company is in the process of business negotiations with Company X and the issue is the development of equipment required in the core process of manufacturing Company X's products. The interview also enabled us to clearly understand the advantageous position of SK's technology, the technological fields targeted by the president, and the clients' needs.

As for the status of SK's patents, two patents are already registered and another three are at the patent pending stage. We received the impression that SK's business of magnesium processing equipment is a business with an exclusive nature because SK obtained the relevant patents.

Concerning the finance and the use of the funds, SK requested the bank for the finance, saying that they would need 50 million yen for development and another 50 million yen for operations, totaling 100 million yen. The bank confirmed the profitability of the new business. According to SK's plans, it is estimated that stable revenues will be earned from the next fiscal year. However, as the business is still at the development stage, SK has not received any orders from Company X.

The bank arrived at the conclusion that more detailed interviews need be held and the profitability of the business should be reviewed by mainly paying attention to the prospects of obtaining orders from Company X, based on information regarding intellectual assets.

(For the results of the interview, refer to (1) Simple Interview Sheet)

(2) Intellectual property search

We conducted an IPDL search for the name of SK. As a result, five patents were found with the company as the applicant. Similarly, searching with the individual name of the president, the same five patents were found with the president as the inventor. These five patents are identical to those we heard about during the initial interview, i.e. two for which patent rights have been granted and another three for which application has been filed. A search for information on the progress of the three patents for which applications have been filed revealed that a request for examination has been made for one of them, while a request has not been made for the other two.

Then, during a telephone conversation with the president, we confirmed the relationship between the patents and the device technology, and the president provided a detailed description of the historical process of how the technological development was achieved and how such development led to the patent application. Of the two registered patents, one is a fundamental patent that protects the basic structure of SK devices, and the other is a patent for the technology that is required in the manufacturing process after pressing. We understand that the underlying core technology for SK's devices consists of the five patents, and we confirmed SK's clear strategy for intellectual properties: that these patents preclude major enterprises becoming rivals.

(For details, see (2) Intellectual Property Search Sheet)

(3) Intellectual Asset-Based Management Evaluation (Business Prospects) Interview

A detailed interview was conducted regarding the business of magnesium processing devices using the Intellectual Asset-Based Management Evaluation Interview Sheet.

We confirmed the status of each phase of development, manufacturing, and sales according to the business flow.

The magnesium processing device is at the final stage of development, but the development will take another three months to complete. A timetable has been made and there are indications that efficient development was made in the past. Though the issue of speed specifications required by Company X remains to be resolved, it is likely that the company will complete the development for massive production.

Manufacturing and maintenance would be conducted by SK itself, and the company has a track record of manufacturing similar products. It is considered that the company is capable of coping with manufacturing and maintenance of the business concerned. The manufacturing cost would be at a level where sufficient profit could be secured by sales prices given. According to the president, it is mainly the know-how of the engineers who have been working at SK for a long time that has maintained the stability of the manufacturing cost.

If SK completes devices that satisfy the required specifications, Company X, a major manufacturer would almost certainly commit to buying them (ten devices). Company X said that they would pay 50% of the charge at the time of delivery, and we can tell that they are definitely interested in purchasing from SK. Further, SK is concurrently conducting sales negotiations with Company Y, a major manufacturer who will also most likely buy SK products, although the timing of Company Y's purchases would be several months behind Company X. In addition, SK has business negotiations underway with other candidate companies, but once it is determined that SK has delivered its products to Company X, other companies would be more likely to make purchases based on the track record of this introduction.

Subsequently, concerning business characteristics, interviews were held with customers, competitors and SK itself. The customers who purchase SK's products are electronics companies, like Company X, and the products resolve magnesium processing issues, which present problems to each electronics company. By adopting SK's devices, customers can make their products lighter, thereby distinguishing their products from those of their competitors; hence it is considered that there is a sufficient volume of customer needs. One competing manufacturer, Company T is a heavy industry manufacturer and could be a threat in terms of scale. However it is considered that SK has the advantage in pricing and quality/performance. Further, SK's technology is of an original nature, developed from the president's long experience in the press processing industry. The main features of the technology are protected by the relevant patents, and the company, since its early stages, has implemented measures such as patent application in order to preclude competition. The business strategy of the president is to tackle special technology ahead of the market, the need for which is

revealed in dialogues with their customers, major electronics companies, and thus secure an original position in the industry. As a result, the company has been in the process of establishing new, profitable business.

(For the results of the interview, refer to (3) Intellectual Asset-Based Management Evaluation (Business Prospects) Interview Sheet.

(4) Intellectual property valuation

We asked Company P, an IP valuation company, to assess SK's two registered patents and its three patents for which application has been filed. As a result, they were judged to have good value, supported by SK's business prospects, with an estimated value of anywhere from 88 to 106 million yen. By conducting searches in the patent register, the valuator confirmed that they were free from any right of pledge or defects. Further, the valuator pointed out several patents owned by rival Company T, which are the ones mentioned in the survey on similar patents and in the interview with the president. In addition to an analysis of competing patents, the valuator carried out a market analysis, including a market trend analysis of the magnesium industry, an analysis on competitors' share and business domains, and a comparative analysis on the technology of rival Company T.

For details, refer to (4) Intellectual Property Evaluation.

(5) Intellectual Asset-Based Management Evaluation (Profitability) Check

Cash flow trial sheets are prepared based on development cost and sales prospects for Company X and other customers. Thus, we reviewed the profitability of the business. SK's plan forecasts that soon after it receives the initial orders from Company X, it will receive second orders. However, as the result of the interview, we revised the forecast by reducing second orders and we made our underlying scenario as conservative as practicable. The trial calculations show that it is possible to collect the funds to be financed at their request through orders from Company X, at a volume of ten devices in the initial order, and an additional five devices in the second order.

(For details, refer to (5) Intellectual Asset-Based Management Evaluation (Profitability) Checksheet.)

(6) Intellectual Asset-Based Management Evaluation Finance Check

Comprehensive evaluation is made in Intellectual Asset Management Evaluation Based Finance, by preparing an Intellectual Asset Management Evaluation Based Finance Check Sheet. We arrived at the following view on the business profitability. SK's product has been developed according to the needs of Company X and the development is at the closing stage, so it is highly probable that the products will be delivered to Company X. Based on our confirmation of the business flow from the development stage of the devices to the stage of sales to Company X, we consider that the cash flows of the business are within a valid range.

The intellectual properties (patents) concerned do not have such problems as legal imperfections, or legal actions taken against them, and these properties constitute the core of SK's magnesium

processing device. A review on the liquidity of the patents assuming rival Company T's products to be inferior in terms of pricing and quality, shows that the intellectual properties could attract interest from other manufacturers in the same industry, including Company T, which means that the patents have liquidity.

Company P, an intellectual property valuation company, has a solid track record and criteria for confirming non-imperfections in patent rights and for valuations on intellectual properties. The valuations by the company are well received at the bank and in each relevant department.

Regarding persons concerned with the business, being limited only to SK, the executive manager has established technology of an original nature through his long experience and his clear objective is to expand the business domain as a pioneer. Further, the president himself makes detailed confirmation on the cash flows of the company, and no problems are identified in his administrative capacity for financial activities.

Rival Company T outweighs SK in terms of size and fame, but when it comes to price and quality, SK shows superiority.

(For details, refer to (6) Intellectual Asset-Based Management Evaluation Financing Checksheet)

Process Inline with Finance Flow

(1) Direction of Intellectual Asset-Based Management Evaluation Finance (Day-to-day collection of business information)

As part of our efforts to assess the outline of SK's intellectual assets through our daily information sessions, we conducted a simple interview with the president using the (1) Simple Interview Sheet. SK has accumulated technological assets and has filed many patent applications. In response to the president's request for funding, we decided to see if we could make financing decisions based on the feasibility of the new business of processing devices, taking into account the progress made in business negotiations with Company X, a major electronics company, as SK did not have any tangible assets to pledge as collateral. Following our in-house review of the information obtained through the interview, we decided to continue the assessment of the company by acquiring further, more detailed information.

According to the president, SK's patents constitute the core of the processing device in the business concerned, and the technology involved has been patented and cannot be copied by other competitors. Using (2) Intellectual Property Sheet, we conducted an IPDL search to learn the status of SK's patent rights. We found two registered patents, and three patents for which applications have been filed. The latter three patents found in the search were identical to the ones related to the device that we heard about from the president. We confirmed that the two patents have been registered with the JPO.

(2) Use of intellectual asset information in corporate rating and trading policy

In a second meeting with the president using (3) Intellectual Asset-Based Management Evaluation (Business Prospects) Interview Sheet, we conducted an interview regarding details on the development of the business of magnesium processing devices. We confirmed the details of SK's intellectual assets, namely the elements that could be the source of the value of the intellectual property. We identified a problem regarding magnesium processing that troubles Company X and we confirmed the historical process of business negotiation on such matters as the proposals put forward by SK to resolve the above problem. We came to realize that SK has made progress in product development to specifically meet the client's needs. We also understood that although there is a rival, Company T, SK is the forerunner and has maintained superiority in terms of price and quality. Further, we recognized that the intellectual assets consist of such important elements as the technological experience of the executive manager, a human asset like the know-how of the staff members who support the manufacturing. We assumed that these elements of the intellectual assets are linked to the future cash flows in SK's development of the business of magnesium processing devices and that they form the basis of profitability.

Upon obtaining (4) Intellectual Property Evaluation Sheet from an IP valuator, we entered the estimated intellectual asset value in the actual balance sheet and made the decision as to what rating to give to the company. Following an in-house discussion of trading policies in consideration of the corporate rating, we decided to proceed with the financing of the company.

(3) Use of intellectual asset information in the process of credit approval

In the process of credit approval, using (5) Intellectual Asset-Based Management Evaluation (Profitability) Checksheet, we projected future cash flows based on the prospects for orders from Company X and other prospective customers, and made an assessment of SK's repayment ability.

The key assumptions underlying our future cash flow projection are the price of the devices and the profits generated thereby that were consistent with qualitative data gained from intellectual asset information, such as SK's superiority in the technology. The underlying scenario for sales scheduled from Company X and other customers and for revenues was plausible. As a result of a review of future cash flow projections, including one under the conservative scenario, our bank showed a positive stance toward financing the company.

(4) Comprehensive judgment of creditworthiness

Ahead of a final financing decision, we carried out risk checks to see if all the intellectual asset information had been put under review, in accordance with (6) Intellectual Asset-Based Management Evaluation Financing Checksheet. We completed the identification of inherent risks, following a comprehensive assessment of information gained from each check sheet and the intellectual asset

valuation report. As a result, we came to the following conclusion.

Based on the historical process of business negotiations between SK and Company X, the device development has been made in accordance with the needs of Company X and it is judged that the prospects for orders are valid. Further, as the result of profitability analysis, it is possible to collect the funds to a sufficient degree if orders are achieved for the quantity of devices that Company X is scheduled to purchase and the corresponding deliveries are successfully made.

It is presumed that the technology of SK is superior to that of the rival Company T in terms of price and quality. The patents shaped the original technology into due rights under legal protection and the technology could well survive competition with such rivals as Company T. According to the valuations made in an external institution, the patents, as legal forms, have no imperfections and the value is appraised at 88 to 106 million yen. This value is not manifested in the accounting balance sheet, but we could take it into account on the substantial balance sheet. Also from the results of the valuation reports on the intellectual properties, it is predicted that in the market for metal press processing devices, magnesium devices will be actively used in the future and thus it is expected that orders may come from other customers in addition to Company X.

In the final deal in question, there is an inherent risk involved in development. However, as SK is strictly controlling time schedules for the development through the use of development management charts and by capitalizing on their past experience, it is considered that the risks of delay or business interruptions can be mitigated to a certain degree. The funds will be used strictly for development and operations. At the final stage, though we would need to confirm the status of orders from Company X, by referring to such evidence as order forms therefrom, we have been led to the conclusion that we will proceed with the financing of such amount of funds as requested by SK.

(1) Simple Interview Sheet
Patent Rights Edition

1. Corporate profile

Company name	Sanko Mechanical Industry Company
Representative	Taro Suzuki
Contact person	Nakagawa Manager
Contact	03-1111-1111
Business description	Manufacturer of special metal pressing machinery
Human assets	<p>Manager's career history and qualifications</p> <p>Mr. Taro Suzuki, the Chief Executive Officer of SK, was derived from an engineering profession at one of leading heavy machinery manufacturers in Japan. Based on comprehensive knowledge built up for nearly 30 years in the field of designing and manufacturing pressing machines, products manufactured by this company have been well reputed of high precision and high operating efficiency as well. (Other information concerning the manager will be collected at the time of Interview (3).)</p>

2. Business summary (core business)

Tangible assets	Core product	Pressing machines for processing magnesium
Organizational assets	Product's intended purpose	The company presses magnesium parts that are mounted on electrical devices manufactured by leading manufacturers of electrical machinery and apparatuses.
	Production system	As the fusion of design and manufacturing works constitutes the pivot of high-quality machinery, all the manufacturing processes are executed internally.
	Features of the technology	Although magnesium is substantially fragile, the pressing technology originated by this company makes it possible to minimize percent defective of molded products.
	Competitors and their strengths and weaknesses	"T-Corporation" ranked as one of leading manufacturers of heavy-duty machinery manufactures and markets magnesium pressing machinery being analogous to the one manufactured by this company. Although T- Corporation as one of the leading manufacturers outstands in the product marketing capability and creditability, the price of the corresponding magnesium pressing machinery stands higher than that of the magnesium pressing device manufactured by this company and lower in the yield rate.
	Advantages of the technology	The magnesium pressing machine manufactured by this company features lower percent defective and easier surface processing characteristics compared to those which are manufactured by others.
	Circumstances surrounding the intellectual property	The company has legally been entitled for 2 Japanese patents and further filed 3 applications for the Japanese patents on the magnesium pressing machines thus far developed.
Human assets	Reason for invention	Based on the consultation from one of manufacturers of electrical devices on the magnesium pressing machines, this company proceeded with practical development of the magnesium processing machines since 10 years ago. Based on long-years experiences in the processing of special metals including aluminum, Mr. Suzuki, the chief executive officer of the company, conducted basic trials of technology on the pressing of magnesium by referring to aluminum processing devices by overcoming errors.
	Inventor's career	The inventor of the newly developed magnesium processing machine has built up practical experiences in the development of metal pressing devices for more than 20 years including several years of practical experiences on the technology of magnesium molding press. Due to this experience, the inventor functions as the key engineer in the magnesium pressing technology.
Relationship assets	(Prospective) buyers	Company X, one of the leading manufacturers of electrical machinery and appliances in Japan, highly evaluates potential technology developed by company SK. However, the Company X has not yet been committed on the purchase of electrical machinery and appliances developed by company SK.
	Advantage to the buyer in adopting the product	Due to light weight and excellent strength, magnesium is a suitable material for constituting portable devices. Conversely, due to difficulty in the processing characteristics and low yield rate, processing cost rises as an annoying problem. On the other hand, the magnesium processing machine developed by the above company advantageously enables customers to make use of the magnesium processing device and solve problem in the cost.

3. Profitability

(Unit: million yen)

Profitability	Term prior to the preceding term	Preceding term	Current term	Next term	Term following the next term
	March XX	March XX	March XX	March XX	March XX
Estimated revenue (Total)	0	0	0	225	300
Unit price				15	15
Volume				15	20
Estimated expenses (Total)	0	0	70	150	200
Development costs			70		
Production costs	0	0	0	150	200
Unit price				10	10
Volume				15	20
Balance	0	0	-70	75	100

4. Use of funds

·SK requires 50 million yen for developing novel magnesium processing machines for delivery to company X, and further, cost for parts for assembling 10 units of these machines and labor cost obliges the company to bear 100 million yen additionally.

·In terms of operating fund, the company X has deposited 75 million yen in advance. Thus, substantially, SK requires a sum of 100 million yen including 50 million yen for the above developing fund and the other 50 million yen as part of operating fund.

·There is no need to spend fund for publicizing cost. SK is scheduled to use the fund previously prepared for developing and manufacturing the novel magnesium processing machines.

5. Note

(2) Intellectual Property Search Sheet Patent Rights Edition

1. Search results for patents owned by the company

Conduct IPDL search using

Company name
Sanko Mechanical Industry Company

 as a keyword

Number of patents	5
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 Details are shown in the attached search results.

* Conduct IPDL search using

Representative's name
Taro Suzuki

 as a keyword,
as some patents are registered under the name of representatives.

Number of patents	5
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 Details are shown in the attached search results.

* If neither of the above two keywords refines search results,
conduct a search using both the company name and the representative's name.

Conduct IPDL search using

Company name [,] Representative's name

 as a keyword

Number of patents	
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 Details are shown in the attached search results.

2. Confirmation and list of patents

Confirmation of patents embodied in the products and technologies that were stated by the company
at the time of a simple interview

	Application number		
(Group of) basic patents	Registration 3948XXX	Registration 1528XXX	
(Group of) related patents	Unexamined Patent 20XX-3948XXX	Unexamined Patent 20XX-6348XXX	Unexamined Patent 20XX-1923XXX

Confirmation of the above-mentioned details if there are any foreign patents

Related domestic application	Foreign patent		
	None		

3. Patent details

Application number	Publication number	Title of the invention	Information on progress	Registration number (if any)
Unexamined Patent 20XX-3533XXX	Unexamined Patent 20XX-4666XXX	Pressing apparatus for magnesium ingots	Registered	Registration 3948XXX
Unexamined Patent 20XX-4747XXX	Unexamined Patent 20XX-4182XXX	Method of executing post treatment after pressing magnesium ingots	Registered	Registration 1528XXX
Unexamined Patent 20XX-4673XXX	Unexamined Patent 20XX-3948XXX	Method of executing surface treatment against magnesium (ingots)	Unexamined	
Unexamined Patent 20XX-4673XXX	Unexamined Patent 20XX-6348XXX	Method of twisting magnesium (ingots)	Examination requested	
Unexamined Patent 20XX-3743XXX	Unexamined Patent 20XX-1923XXX	Apparatus for cooling magnesium ingots	Unexamined	

For details, see the attached "publication of unexamined patent applications" and "Patent Gazette."

4. Relation between the patents and the company's products/technologies

The basic patent No. 3948xxx specifically defines the structure of the device invented by SK and the specific method for processing lateral surfaces of the magnesium pressing machine. The patent No. 1528xxx specifies the post processing process after executing a pressing process. The patent No. 1528xxx further specifies an ensuing important method for executing surface treatment and painting process. In addition, SK has successively filed applications for Japanese patents on the novel technologies related to surface treatment and twisting process developed by the company.

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

Company name	Sanko Mechanical Industry Company
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Business flow**1. Development phase**

Interview items		Responses	
Organizational assets	Past development efforts	Time frame of past development	Technological development was initiated 6 months ago. The company has proceeded with designing and development of experimental models of α machines up to the present.
		Past development funds (Labor costs, number of plants, and parts & components)	The company spent a sum of approximately 20 million yen in the past, which includes approximately 9 million yen for personnel cost (500,000 yen per month/ per capita), 10 million yen for purchasing parts, and 1 million yen for other uses.
	Future development efforts (If in the middle of development or improvement stages)	Time frame for future development	The company is scheduled to manufacture improved experimental model β machines during the coming 3 months upon completion of the experimental model α . The company is further scheduled to execute adjustable improvement of the experimental model 3 months later on before eventually completing practical models on the mass production basis. Due to the need for improving the pressing efficiency, 3 weeks have been added to the above period that is required for developing the existing models.
		Future development funds (Labor costs, number of plants, and components)	To prepare for the forthcoming full-dress technological development, the company is scheduled to prepare expenses including approximately 30 million yen (500,000 yen per month/per capita), 20 million yen for purchasing member parts, aggregating 50 million yen.
		Existence of a development process chart	Operation sheets have been prepared since the beginning of technological development. The company has organized a system for proceeding with development within the company in compatibility with the operation sheet for technological development, and further, progressive control has been implemented properly. Note that operation sheets for technological development have been secured separately.
		Future challenges to development (excluding funds)	At present, verification to check to see whether or not the magnesium processing machine can normally increase own function up to the operating speed demanded by customers has not yet been implemented. However, since there is a certain allowance up to the theoretical value, it appears to be possible to overcome uncertain factors by continuously operating the testing model.

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 cost aggregates 10 million yen, which includes 7 million yen payable for purchasing raw material and 3 million yen payable for labor work executed by regular employees. Upon procuring materials such as parts, manufacturing work requires approximately one month. Composition of manufacturing cost appears to have been improved slightly compared to any of conventional magnesium processing machines that have already built up substantial results in the market.
	Manufacturing equipment costs (Initial adoption costs, capacity utilization rate, and depreciation period)	Since complete products are assembled from component parts, any of large scale manufacturing installations is not required.
	Production capacity (Plants and equipment)	Manufacturing process is executed by making use of vacant space of its factory site. Further, manufacturing work will be executed by making use of existing installations.
	Maintenance system	All the manufacturing machines made in the past have been inspected via its own maintenance routines by executing periodical inspection once every year. However, since the installations rarely incur disorder, extraordinary measures are rarely implemented.
Relationship assets	Raw materials suppliers	Any of conventional component parts will be procured via normal suppliers. Specific component parts will be procured from company C who has been in a favorable trade relation with SK for more than 10 years to date.
	Manufacturing equipment suppliers	There is no schedule to purchase any manufacturing machine for now.

(2) Outsourced manufacturing

Interview items		Responses
Relationship assets	Contract manufacturers	In-house manufacturing
	Production costs	Same as above
	Existence of a manufacturing license agreement (Provision of know-how and product liability)	Same as above
	Maintenance system	Same as above

3. Sales phase

Interview items		Responses
Relationship assets	Existing buyers	SK has been in a practical trade relation with company X who ranks as one of leading manufacturers in the electric machines and appliances since the past 10 years. It is reported that this company X has rarely encountered critical problem on the performance quality of the machines thus far delivered from SK.
	Confirmed buyers (Time to start selling)	The above-referred company X, who is scheduled to start introduction of SK's machinery from the next April on one after the other.
	Prospective buyers under negotiation (Time to start selling)	Based on the reasons to anticipate potential advantage generated from the introduction of the above magnesium processing machines manufactured by SK, company Y ranked as one of leading manufacturers in the line of electric machinery and appliances also appears to have considered introduction of the above machines positively. Although being competitive in the market against company X, company Y is scheduled to introduce the above machines later than company X by half or one year.
	(Monthly) sales volume and sales	The above company X is expected to place an order with us for 5 to 7 units of the magnesium processing machine every half year for periodical delivery. It is expected that the sales volume will aggregate 75 million yen to 99 million yen every half-year.
	Contract distributors (If any)	Due to its policy to abide by direct sale to purchasers, all the above machines are not assigned for marketing.
Organizational assets	Selling price	The above magnesium processing machine will be quoted at 15 million yen per unit for delivery to the above company X. It will separately quote the above machine at 18 million yen to 20 million yen per unit for delivery to any client other than the company X.

Business features

1. Customer analysis

Interview items		Responses
Relationship assets	Grounds for product demand (Costs, added value, and substitute demand)	There has been a growing demand among individual manufacturers in the line of electronic appliances including highly expensive personal computers, digital cameras, and other sophisticated precision apparatuses for practical introduction of magnesium featuring very light weight and durable strength. However, due to difficulty to properly process magnesium, there was no pressing device capable of properly processing magnesium on the mass production basis, and thus, the above needs were not realized practically. Now that the novel magnesium processing machine has been realized on the commercial basis, it is possible for those clients who have introduced the above machines to differentiate their magnesium products from others in the marketing potentials. Further, it is also possible to promote advantages by lowering production cost relatively to the furtherance of mass production thereof.
	Stability of customers' needs (One-time order/periodical order and adoption cycle)	When business scope of the company X expands further, SK can anticipate continuous rise of demand for SK's products. In addition, as SK has already received a number of inquiries for our products from other manufacturers including the above-referred company Y who competes with the company X, SK considers that there is high prospect for continuously receiving orders for SK's products from now on.
	Target customers and market size (Fields, sales figures, regions, etc.)	At present, leading electric machinery and appliances share main clients. However, SK is also targeting at automobile manufacturers as potential clients in the future. We estimate that there will be a favorable market for SK's products that would eventually attain a sum of 300 units among those electronic appliances manufacturers operating in Japan, aggregating more than 5 billion yen in the sales volume.
Organizational assets	Sales system	Basically, SK abides by direct sale of its magnesium processing machines. Since it is essential that professional lectures on the method of executing maintenance service and operating method be held for engineers on the part of users, these essential matters can hardly be practiced unless the machines are delivered to them via direct sales. Further, when the machines have actually been delivered to any of clients, it is imperative that SK's engineers directly deal with the client's engineers by testing the installed machines.

2. Competitor analysis

Interview items		Responses	
Organizational assets	Company product's advantages	Known competing products	Company T, ranked as one of leading manufacturers of heavy-duty machinery, is actually the foremost competitor against SK's products. As for the rest, SK hears that several overseas machinery manufacturers proceed with development of corresponding magnesium pressing machines.
		Competing products' prices	The above competitive company T currently quotes the price of the competitive magnesium pressing machine at 25 million yen per unit.
		Competing products' sales and customers	The above competitive company T has already sold approximately 20 units of the corresponding machine to some of the leading manufacturers in the line of electronic machines and appliances, aggregating 500 million yen per annum.
		Competing products' advantages and disadvantages	The competing machine has high degree of compatibility with Company T's other machines. This allows those who use Company T's machines higher efficiency. However, as its price has been set high, the introduction of the machine has not been developed. The yield rate of processed products is also low.
		Known substitutes	There are some companies that are trying to substitute aluminum pressing machines, but they have not succeeded. Molding process would increase die costs and would not suit for high-mix, low-volume manufacturing.
		Company's strengths and weaknesses	SK's pressing machine achieves higher yield rate and makes it easier to perform surface treatment, compared with magnesium pressing machines of other companies. These advantages contribute to weight saving, strength retention and cost improvement in manufacturers that develop small and light products.

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

(1) Analysis of technology

Interview items		Responses
Organizational assets	Reasons for the establishment of the company's proprietary technology	The president's long experience in pressing machines gave him a hint for the development. The company's good relationship with existing major manufacturers allowed it to hear about the needs for magnesium-related machines at an early stage.
	Features of the technology (Strengths and weaknesses) (Cost barriers and adoption barriers)	The strength lies in the use of a special spring for the lateral side of the pressing machine to reduce the shock caused by pressing. This technology improved yield rate, which led to cost improvement for customers. The weakness is seen in its speed of mass production, which is planned to be improved using the funds to be raised in this case.
	Comparison with competing technologies	The competing technology, which absorbs pressing shock using air pressure, has not improved the yield rate of magnesium processing. However, the competing technology is far superior in terms of mass production speed.
Human assets	Primary developer's career outline	After ten years of experiences in a major heavy-equipment manufacturer, President Suzuki engaged in manufacturing of pressing machines for SK for nearly 20 years. His development power enjoys wide recognition by major manufacturers.

(2) Analysis of know-how

Interview items		Responses
Organizational assets	Patent(s) central to business	Of five for which the company has filed a patent application, two have been already granted a patent.
	Technical scope covered by the patent(s)	The patents cover the structures of the magnesium pressing machine. The technologies includes the use of a spring for the lateral side of the pressing machine—SK's original technology.
	Patented technology's versatility	The technology is primarily for magnesium pressing machines and does not have much versatility. The shock-absorbing technology can be applied to precision equipment manufacturing.
	Unpatented know-how (Trade secrets, etc.)	The manufacturing process and fine adjustments to inner parts of the pressing machine has been kept as trade secrets. This know-how has been shared by the president and key engineers.
Human assets	Unpatented techniques	The manufacturing process and fine adjustments to inner parts of the pressing machine has been kept as trade secrets. This know-how has been shared by the president and key engineers.

(3) Analysis of manager

Interview items		Responses
Human assets	Manager's business strategy	He aims to differentiate its technologies from competitors' by leading the development of machines that require high technology. He focuses on sales to customers that seek high-tech machines and equipment.
	Manager's marketing expertise	He makes periodic visits to customers for the purpose of information exchanges and understanding of technology trends. His technological power is highly praised by customers and he enjoys the confidence of them. He seeks business opportunities through such periodic information exchanges.
	Manager's financial management skills	The president is in charge of cash management other than accounting. There have been no significant issues in cash management. He consults with financial institutions if any issues arise, striving to keep strict financial management in place.

**(5) Intellectual Asset-Based Management Evaluation (Profitability) Checksheet
Patent Rights Edition**

Company name	Sanko Mechanical Industry Company
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1. Future cash flow (trial balance sheet attached)

(1) Company's business plan-based scenario

Estimated sales	<ul style="list-style-type: none"> • For Major Manufacturer X : 15 units for the current fiscal year and 5 units for the next fiscal year • For Major Manufacturer Y: 5 units for the next fiscal year • Unit price: 15million yen per unit
Estimated expenses	<ul style="list-style-type: none"> • Cost of sales: 10 million yen per unit
Other	<ul style="list-style-type: none"> • Expenses: 5 million yen per unit

(2) Conservative scenario

Estimated sales	<ul style="list-style-type: none"> • For Major Manufacturer X : 10 units for the current fiscal year and 5 units for the next fiscal year • Unit price: 15million yen per unit
Estimated expenses	<ul style="list-style-type: none"> • Cost of sales: 10 million yen per unit
Other	<ul style="list-style-type: none"> • Expenses: 5 million yen per unit

(3) Common underlying assumptions (based on the company's business plan)

Terms of collection and payment

Interview items		Responses
Organizational assets and relationship assets	Terms of collection from buyers	Terms of collection from Company X: 50% will be repaid in cash at the time of delivery of the first 10 units and the rest 50% will be repaid in cash in the second month after the month in which delivery is made. For the second delivery and thereafter, the full amount will be repaid in cash in the second month after the month in which delivery is made.
	Terms of payment to suppliers	For the first purchase, 50% will be repaid in cash in the month in which delivery is made and the rest 50% will be repaid in cash in the second month after the month in which delivery is made. For the second purchase and thereafter, the full amount will be repaid in cash in the second month after the month in which delivery is made.
	Marketing staff and expenses	No marketing staff expenses are planned.

Use of funds

Interview items	Responses
Use of funds (Development and mass production launch expenses)	Development funds of 50million yen (30 million yen for labor costs and 20 million yen for equipment expenses)
Use of funds (Money for purchasing materials, etc.)	Fifty million yen out of the 100 million yen allocated for labor costs and components/raw materials expenses for 10 units. (Company X will make an advance payment of 75 million yen upon delivery. The company will allocate the money for the second payment of parts costs.)
Use of funds (Promotion expenses)	None
Fundraising scale and repayment schedule (Consistency with profitability)	The company will raise 100 million yen in funding. It plans to repay 75 million yen after the collection of accounts receivable from Company X (after nine months to one year), and repay the rest within six months after the first repayment.

Financial Plan for Magnesium Processing Equipment Business - Underlying Assumptions

1. Unit price information (plans)

Items	Amount (Thousand)	Remarks
Unit price of presses	15,000	Selling price for customers
		Same as above
		Same as above
(1) Sales		
Cost of presses	10,000	Including cost of raw materials and labor costs (excluding depreciation and initial costs)
		Same as above
		Same as above
(2) Cost of sales		
Gross margin Product A	5,000	
Gross margin Product B	0	
Gross margin Product C	0	
(3) Gross margin ((1)-(2))		
Product A costs	500	Middlemen's margins, sales-related expenses including delivery charges, and logistics costs
Product B costs		
Product C costs		
(4) Costs		
Profits from Product A	4,500	Cash-based profits excluding depreciation and initial costs
Profits from Product B	0	
Profits from Product C	0	
(5) Cash-based profit ((3)-(4))		

2. Development and initial costs

	Amount (Thousand)	Remarks
Test model component costs	20,000	Components and devices necessary for the development of test models (excluding existing devices)
Development outsourcing costs		Expenses for development outsource to other companies
Newly introduced equipment costs		Devices necessary for development and mass production (excluding existing devices)
Other development costs		Other development costs, such as testing costs
In-house development costs	30,000	Development expenses @5,000 × 6 (yen) (Monthly amount) (Period: months)
(1) Total development expenses	50,000	
Patent-related expenses		Patent filing and registration expenses (including international filing)
Other initial costs		
(2) Total other initial costs	0	
Promotion expenses		
Sales staff expenses	0	Costs × (Monthly amount) (Period: months)
Other costs	0	
(3) Sales related expenses	0	

Magnesium Processing Equipment Business Cash Flow

Unit price (thousand yen)	Sales	Cost	Gross margin	Commissions
Presses	15,000	10,000	5,000	500
Product B	0	0	0	0
Product C	0	0	0	0

(1) Company's business plan

(Unit: 1,000 yen)

Advance payment of 75 million yen from Company X Balance of 75 million yen to be paid by Company X

	Budget/Funds raised	Nov. 20XX	Dec. 20XX	Jan. 20XX	Feb. 20XX	Mar. 20XX	Apr. 20XX	May 20XX	Jun. 20XX	Jul. 20XX	Aug. 20XX	Sep. 20XX	Oct. 20XX	Current fiscal year
Accumulated sales volume		0	0	0	0	0	10	10	10	10	10	15	15	
Monthly sales volume							10							15
Sales of presses		0	0	0	0	0	75,000	0	75,000	0	0	75,000	0	225,000
Accumulated sales volume		0	0	0	0	0	0	0	0	0	0	0	0	
Monthly sales volume														0
Sales of product B		0	0	0	0	0	0	0	0	0	0	0	0	0
Accumulated sales volume		0	0	0	0	0	0	0	0	0	0	0	0	
Monthly sales volume														0
Sales of product C		0	0	0	0	0	0	0	0	0	0	0	0	0
Net sales		0	0	0	0	0	75,000	0	75,000	0	0	75,000	0	225,000
Suspense receipt of consumption tax		0	0	0	0	0	3,750	0	3,750	0	0	3,750	0	11,250
Cost of presses sold		0	0	0	0	50,000	50,000	0	0	0	50,000	0	0	150,000
Cost of product B sold		0	0	0	0	0	0	0	0	0	0	0	0	0
Cost of product C sold		0	0	0	0	0	0	0	0	0	0	0	0	0
Cost of sales		0	0	0	0	50,000	50,000	0	0	0	50,000	0	0	150,000
Commissions on presses		0	0	0	0	0	5,000	0	0	0	0	2,500	0	7,500
Commissions on product B		0	0	0	0	0	0	0	0	0	0	0	0	0
Commissions on product C		0	0	0	0	0	0	0	0	0	0	0	0	0
Cash-based profit		0	0	0	0	? 50,000	20,000	0	75,000	0	? 50,000	72,500	0	67,500
Cost of self-developed parts/cost of materials	20,000	6,667		6,667		6,667								20,000
Development outsourcing costs	0													0
Newly introduced equipment costs	0													0
Other development costs	0													0
In-house development costs	30,000	5,000	5,000	5,000	5,000	5,000	5,000							30,000
Total development expenses		11,667	5,000	11,667	5,000	11,667	5,000	0	0	0	0	0	0	50,000
Patent filing expenses	0													0
Other initial costs	0													0
Promotion expenses	0													0
Sales staff expenses	0													0
Other expenses	0													0
Suspense consumption tax paid		583	250	583	250	3,083	3,000	0	0	0	2,500	125	0	10,375
Expenses paid (tax included)		583	250	583	250	3,083	3,000	0	0	0	2,500	125	0	10,375
Balance (1)		? 12,250	? 5,250	? 12,250	? 5,250	? 64,750	15,750	0	78,750	0	? 52,500	76,125	0	18,375
Funds raised	100,000	100,000												100,000
Refunded consumption tax								4,000						4,000
Cash receipt (2)		100,000	0	0	0	0	0	4,000	0	0	0	0	0	104,000
Cash outlay (consumption tax/income tax paid)								0						0
Repayment of loans payable													100,000	100,000
Interest expenses													3,000	3,000
Other repayment														0
Total cash outlay (3)		0	0	0	0	0	0	0	0	0	0	0	103,000	103,000
Total cash flow ((1) + (2) - (3)) = Cash balance		87,750	82,500	70,250	65,000	250	16,000	16,000	98,750	98,750	46,250	122,375	19,375	19,375
Balance of short-term loans payable		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	0	0
Balance of long-term loans payable														0
Total amount of loans payable		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	0	0

*This cash flow table shows the amount of funds raised and balances of loans payable for the new business. The amount of funds raised and repayment plans for the existing business are separately examined.

Magnesium Processing Equipment Business Cash Flow

(1) Company's business plan

(Unit: 1,000 yen)

	Nov. 20XX	Dec. 20XX	Jan. 20XX	Feb. 20XX	Mar. 20XX	Apr. 20XX	May 20XX	Jun. 20XX	Jul. 20XX	Aug. 20XX	Sep. 20XX	Oct. 20XX	Next year	Third year	Fourth year	Fifth year
Accumulated sales volume	15	15	15	15	25	25	25	25	25	25	25	25		55	95	145
Monthly sales volume					10									10	30	40
Sales of presses	0	0	0	0	150,000	0	0	0	0	0	0	0	0	150	450,000	600,000
Accumulated sales volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly sales volume														0	0	0
Sales of product B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Accumulated sales volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly sales volume														0	0	0
Sales of product C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net sales	0	0	0	0	150,000	0	0	0	0	0	0	0	0	150,000	450,000	600,000
Suspense receipt of consumption tax	0	0	0	0	7,500	0	0	0	0	0	0	0	0	7,500	15,000	30,000
Cost of presses sold	0	0	0	100,000	0	0	0	0	0	0	0	0	0	100,000	300,000	400,000
Cost of product B sold	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cost of product C sold	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cost of sales	0	0	0	100,000	0	0	0	0	0	0	0	0	0	100,000	200,000	400,000
Commissions on presses	0	0	0	0	5,000	0	0	0	0	0	0	0	0	5,000	15,000	20,000
Commissions on product B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commissions on product C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cash-based profit	0	0	0	100,000	145,000	0	0	0	0	0	0	0	0	45,000	90,000	180,000
Cost of self-developed parts/cost of materials														0		
Development outsourcing costs														0		
Newly introduced equipment costs														0		
Other development costs														0		
In-house development costs														0		
Total development expenses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Patent filing expenses														0		
Other initial costs														0		
Promotion expenses														0		
Sales staff expenses														0		
Other expenses														0		
Suspense consumption tax paid	0	0	0	5,000	250	0	0	0	0	0	0	0	0	5,250	10,750	21,000
Expenses paid (tax included)	0	0	0	5,000	250	0	0	0	0	0	0	0	0	5,250	10,750	21,000
Balance (1)	0	0	0	105,000	152,250	0	0	0	0	0	0	0	0	47,250	94,250	189,000
Funds raised	100,000													100,000	0	0
Refunded consumption tax														0	0	0
Cash receipt (2)	100,000	0	0	0	0	0	0	0	0	0	0	0	0	100,000	100,000	200,000
Cash outlay (consumption tax/income tax paid)		4,875						2,250						7,125	4,250	9,000
Repayment of loans payable												100,000		100,000		
Interest expenses												3,000		3,000		
Other repayment														0		
Total cash outlay (3)	0	4,875	0	0	0	0	0	2,250	0	0	0	103,000	110,125	4,250	9,000	
Total cash flow ((1) + (2) - (3)) = Cash balance	119,375	114,500	114,500	9,500	161,750	161,750	161,750	159,500	159,500	159,500	159,500	56,500	56,500	246,500	626,500	1,386,500
(The above table assumes a case in which the company needs additional 100 million yen in funding for operating costs.)																
Balance of short-term loans payable	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	0	0		
Balance of long-term loans payable													0	0	0	0
Total amount of loans payable	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	0	0	0	0

*This cash flow table shows the amount of funds raised and balances of loans payable for the new business. The amount of funds raised and repayment plans for the existing business are separately examined.

Magnesium Processing Equipment Business Cash Flow

(2) Conservative scenario

Unit price (thousand yen)	Sales	Cost	Gross margin	Commissions
Presses	15,000	10,000	5,000	500
Product B	0	0	0	0
Product C	0	0	0	0

(Unit: 1,000 yen)

Advance payment of 75 million yen from Company X Balance of 75 million yen to be paid by Company X

	Budget/Funds raised	Nov. 20XX	Dec. 20XX	Jan. 20XX	Feb. 20XX	Mar. 20XX	Apr. 20XX	May 20XX	Jun. 20XX	Jul. 20XX	Aug. 20XX	Sep. 20XX	Oct. 20XX	Current fiscal year
Accumulated sales volume		0	0	0	0	0	10	10	10	10	10	10	10	
Monthly sales volume							10							10
Sales of presses		0	0	0	0	0	75,000	0	75,000	0	0	0	0	150,000
Accumulated sales volume		0	0	0	0	0	0	0	0	0	0	0	0	
Monthly sales volume														0
Sales of product B		0	0	0	0	0	0	0	0	0	0	0	0	0
Accumulated sales volume		0	0	0	0	0	0	0	0	0	0	0	0	
Monthly sales volume														0
Sales of product C		0	0	0	0	0	0	0	0	0	0	0	0	0
Net sales		0	0	0	0	0	75,000	0	75,000	0	0	0	0	150,000
Suspense receipt of consumption tax		0	0	0	0	0	3,750	0	3,750	0	0	0	0	7,500
Cost of presses sold		0	0	0	0	50,000	50,000	0	0	0	0	0	0	100,000
Cost of product B sold		0	0	0	0	0	0	0	0	0	0	0	0	0
Cost of product C sold		0	0	0	0	0	0	0	0	0	0	0	0	0
Cost of sales		0	0	0	0	50,000	50,000	0	0	0	0	0	0	100,000
Commissions on presses		0	0	0	0	0	5,000	0	0	0	0	0	0	5,000
Commissions on product B		0	0	0	0	0	0	0	0	0	0	0	0	0
Commissions on product C		0	0	0	0	0	0	0	0	0	0	0	0	0
Cash-based profit		0	0	0	0	? 50,000	20,000	0	75,000	0	0	0	0	45,000
Cost of self-developed parts/cost of materials	20,000	6,667		6,667		6,667								20,000
Development outsourcing costs	0													0
Newly introduced equipment costs	0													0
Other development costs	0													0
In-house development costs	30,000	5,000	5,000	5,000	5,000	5,000	5,000							30,000
Total development expenses		11,667	5,000	11,667	5,000	11,667	5,000	0	0	0	0	0	0	50,000
Patent filing expenses	0													0
Other initial costs	0													0
Promotion expenses	0													0
Sales staff expenses	0													0
Other expenses	0													0
Suspense consumption tax paid		583	250	583	250	3,083	3,000	0	0	0	0	0	0	7,750
Expenses paid (tax included)		583	250	583	250	3,083	3,000	0	0	0	0	0	0	7,750
Balance (1)		? 12,250	? 5,250	? 12,250	? 5,250	? 64,750	15,750	0	78,750	0	0	0	0	? 5,250
Funds raised	100,000	100,000												100,000
Refunded consumption tax									4,000					4,000
Cash receipt (2)		100,000	0	0	0	0	0	0	4,000	0	0	0	0	104,000
Cash outlay (consumption tax/income tax paid)									0					0
Repayment of loans payable													35,000	35,000
Interest expenses													3,000	3,000
Other repayment														0
Total cash outlay (3)		0	0	0	0	0	0	0	0	0	0	0	0	38,000
Total cash flow (1) + (2) - (3) = Cash balance		87,750	82,500	70,250	65,000	250	16,000	16,000	98,750	98,750	98,750	98,750	60,750	60,750

Balance of short-term loans payable														
Balance of long-term loans payable		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	65,000	65,000
Total amount of loans payable		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	65,000	65,000

*This cash flow table shows the amount of funds raised and balances of loans payable for the new business. The amount of funds raised and repayment plans for the existing business are separately examined.

Magnesium Processing Equipment Business Cash Flow

(2) Conservative scenario

(Unit: 1,000 yen)

	Nov. 20XX	Dec. 20XX	Jan. 20XX	Feb. 20XX	Mar. 20XX	Apr. 20XX	May 20XX	Jun. 20XX	Jul. 20XX	Aug. 20XX	Sep. 20XX	Oct. 20XX	Next year	Third year	Fourth year	Fifth year
Accumulated sales volume	10	10	10	10	15	15	15	15	15	15	15	15		45	85	135
Monthly sales volume					5								5	30	40	50
Sales of presses	0	0	0	0	75,000	0	0	0	0	0	0	0	75,000	450,000	600,000	750,000
Accumulated sales volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly sales volume													0	0	0	0
Sales of product B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Accumulated sales volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monthly sales volume													0	0	0	0
Sales of product C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net sales	0	0	0	0	75,000	0	0	0	0	0	0	0	75,000	450,000	600,000	750,000
Suspense receipt of consumption tax	0	0	0	0	3,750	0	0	0	0	0	0	0	3,750	7,500	15,000	30,000
Cost of presses sold	0	0	0	50,000	0	0	0	0	0	0	0	0	50,000	300,000	400,000	500,000
Cost of product B sold	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cost of product C sold	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cost of sales	0	0	0	50,000	0	0	0	0	0	0	0	0	50,000	100,000	200,000	400,000
Commissions on presses	0	0	0	0	2,500	0	0	0	0	0	0	0	2,500	15,000	20,000	25,000
Commissions on product B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Commissions on product C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cash-based profit	0	0	0	25,000	72,500	0	0	0	0	0	0	0	22,500	45,000	90,000	180,000
Cost of self-developed parts/cost of materials													0			
Development outsourcing costs													0			
Newly introduced equipment costs													0			
Other development costs													0			
In-house development costs													0			
Total development expenses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Patent filing expenses													0			
Other initial costs													0			
Promotion expenses													0			
Sales staff expenses													0			
Other expenses													0			
Suspense consumption tax paid	0	0	0	2,500	125	0	0	0	0	0	0	0	2,625	5,750	11,000	21,250
Expenses paid (tax included)	0	0	0	2,500	125	0	0	0	0	0	0	0	2,625	5,750	11,000	21,250
Balance (1)	0	0	0	52,500	76,125	0	0	0	0	0	0	0	23,625	46,750	94,000	188,750
Funds raised													0	0	0	0
Refunded consumption tax		0						0					0	0	0	0
Cash receipt (2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cash outlay (consumption tax/income tax paid)		3,750						1,125					4,875	1,750	4,000	8,750
Repayment of loans payable												65,000	65,000			
Interest expenses												1,950	1,950			
Other repayment													0			
Total cash outlay (3)	0	3,750	0	0	0	0	0	1,125	0	0	0	66,950	71,825	1,750	4,000	8,750
Total cash flow (1) + (2) - (3) = Cash balance	60,750	57,000	57,000	4,500	80,625	80,625	80,625	79,500	79,500	79,500	79,500	12,550	12,550	57,550	147,550	327,550
Balance of short-term loans payable																
Balance of long-term loans payable	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	0	0	0	0
Total amount of loans payable	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	0	0	0	0

*This cash flow table shows the amount of funds raised and balances of loans payable for the new business. The amount of funds raised and repayment plans for the existing business are separately examined.

(6) Intellectual Asset-Based Management Evaluation Financing Checksheet Patent Rights Edition

1. Check for profitability

Checked items	Criteria	Judgment and grounds
To examine business profitability (organizational assets) in all aspects	Cash flow stability	<ul style="list-style-type: none"> · Are the buyers stable? · Is the company's sales volume and sales plan appropriate? · Major Electronic Manufacturer X is a stable buyer. · The company plans to receive the first order for ten machines and the second order for five machines from Company X. The sales plan is based on the volume of orders placed. Demand from companies other than Company X is estimated conservatively.
	Marketability (Customers and their needs)	<ul style="list-style-type: none"> · Does the company have clear customer targets? · Do the company's products match the needs of its customers? · Is the target market size large enough, compared with its sales plan? · The company targets major electronic manufacturers. · They match the needs of press work for magnesium products. · The market is estimated to be worth at least 5 to 10 billion yen.
	Underlying assumptions for income and expenditure plan	<ul style="list-style-type: none"> · Is the company's unit sales price at an adequate level? · Is its manufacturing unit price at an adequate level? · Are development and equipment expenses at an adequate level? · Are promotion expenses at an adequate level? · Are maintenance expenses at an adequate level? · The unit sales price is agreed by Company X. · The manufacturing unit price, based on accumulated costs, is at an adequate level. · Development expenses is below the level of labor costs plus parts costs according to the flow chart. · No promotion expenses. · Maintenance expenses are based on actual costs.
	Balance with fundraising efforts	<ul style="list-style-type: none"> · Does the amount of funds raised conform with the amount for use? · Does the company's cash management secure enough financial resources to repay? · To be recoverable from sales of 15 machines to Company X. · Fifty million yen in funding for development and fifty million for operating costs, for a total of 100 million yen.

2. Intellectual property due diligence

Checked items	Criteria	Judgment and grounds
Examination of intellectual property rights (organizational assets)	Validity of patent rights	<ul style="list-style-type: none"> · Do the patent rights belong to the company? · Have the patent rights been registered? · Has a pledge been established on the patent rights? · Do the patent rights have a long enough period of validity? · The patent rights are all belong to SK. · The major two patents have been established as patent rights. · They are not pledged as collateral. · They are valid for 12 years. Annual fees for 10 years have been paid for the patents.
	Patent litigation	<ul style="list-style-type: none"> · Have any requests for a trial for patent invalidation been filed? · Have any patent infringement lawsuits been filed against the company's products? · No request for a trial for patent invalidation has been filed. · No patent infringement lawsuit has been filed.
	Power of patent rights	<ul style="list-style-type: none"> · Does the patent cover core technologies and features of the products? · Has a patent been granted by the patent office of a country (or region) where the products are sold? · Are the patent rights sufficient to suspend the sales of counterfeit goods and similar products? · The core technologies of the products have been patented. · The company sells its products only in Japan. · SK's technologies have been patented and are therefore sufficient to suspend the sales of counterfeit machines.
	Liquidity of patent rights	<ul style="list-style-type: none"> · Is it a co-owned patent? · Does the patent comprise most of the know-how that has not been patented? · Are the contract distributors and manufacturers able to sustain their business without the company's technologies and patents? · Are competitors' technologies and patents similar to those of the company? Do the company's technologies and patents have advantages over them? · · · are covered by the patents. · · other companies. But that will prevent it from improving yield rate and Company X will have problems. · · struggling with low yield rate. This gives SK a technological advantage over Company T.

3. Examination of intellectual property evaluation reports

Checked items	Criteria	Judgment and grounds	
Examination of third-party valuation of the company's technological and business advantages (organizational assets)	Valuator	<ul style="list-style-type: none"> Does he/she have sufficient ability and enough experience? 	<ul style="list-style-type: none"> Valuator P has two years of experiences in appraisals for banks.
	Valuation purpose	<ul style="list-style-type: none"> Has the valuation been made in light of a financial institution's viewpoint? 	<ul style="list-style-type: none"> The appraisals provided by Valuator P are intended for banks and are in line with financial concepts.
	Valuation method	<ul style="list-style-type: none"> Has the DCF method (or equivalent methods) been used? 	<ul style="list-style-type: none"> The DCF method applied.
	Patent rights valuation	<ul style="list-style-type: none"> Have the validity of the patent rights been examined? Have competitors' patents been researched? Has information on the progress of the patent rights been checked? Have any comments been made about issues surrounding acquisition of patent rights? 	<ul style="list-style-type: none"> The patent attorney, a partner of the valuator, has checked the validity of the patent rights and competing patents. Information on progress and the completion of annual fee payments have been confirmed. The valuator commented that there is no barrier to the acquisition of patent rights.
	Technology valuation	<ul style="list-style-type: none"> Has the target market for the technology been researched? Has any information on similar technologies been presented? Have the features of the technology been examined? 	<ul style="list-style-type: none"> A market research report was compiled based on a METI report. The report shows the search results for similar technologies and the comparisons with those including that owned by Company T. The features of the technology were examined in comparison with the technologies owned by Company T.
	Valuation	<ul style="list-style-type: none"> Are the estimated sales adequate in light of the company's corporate information and the market size? Is the established discount rate reasonable? Is the amount of royalty at an appropriate level? 	<ul style="list-style-type: none"> Estimated sales are based on the company's past performances. The discount rate is at an appropriate level against WACC. The royalty rate is based on the market data.

4. Risk to parties concerned

Checked items	Criteria	Judgment and grounds	
Examination of factors stemming from the developers (human assets)	Manager (Management team)	<ul style="list-style-type: none"> Has he/she drawn up specific business plans and strategies? Does he/she have marketing expertise and the ability to coordinate people to do business? Does he/she have the financial management skills to manage cash flow and so on? 	<ul style="list-style-type: none"> The manager promotes product development that focuses on technological differentiation. He regards it important to have communicate with customers and actively leads sales activities in order to understand customer needs. He has financial management skills and is striving for improvements in financial controls.
	Developer (The company)	<ul style="list-style-type: none"> Do they have development know-how and technological skills? Do they have the sufficient staff and equipment needed for development? Do they have development plans and are they proceeding as planned without delays? Do they have enough funds to complete development? Are the funds raised enough for the planned development? 	<ul style="list-style-type: none"> The president, as a developer, has know-how he obtained in the course of his career. SK already have necessary facilities and staff for pressing work. Development is in progress as planned. No delay has been reported in the development plan. SK relied on its own resources in the past. SK will allocate the fund to be raised in this case for development.
Examination of factors underlying the partners (relationship assets)	Manufacturer (Contracted manufacturer)	<ul style="list-style-type: none"> Do they have enough manufacturing experience and know-how? Do they have the capacity and staff necessary to produce the projected sales volume? Do they bear product liability under the contract with the company? Do they have the capacity to bear financial burdens such as parts inventories and labor costs? 	<ul style="list-style-type: none"> SK, a pressing machine manufacturer, has good performance records. Under the current condition, the company has enough capacity to build up to 20 machines for a half-year period. SK bears product liability. The company will allocate the funds for manufacturing.
	Distributor	<ul style="list-style-type: none"> Do they have sales channels and marketing expertise? Do they have a sales commitment under the contract with the company? Have they presented their sales plan? Do they have enough credibility? 	<ul style="list-style-type: none"> SK sells its products directly to customers. SK has made several proposals for Company X, and is carrying out continuous sales activities. The buyer has presented the number of machines it plans to purchase, but no sale commitment has been signed. The company has a sales plan that primarily focuses on sales to Company X.

5. Competitors

Checked items		Criteria	Judgment and grounds
Examination of business advantages (organizational assets)	Competing products	<ul style="list-style-type: none"> • Are there any competing products in the market? • Are their prices lower than that of the company's products? • Are their qualities superior to that of the company's products? • Who are their target customers? 	<ul style="list-style-type: none"> • Company T's products are already available in the market. • Company T's products are priced higher than SK's. • Company T's products are superior to SK's in terms of yield rate but inferior to SK's in terms of pressing speed. • Company T targets electronic manufacturers, as does SK. Company T's major clients are competitors of Company X.
	Competitors	<ul style="list-style-type: none"> • Are they superior to the company in terms of sales, company size, or name recognition? • Do the company's products or manufacturing technologies infringe patent rights of other companies including competitors? 	<ul style="list-style-type: none"> • Company T, a major heavy-equipment manufacturer, has credibility in the market. • Company T has already obtained patents in this field of technology, but Company T's technology is different from SK's. SK's technology does not infringe the patents owned by Company T.
	Substitutes	<ul style="list-style-type: none"> • Are there substitutes or existing products that can serve as alternatives to the company's products available in the market? • Are their prices significantly lower than those of the company's products? • Are there any advantages in shifting from substitute 	<ul style="list-style-type: none"> • Pressing work by hand has been available, but there is no pressing machine for mass production. • Production efficiency of the SK's machine is far better than hand work.

(4) Samples of Valuation Reports on Intellectual Properties by an External Institution

We provide a sample report for intellectual asset valuation by an external institution below.

The present valuation consists of the following three chapters:

1. Patent Research
2. Market and Technology Research
3. Valuation

(1) Patent Research shows the results of the survey on the legal status of the patents. (The patent rights are surveyed for imperfections of defects in order to be valid under relevant laws.) (2) Market and Technology Research shows the results of the survey on the business prospects of the technology. (3) Valuation shows the economic value of the intellectual assets. The value appraisal adopts the royalty relief method, based on the prospects for the sales of the business, with a view to the surveys on the patents, the market and the technology.

1. Patent Research

○ Summary of Individual Patent Rights

File No. 1

Application No. 20xx-3533XXX

Registration No. 3948XXX

Up to now, there have been technical problems in processing magnesium due to the difficulty of processing it with conventional pressing machines, as such processing easily causes cracks or further breakages to be generated in the product or degrades the yield of the product.

This invention has been created to solve this problem. The invention relates to a pressing machine that has springs on its lateral surfaces in order to soften vibrations and avoid generating any shock against the magnesium sheet metal it presses.

The invention produces the advantageous effect of enabling the pressing apparatus to securely and easily process magnesium. Hence, it is considered that the patent rights duly constitute the basic patent of the pressing apparatus invented by SK.

File No. 2

Application No. 20xx-4747XXX

Registration No. 1528XXX

In contrast to the patent rights corresponding to File No. 1 above, which relates to an invention of a pressing apparatus, this invention relates to a post treatment method applicable to processed magnesium via a pressing process. Specifically, the invention relates to a method for retaining the

strength of processed magnesium treated with a thermal pressing process after being removed from frames. The invention solves problems by executing a thermal treatment immediately after completing the pressing process. Therefore, it is considered that the patent rights duly constitute the basic patent in combination with the patent cited in File No. 1.

File No. 3

Application No. 20xx-4673XXX

Disclosure No. 20xx-3948XXX

The present invention relates to a method of executing a surface treatment on magnesium. Up to now, due to the generation of projections and recesses on the surface of processed magnesium after the pressing process is completed, it has thus far been necessary to execute surface treatment through such means as grinding.

Unlike any conventional arts, the invention provides a novel method that enables a superficial configuration of pressed magnesium to be formed without generating projections and recesses thereon at all and prevents projections and recesses from being generated during the pressing process.

File No. 4

Application No. 20xx-3743XXX

Disclosure No. 20xx-1923XXX

This invention relates to a method of executing a twisting process for magnesium. There is a critical problem of causing magnesium to become fragile when being processed. In order to enhance the strength of magnesium, the invention executes an additional twisting process for magnesium before it is treated with a pressing process. The invention makes use of this twisting process to solve the above problem concerning magnesium.

File No. 5

Application No. 20xx-3734XXX

Disclosure No. 20xx-1923XXX

This present invention relates to an apparatus for cooling magnesium ingots. Although a thermal treatment is used as a post-treatment during magnesium processing, there has thus far been a problem in that the strength of magnesium is reduced if the cooling time for magnesium is shortened after the thermal treatment is completed. To solve the above problem, the invention corresponding to these patent rights instantly lowers the temperature generated in the thermal treatment.

○Current Situation of Individual Patent Rights

With regard to the current situation of individual patents, including application numbers, application dates, disclosure numbers, disclosure dates, registration numbers, registration dates, and status, please refer to the tables below.

File No.	Application No.	Date filed	Publication No.	Date published
1	Unexamined Patent 20XX-3533XXX	20XX.X.X	Unexamined Patent 20XX-4666XXX	20XX.X.X
2	Unexamined Patent 20XX-4747XXX	20XX.X.X	Unexamined Patent 20XX-4182XXX	20XX.X.X
3	Unexamined Patent 20XX-4673XXX	20XX.X.X	Unexamined Patent 20XX-3948XXX	20XX.X.X
4	Unexamined Patent 20XX-4673XXX	20XX.X.X	Unexamined Patent 20XX-6348XXX	20XX.X.X
5	Unexamined Patent 20XX-3743XXX	20XX.X.X	Unexamined Patent 20XX-1923XXX	20XX.X.X

File No.	Registration No.	Date registered	Title of Invention
1	Registration 3948XXX	20XX.X.X	Pressing apparatus for magnesium ingots
2	Registration 1528XXX	20XX.X.X	Method of executing post treatment after pressing magnesium ingots
3	-	-	Method of executing surface treatment on magnesium (ingots)
4	-	-	Method of twisting magnesium (ingots)
5	-	-	Apparatus for cooling magnesium ingots

File No.	Applicant	Right holder	Status	Annual fees payment	Pledged as collateral
1	SK	SK	Registered	Paid for 10 years	No
2	SK	SK	Registered	Paid for 10 years	No
3	SK	SK	Unexamined	-	-
4	SK	SK	Examination requested	-	-
5	SK	SK	Unexamined	-	-

oResearch on Analogous Patents

As analyzed below, by applying “F terms” and key words, analogous patents were investigated. Note that this search includes patent publications published in 19xx and onward.

*“F terms” as mentioned above corresponds to “search indexes” developed for retrieval computers in order to quickly execute antecedent technical investigations needed for examining

patents. “F terms” are classified per technical field (theme) based on various technical viewpoints.

Search 1

Application tendency of technical field to which SK’s patent belongs and the ten highest-ranked applicants:

Based on retrieving formulas using the “F terms” shown below, we specified the technical field to which SK’s patents belong and then investigated the application tendency in the corresponding technical field and the ten highest-ranked applicants.

The above “F terms” includes those patent groups that can be retrieved from [2FD33 or 5DS45 or 3AG34]

→Total number of retrieved objects: 5903 objects

F-term	:	Contents
2FD33	:	Pressing (1)
5DS45	:	Pressing (2)
3AG34	:	Pressing (3)

Application tendency in the technical field to which SK’s patent belongs was analyzed as shown in Figure 1. Although the total number of the patent applications increased steadily during the period from 19xx up to 20xx, the total number of the patent applications decreased after the peak of 20xx. Approximately 550 patent applications were filed both in 20xx and 20xx. The total number of patent applications during 20xx and 20xx turned out to be extremely low because the filed patent applications were officially disclosed on a date one-and-half-years later than the date the applications were filed, and so the contents of the filed patent applications were held officially without being publicly disclosed.

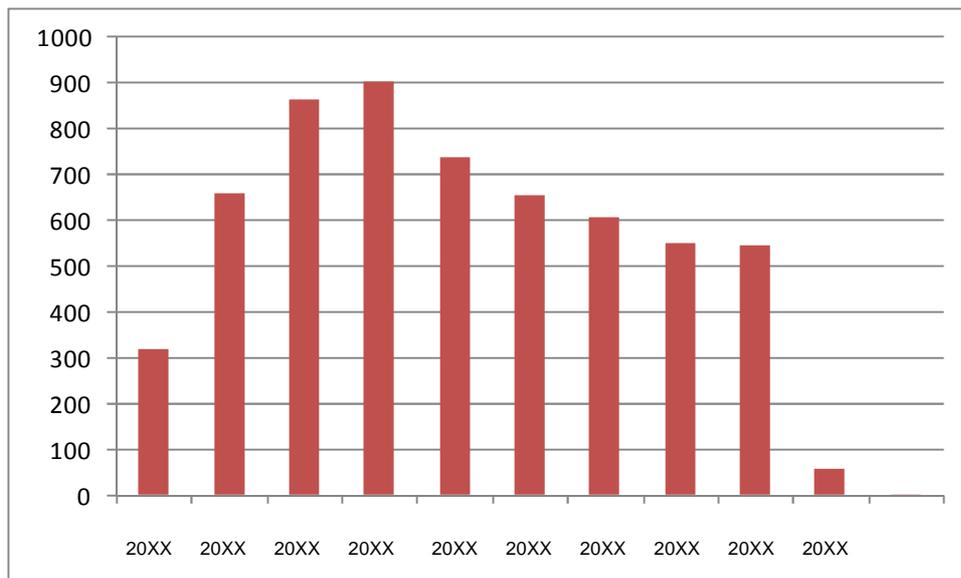


Figure 1 Tendency in the patent applications in the technical field to which SK's patent belongs.

Figure 2 shows the ten highest-ranked companies who applied for patent rights in the technical field to which SK's patent belongs. Figure. 2 further reveals that company T filed 244 patent applications: a number conspicuously larger than that of the applications filed by the rest. It is also apparent that many large manufacturers of machinery filed patent applications.

Rank	Right holder	Number of applications filed
1	Company T	244
2	Company A	147
3	Company B	142
4	Company C	84
5	Company D	79
6	Company E	78
7	Company F	75
8	Company G	71
9	Company H	70
10	Company I	64

Figure 2 Ten highest-ranked companies who filed patent applications in the technical field to which SK's patent belongs

Search 2

The ten highest-ranked companies who have already been entitled to patent rights on magnesium pressing machines:

We further investigated the ten highest-ranked companies, finding those with patent rights for magnesium pressing machines via search 1 by retrieving the following cases. We specified individual patents by initially extracting the patent rights for magnesium followed by eliminating those related to iron, aluminum, plastics, etc.

Although the specific keyword “magnesium” is included in the patent groups that are retrieved by an F-term [2FD33 or 5DS45 or 3AG34], objective patents do not include any of the specific keywords such as “copper, aluminum, iron, foamed polystyrene, plastics, and paper.”

→Total number of retrieved cases: 117

Rank	Right holder	Number of applications filed
1	Company T	50
2	Company B	43
3	Company C	36
4	Company E	31
5	Company A	29
6	Company G	20
7	Company F	19
8	Company D	18
9	Company H	18
10	Company I	18

Figure 3 Ten highest-ranked companies found via Search 2

Figure 3 shows the ten highest-ranked companies who applied for patent rights, found as a result of search 2. Like the preceding search 1, the largest share was held by Company T. It is understood that companies B, C, and E followed Company T in the number of applications for patent rights concerning metallic pressing machines.

Search 3

Patent rights on pressing machines with structures analogous to the patented constitution in the present case:

Based on the search cited below, we specified the following conditions to further analyze the

patents for pressing machines each using springs on lateral surfaces of pressing units.

Of those patent groups retrievable by an F-term [2FD33 or 5DS45 or 3AG34], the objective material includes the designated key-word “magnesium,” but the objective material does not include any of the specific key-words such as “copper, aluminum, iron, foamed polystyrene, plastics, and paper.”

→Total number of retrieved cases: 9 (Refer to the table cited below)

File No.	Publication No.	Application No.	Title of invention	Applicant	Status
1	20XX-279XXX	HXX-084XXX	Mg Pressing machine	Company T	Under examination
2	20XX-301XXX	HXX-111XXX	Structure of Special Press	Company T	Under examination
3	20XX-263XXX	20XX-068XXX	Mg press cutter	Company B	Withdrawn
4	20XX-361XXX	20XX-146XXX	Mg cutter	Company C	Withdrawn
5	Unexamined patent 20XX-4666XXX	Unexamined patent 20XX-3533XXX	Mg alloy pressing device	SK	Registered
6	Unexamined patent 20XX-4182XXX	Unexamined patent 20XX-4747XXX	Post-treatment method after pressing Mg alloy	SK	Registered
7	Unexamined patent 20XX-3948XXX	Unexamined patent 20XX-4673XXX	Mg surface treatment	SK	Unexamined
8	Unexamined patent 20XX-6348XXX	Unexamined patent 20XX-4673XXX	Method of twisting Mg	SK	Examination requested
9	Unexamined patent 20XX-1923XXX	Unexamined patent 20XX-3743XXX	Mg alloy cooling device	SK	Unexamined

Of the nine objectives retrieved via the above retrieval process, judging from the contents, it appears that the arts proposed by applicants B and C for patent rights are both not very analogous. With regard to the two cases of patent applications in competition with company T above, we analyzed the analogousness of the above two cases against the patented art entitled to SK.

○Patent rights owned by company T

Patent Application No. HXX-084XXX

Company T is entitled to exercise this patent, and like SK, it has been engaged in the development and production of magnesium pressing machines. Company T's patent rights are solely related to an invention of the structure for a device capable of adjusting conventional pneumatics. Therefore, the patent owned by company T is completely different from the patent owned by SK, as the patented art entitled to SK mainly comprises springs. In other aspects, the device patented for company T is structurally analogous to the device invented by SK.

Patent Application No. HXX-111XXX

Like the above case, this patent belongs to company T. This patent application comprises contents of an art applicable to all metallic materials, not only magnesium. This patent application is still under examination. However, since the applicable scope of this invention is too extensive, it is suggested that the applicable contents may be restricted by an amendment. This invention relates to a device that makes use of specific metals, such as aluminum or magnesium, for a versatile range of uses.

As described above, Company T's patented art is structurally quite analogous to the one invented by SK, and thus, both of the patented arts can become competitive with each other. However, in view of the fact that SK has successfully preceded others in achieving improved inventions in succession, we believe that SK has an advantageous position in that it has properly defended its own technology with a number of patent rights and accumulated technologies. On the other hand, company T has filed a large number of applications for patents related to their inventions concerning metallic pressing devices. Since company T has been manufacturing various kinds of metallic pressing devices, it is conceivable that a large number of its patent applications thus far filed in Japan correlate to the facts above.

2. Market and Technology Research

(1) Market Research

○Market Trends in Magnesium Pressure Forming

We referred to 'Strategies in Magnesium Industry' compiled by Ministry of Economy of Industry in 20XX, in order to proceed with a survey on market trends in the magnesium industry.

The material we referred to shows that the sales volume of parts made of magnesium was worth some 60 billion yen in 20XX (conventional fiscal year, from the beginning of April until end of March). As for the breakdown of sales, automobile-related parts account for more than 50% in terms of weight, but in yen terms, cases (or frames) occupy more than 50%, as the unit prices of automobile-related parts are inexpensive. Among the cases (or frames), about 50% are those for mobile phones and laptops and the majority of the products are of rolling type.

In the current market for formed products made from magnesium, almost all of the products are of cast metals (die casting, thixomolding: 43 thousand tons). Future market growth is expected in forging and rolling. Many forging manufacturers operate in domestic markets and the number of such companies tends to surpass that of rolling and pressing manufactures. Domestic and overseas processing manufacturers are conducting trials with an eye toward mass production using such techniques as processing extended magnesium material using heat and twin-roll direct rolling etc.

The material mentioned above describes the following contents as strategies for the future markets of magnesium press forming.

(1) Promotion of Lightweight Material for General Use

It is recommended that proactive measures should be taken in the magnesium industry itself to find uses where more demand can be explored for magnesium with such features as low weight and relative stiffness. It is also recommended that mainly industry associations take measures to promote the dissemination of information on magnesium to the end-users (reinforcing actions for removing misunderstandings on magnesium).

(2) Promotion of use of Magnesium with Attention Given to Features other than low Weight

It is necessary to expand the matching of magnesium with new uses that capitalize on the excellent features thereof. It is also necessary to promote the organization of fundamental data on these features and to develop methods for experiments and evaluation and so on.

- Vibration damping property: it is expected that magnesium could be utilized in engine covers or hoods of cars, taking advantage of the material property of absorbing vibration energy.
- Shield performance for electromagnetic waves: increased use of magnesium for cases and frames of cellular phones and personal computers.

- Machinability for cutting (resistance): easy-cutting for all types of parts, easy to save processing time, to reduce power, and to extend the life of tools.

(3) Overcoming Inherent Weaknesses of Magnesium and Strengthening International Competitive Power

In order to further explore new demands of the magnesium-related market, it is necessary to conquer such fundamental weaknesses as alloy technology, implement countermeasures to corrosion and conjugation, increase the cost competitiveness of rolling processing, and thereby improving the basic features of magnesium. In addition, it is also necessary to reinforce the fundamentals of the global competitive power of the magnesium industry in our country, with a view toward China, which produces the largest amount of unwrought magnesium products in the world and where the production of all-purpose magnesium casting products is increasing sharply.

(4) Measures for Reducing Greenhouse Gasses

SF₆ is currently used as a cover gas during magnesium processing, but it is recommended that by way introducing certain measures, including tax benefits, an alternative gas and processing methods without the use of cover gas should be explored.

(5) Structuring Social Systems to Promote the Utilization of Lightweight Materials Including Magnesium

We need to take measures toward structuring social systems whereby improvements are made in automobile fuel efficiency in response to society's request for lightweight materials, together with a view to such measures as utilization of other lightweight materials.

(6) Securing Magnesium Resources and Structuring Recycling Circulation

The supply of magnesium resources is highly dependant on one country, and therefore, from medium- and long-term view points, measures need to be taken to secure the resources in advance. It is expected that there will be an increasing amount of magnesium scraps in cities and so it is necessary to promote structuring systems whereby the anti-corrosion quality of magnesium would not deteriorate due to mixing with such impurities as nickel, copper and iron.

○Market trends of Magnesium Material

Market trends in the world-wide magnesium industry are estimated as follows.

It is expected that the dominant position of China on the supply and demand in the magnesium market in the world will continue in the future. In 20XX, the factory of N company was closed and subsequently since 19XX, several factories in the Western countries have been forced to close. Only six primary magnesium factories in countries other than China remain, and among those six, two

factories are producing magnesium for their own use. As a result, production volume in China amounted to 77% of the entire production in the world, some 860 kilo-tons.

All of the new magnesium projects for which a feasibility analysis was conducted or actual implementation was commenced were suspended and many remain so, as no economic advantages are recognized in such projects, due to competition with China. The only example of an alternative supply source that we could point out is Kouilou magnesium project in the Republic of Congo. In the suburbs of Pointe Noire, there is a factory that produces 72 kilo-tons of primary magnesium per year, together with oxidized potassium. However, the production volume will reach a level of 200 kilo-tons per year or more in 20XX, and the level will continue in 20XX and 20XX.

Analysis is made on the price trends of magnesium alloy as follows.

In the US, the price of magnesium ingots was 2.65 dollars per kilogram in 20XX. (Hereinafter, the price is expressed per kilogram. If the price is expressed in dollars per lb (pound), the multiplier of 2.2 could be used to convert the price into dollars per kilogram), which is 1.8 times that of pure aluminum, which was 1.43 dollars. However, taking into account the relative unit weight (Mg: 1.8, Al: 2.7), the price would be 1.2 times and as the Young Coefficient (4,470kg/mm²) for magnesium is small, and in order to gain the same stiffness as aluminum (7,000kg/mm²), more weight would need to be added to magnesium to compensate. Thus, as a result of this sort of adjustment, on a theoretical basis, the price of magnesium required to compete with aluminum and galvanized steel plates (1.43 dollars and 0.33 dollars respectively), would be presumed to be at 1.59 to 2.43 dollars and at 0.93 dollars.

oMarket Size of Magnesium Molding and Needs for SK's products

(Market Size)

In the Magnesium Industry Strategies compiled by the Ministry of Economy, Trade and Industry, the total value of the magnesium molding market is estimated to be 60 billion yen (20XX). The data used as the basis for this estimate is more than five-years old, but if we assume that the market is growing at 10% annually, it is possible that the market could expand to a level of about 90 billion yen. The figures in the statistics include not only the press molding market but also the forging molding market, and so if we assume the growth rate at 10% for the press molding market, SK's estimate of 10 billion yen for the market size is considered to be valid.

(Need for SK's products)

As the following shows, according to the 20XX Magnesium Industry Report, companies producing automobile parts, laptops and cellular phones are the main users of magnesium-molded products.

On the other hand, partly due to its prices, which are higher than alternative metals such as aluminum, it is considered difficult for magnesium-molded articles to be utilized for all-purpose and inexpensive products.

Trends in the use of magnesium-made parts

- (1) Parts for automobiles
- (2) Laptops
- (3) Cellular phones

Needs for the use of magnesium by primary set manufacturers

- (1) Motor Company T
- (2) Motor Company N
- (3) Motor Company H
- (4) Electric Company T
- (5) Electric Company M

Source: Magnesium Industry Report 20XX

○Competitors

The following manufacturers are listed as primary ones according to the Magnesium Industry Report 20XX. The list includes companies whose main business is forging molding, and Company T is considered to compete with SK in the press processing field.

1. Company T
2. TKB
3. TSI
4. YF
5. MDK

(2) Technology Research

○The features of SK's technology and its superiority

According to the information from SK, the following two points are raised as the characteristics of SK's technology.

- A low rate of defects in the forming process.
- It is easy to make surface processing

SK's magnesium press device uses special springs to mitigate shocks on the magnesium-side of the device. SK obtained patents for this technology and it is presumed that the technology is superior with respect to know-how. Although not mentioned in the patents, the skills of experienced

craftsmen are required to finish springs, and such skills are the result of the accumulation of experiences by the president and the staff of SK.

Also, SK has developed a heat treatment that preserves strength after press processing, and as in the treatment for the lateral surface of the press, the process constitutes an important element for the maintenance of quality. This heat treatment enables easy surface processing and the treatment is useful in the post-process steps of manufacturing, such as painting.

(Comparison with traditional technology)

	SK	Forging	Manual Work
Strength	Strength is kept by using springs.	No breaks for there is no press processing.	Deviations in Strength. High rate of defects
Small lots	Possible by forming pressed metal forms	The cost for forged metal forms is too expensive to allow for small lot production.	Possible for small lots.
Surface treatment	Surface treatment allows easy painting	Rough surface needs be taken care of by polishing etc.	Rough surface needs be taken care of by polishing etc.

○Technology Competing with SK's

As mentioned above, Company T's technology, which it has already applied in manufacturing products, is in direct competition with SK's press processing devices. Even during the patent research, two patents were detected for Company T. Although there is a difference in technology between SK and Company T, with a view to the size and financial power of Company T, there is a possibility that Company T will proceed with technological development to catch up with the superiority of SK's technology. It is necessary to continue paying attention to future developments as well to the trends in products and technology of Company T.

(Outline of Company T)

Trade Name: Company T Limited

Address: Ota ward Tokyo Metropolitan

Industry: Manufacturing and development of press processing devices

Capital: One billion yen

Establishment: 19XX April

Clients: Major electric companies, automobile manufacturers

Fiscal terms	Sales (million yen)	Profits (million yen)
(MM/20XX)	68,000	1,350
(MM/20XX)	69,000	1,500
(MM/20XX)	66,000	1,857

(Comparative analysis between Company T and SK)

	Company T	SK
Name	BY-TC	ALP 1200
Subject for treatment	Aluminum, magnesium	Only for magnesium
Press structure	Air pressure press	Spring press
Price	25 million yen	15 million yen
Sales record	20 lots	-
Patents	2 Two applications filed	5 Two patent rights registered Three applications filed

The specifications of Company T's device are similar to those of SK's device, except that the press structure differs, as mentioned above. Under the current situation, Company T utilizes the aluminum press processing equipment also for processing magnesium and the equipments cannot exclusively process magnesium. On the other hand, SK's equipments are made exclusively for magnesium, and the yield could be raised incrementally. The processing technology for enhancing precision is based on the know-how accumulated by the president and staff of SK, and thus it may not be possible for Company T to develop similar technology.

However, it is presumed from their patent trends that Company T is proceeding with the development of equipment for magnesium, and, under their more substantial research and development, there is a possibility that SK's technological superiority may disappear. Attention needs be paid to Company T as there is the possibility that they may make a substantial entry into the magnesium market.

3. Evaluation of Economic Value

(1) Selection of Valuation Method and Basic Concept

- Selection of Specific Valuation Method

We used the Royalty Relief Method, a specific appraisal method under the income approach. This method calculates the royalty costs the company would have to pay to a third party if, hypothetically, the targeted intellectual property was licensed from the third party, by estimating these costs according to licensing agreements for similar products. Specifically, it uses the company's business plan to estimate the royalties (licensing fees) the company would have to pay if it did not own the patent rights that it needs to produce the products. It then values the intellectual property rights by calculating the capitalized value of the royalties.

$$\text{Economic value of the intellectual property (trademark rights)} = \text{Present value of the estimated royalty income}$$

- Valuation period

As described in (1) Survey on Patents, among these patents, we consider Patent Number 3948XXX and Patent Number 1528XXX to constitute so-called basic patents. In this report, the duration of Patent Number 3948XXX (12 years; until 20XX) is chosen as the subject period of time for evaluation. The intellectual properties other than the patents will continue to exist after the patents expire. However, from a conservative point of view, we set the evaluation term within the duration of the patents.

- Effective Tax Rate

To be set at 40%

(2) Specific Method for Calculation

- Estimated Royalty Income

Royalty income, which serves as the basis for the assessment, was calculated by multiplying the projected sales of the business related to intellectual property (trademark rights) by the estimated royalty rate.

(1) Scenario Based on Revised Projections

Based on the information gained during the interview by the appraiser, it was determined that the projected sales were to be set at the average of projected sales for the next three terms.

Projected royalty income = average of revised sales projections multiplied by the estimated royalty rate

○ Assumed Royalty Rate

As for the assumed royalty rate, which is the multiplier to be applied to the projected sales volume, we assume that the rate falls in the category similar to the field of “Special Industrial Mechanicals” as referred to in “Practicing Rates, 5th Version,” issued by the Invention Association (hereinafter called the “Practicing Rate”). The technological field of “Special Industrial Mechanicals” is classified as F296 according to the classification of the Japan Technology Industrial Classification, and F296 includes casting-related devices (equipment) manufacturing technology, etc.

The statistics on the practicing rates in this technological field are as follows:

	Average	Mode	Median
With Initial Payment	5.2%	5.0%	5.0%
Without Initial Payment	6.5%	2.0%	4.0%

Data Outline: Term of Data: 20XX to 20XX

Number of samples with initial payment: 57 samples

Number of samples without initial payment: 45 samples

Referring to the above data on the rates, we set the practicing rate for the subject evaluation at 6.5%, which is the average of the rates without initial payments. There are cases where opinions may vary as to whether the practicing rate is that subject only to the royalty of the patents or is the rate subject to the royalty of patents and other factors, such as technology and know-how. Here, the above rate is assumed as the rate applied to the royalty that includes technology and know-how.

Assumed Royalty Rate = 6.5%

(3) Calculation of Expected Rate of Return

Calculation of WACC

WACC was calculated with the following formula.

$$WACC = \frac{D}{D + E} \times (1 - T) \times Rd + \frac{E}{D + E} \times Re$$

D: Interest-bearing debt
E: Shareholders’ equity
T: Effective tax rate
Rd: Debt cost

Re: Cost of shareholder's equity

$$Re = Rf + \beta \{ E(Rm) - Rf \}$$

Re	Expected return on investment
Rf	Risk free rate
β	Value of β This indicates changes in the returns on stocks in proportion to stock market fluctuations.
$E(Rm)-Rf$	Market risk premium

WACC was calculated to be 4.68%.

○ Calculation of Expected Rate of Return on Intellectual Property

The expected rate of return indicated by WACC shows the rate for the whole company and accordingly it may differ from that for intellectual property. However, subtracting tangible assets from the company-wide value gives the value of intangible assets, including intellectual property rights.

We figured out the expected return on intellectual property in light of that on tangible assets. Following our estimation of the liquidity of the intellectual property, we calculated an additional individual liquidity premium of 2.2% to 5.2% to WACC.

Expected rate of return on intellectual property
= WACC + Individual premium
= WACC + 2.2% ~ 5.2%
= 4.68% + 2.2% ~ 5.2%
= 6.88% ~ 9.88%

As a result, we set the expected rate of return at levels ranging from 6.88 to 9.88%.

(4) Assessed Value

As the result of the above evaluation, the economic value of the present intellectual assets (patent rights) is appraised at 87.792 to 106.276 million yen.

Appraised Value
88 million to 106 million*

*Rounded off to the nearest million.

For details of the evaluation, please refer to Attachment 1

Attachment 1

Discount rate for discounted cash flow method: 6.88%

Evaluation of Economic Value: Royalty Relief Method

Revised Scenario

1 Calculation of assumed royalty

	Sales for devices	Assumed royalty rate	Assumed royalty amount
FY20XX	150,000	6.5%	9,750
FY20XX	225,000		14,625
FY20XX	450,000		29,250

Assumed royalty amount in Year 20XX and thereafter (= for FY20XX) 29,250

Effective tax rate 40.0%

Assumed net cash flow (= $\times (1 -)$) 17,550

2. Value of the present patent

Expected rate of return 6.88%

Term for evaluation (residual term of the present patent) 12

Value of the present patent rights 106,276

Discount rate for discounted cash flow method: 9.88%

Evaluation of Economic Value: Royalty Relief Method

Revised Scenario

1. Calculation of assumed royalty

	Sales for devices	Assumed royalty rate	Assumed royalty amount
FY20XX	150,000	6.5%	9,750
FY20XX	225,000		14,625
FY20XX	450,000		29,250

Assumed royalty amount in Year 20XX and thereafter (= for FY20XX) 29,250

Effective tax rate 40.0%

Assumed net cash flow (= $\times (1 -)$) 17,550

2. Value of the present patent

Expected rate of return 9.88%

Term for evaluation (residual term of the present patent) 12

Value of the present patent rights 87,792

Case Study (3)

Credit Approval Process by Evaluation of
Intellectual Asset-Based Management
Brand Power (Trademark Rights Edition)

3 . Case Study 3

Credit Approval Process by Evaluation of Intellectual Asset-Based Management (Brand Power [Trademark Rights Edition])

(About this case study)

In this case study, we will make decisions on financing for a fictitious model company, based on the company's financial data and information provided during interview sessions, using business flow charts and manuals for IP evaluation-based finance. Please note that the case study contents are intended for training purposes and the brand names and their targeted markets are not based on verified facts.

Case

Our client Mountain View CO. Ltd., (hereinafter referred to as MV), a start-up outdoor product wholesaler, was founded five years ago by its current president, a camping lover who has rich experience in outdoor sports overseas. Helped by their high popularity among young people, outdoor products labeled with the MV logo have taken a growing share of the market. The company's concept, which pursues design excellence and convenience in outdoor products, has been developed by the president together with designers. Instead of manufacturing its own products, the company outsources the production of MV-designed goods to affiliated plants. The wholesaler runs advertisements in outdoor magazines every year, carrying out its strategy to gain wider recognition for the company and its brand name.

It is considering fundraising, driven by the need for increased operating funds as sales grow, and the president's plan to open an outdoor specialty retail store in Tokyo's major commercial area.

In response to MV's request to our bank, we began an assessment of the company.

(Points of consideration)

MV, in need of additional funding as sales grow, is seeking financing. As the company does not have property to pledge as collateral, the key issue here is that we need additional information for making credit decisions. The most recent balance sheet shows a steep rise in loans payable, caused by mounting inventories and accounts receivable. In consideration of these circumstances, we will assess MV's actual financial balance by evaluating its core intellectual assets, namely its brand power, and make a comprehensive credit decision. The company has no intangible fixed assets, as seen in the following balance sheet. However, it has been raising its brand recognition at a cost of advertising expenses, and MV's trademark rights may have economic value. We will therefore work out the value of the trademark rights by examining its link with other intellectual assets that back the brand power, and use this as supplemental information to make credit decisions.

(Assumptions)

(1) Corporate profile

Company name: Mountain View Co. Ltd.
Establishment: May 20XX
Employees: 25
Capital: 80 million yen
Shareholders: 100% owned by the president
Major clients: Outdoor sports/camping products retailers

(2) Financial information

Balance Sheet

(Unit: thousand)

	The 5th term	The 6th term	The 7th term
Assets			
Cash and deposits	14,000	150,000	110,000
Accounts receivable-trade	55,000	103,000	190,000
Merchandise/finished goods	132,000	212,000	360,000
Other current assets	2,000	7,000	23,000
Current assets	203,000	472,000	683,000
Tangible fixed assets	0	5,000	30,000
Intangible fixed assets	0	0	0
Investments, etc.	4,000	5,000	5,000
Total assets	207,000	482,000	718,000
Liabilities			
Accounts payable-trade	14,000	22,000	24,000
Accounts payable-other	15,000	20,000	16,000
Short-term loans payable	30,000	183,000	322,000
Other current liabilities	24,000	32,000	15,000
Current liabilities	83,000	257,000	377,000
Long-term loans payable	60,000	140,000	210,000
Non-current liabilities	60,000	140,000	210,000
Total liabilities	143,000	397,000	587,000
Shareholders' equity			
Capital stock	50,000	50,000	80,000
Other retained earnings	14,000	35,000	51,000
Total shareholders' equity	64,000	85,000	131,000
Total liabilities and shareholders' equity	207,000	482,000	718,000

Profit and Loss Statement

(Unit: thousand)

	The 5th term	The 6th term	The 7th term
Net sales	435,000	623,000	824,000
Cost of sales	223,000	342,000	475,000
Gross profit	212,000	281,000	349,000
Selling, general and administrative expenses	186,000	241,000	307,000
(Of which, advertising expenses)	82,000	95,000	133,000
Operating income	26,000	40,000	42,000
Non-operating income			
Non-operating expenses	2,000	5,000	13,000
Ordinary income	24,000	35,000	29,000
Extraordinary income	0	0	0
Extraordinary loss	0	0	0
Income before income taxes	24,000	35,000	29,000
Income taxes	10,000	14,000	13,000
Net income	14,000	21,000	16,000
Retained earnings brought forward	0	14,000	35,000
Unappropriated retained earnings	14,000	35,000	51,000

Summary of Interview Sheets, etc.

(1) Simple interview

The company's sales structure and corresponding trademarks are outlined in the Simple Interview sheet. MV's outdoor products are sold under its brand names (trademarks) "Mountain View" and "Rock Moon." The brand power seems to be a key element of its products, attracting consumers and fueling their willingness to buy. Its high-performance outdoor clothing, footwear and bags, sold under its corporate brand "Mountain View," are the major driver of the company's sales. Its rock climbing goods intended for professional climbers, sold under "Rock Moon," target a niche market, and are showing growth in sales.

After having identified MV's sales by brand, as well as each brand's sales by product, we clarified the relationship between brands/products and their sales. Products sold under the above-mentioned two trademarks account for most of the company's sales.

The company-wide profitability does not show any signs of cause for concern, as the gross profit margin for the current term exceeded 40 percent. Although the operating margin was down in the previous fiscal year due partly to MV's recent focus on advertisement, it still is well over five percent. Thus we did not see any significant issues in profitability that might prevent the company from continuing its brand business.

We confirmed MV's need for ¥100 million in funding for mounting operating costs that have been driven by sales growth, and ¥50 million for the development of company-owned outlets, for a total of ¥150 million.

After having made a rough assessment of its funding need and sales profitability, we came to a conclusion that in the course of making a more detailed financing decision, we need to look into the effectiveness of MV's brand power—the financial engine that would spur future sales—in the targeted market.

(For details, see (2) Intellectual Property Search Sheet.)

(2) Intellectual property search

As a result of IPDL search using brand names, MV's brand names "Mountain View" and "Rock Moon" were found. The company has not filed any trademark applications with foreign IP offices. No trademarks other than the above two were found in the IPDL. We confirmed that the company has paid the annual fees necessary for the trademark rights and that its trademarks have already been registered with the JPO.

(For details, see (2) Intellectual Property Search Sheet.)

(3) Intellectual Asset-Based Management Evaluation (Business Prospects) Interview

In accordance with the Intellectual Asset-Based Management Evaluation (Business Feasibility) Interview Sheet, we were informed of the details of the business and its expected revenue. MV's

products target men around 30 who opt for stylish, high-performance products—the high-end segment of the market. This high-end market is estimated to be worth some ¥30 billion.

MV's products, as far as the sales growth the past few years shows, seem to have been accepted in the market despite their prices being about 20% higher than those sold by other companies. MV's rivals, outdoor products giants Company Q and Company K, employ a low-margin, high-turnover policy, which is different from MV's customer segment-focused strategy.

One notable quality of the company manager is seen in his unique marketing strategies, such as competitor-conscious advertisements and building relationships with stores. MV, however, shows a lack of in-depth consideration to its sales budgets, although financial matters are managed by Managing Director Mr. K, an ex-banker, and the president is also good with figures. The company, while providing support services at stores to make customers aware of the functionality of its products, aims to attract consumers' interest through its online membership system.

(For the interview results, see (3) Intellectual Asset-Based Management Evaluation [Business Prospects] Interview Sheet.)

(4) Intellectual property valuation

We requested an IP valuation company to assess MV's two trademark rights. As a result, they were judged to have good value, supported by MV's growth potential and the market size, with an estimated value of anywhere from ¥338 to 363 million. By conducting searches in the trademark register, the valuator confirmed that the two trademarks have been established as trademark rights and they were free from any right of pledge or defects. The designated goods for the trademarks were found to be consistent with MV's products. In addition to this research on the trademark rights, the valuator conducted a close study of the market size and competitors. It pointed out two giant companies as MV's competitors—the same two as those mentioned by the president at the time of interview—and provided detailed explanations of their shares in the market and their fields of business.

(For details, see (4) Intellectual Asset Evaluation.)

(5) Intellectual Asset-Based Management Evaluation (Profitability) Check

We checked MV's cash flow, based on the business plan submitted by the company. Under the MV's financial scenario, the company forecasts it will be able to recover the total ¥150 million investment—¥100 million operating funds and ¥50 million funds for the opening of new outlets—at an early point. As seen from the above interview sessions, MV's profit margin is high, which we think will enable the company to secure the source of funds for repayment. The standard scenario, a conservative one, on the other hand, projects that a slowdown in sales growth will delay the recovery of the investment made in new outlets.

(For details, see (5) Intellectual Asset-Based Management Evaluation (Profitability) Checksheet.)

(6) Intellectual Asset-Based Management Evaluation Finance Check

We drew up Intellectual Asset-Based Management Evaluation Financing Checksheet and made a comprehensive financing assessment of the company. Our view on the company's profitability is as follows. The profitability of MV's products is high, thanks to growing sales driven by their quality in line with customer needs and a higher price setting as high-end goods. The company's request for operating funds and money for opening new outlets is deemed reasonable in terms of cash flow, if provided with a mid-to long-term repayment plan.

MV's intellectual property rights (trademark rights), the core assets of its business, are free from problems of validity or litigation, and are used for all of the company's products. A liquidity check found out that the trademark rights have enough liquidity, as their high-end quality attracts their competitors' interest.

The IP valuator, a company with a good history of service, made clear confirmation of the validity of trademark rights using transparent valuation standards. The valuation performance was well received by all departments of our bank.

With his clear differentiation strategy, the manager, who makes marketing proposals himself, has a clear marketing policy. He keeps strict cash management in place in cooperation with the managing director. In spite of the only five-year-long business history MV has succeeded in raising its trademark recognition by making aggressive investments in advertisement. The company also has a thorough quality control system in place to maintain its brand image, which reflects the high quality and design excellence of its products.

Although the market is dominated by its two rivals, MV's product planning ability and know-how, backed by its earlier entry into the high-end market, appear to be outperforming those of the competitors.

(For details, see (6) Intellectual Asset-Based Management Evaluation Financing Checksheet.)

Process in line with finance flow

(1) Direction of Intellectual Asset-Based Management Evaluation Finance (Day-to-day collection of business information)

As part of our efforts to assess the outline of MV's intellectual assets through our daily information sessions, we conducted a simple interview with the president using the (1) Simple Interview Sheet. With its growth potential, the company has been assessed to have intangible value generated by the high popularity of its products. In response to the president's request for funding, we decided to see if we could make financing decisions based on MV's business prospects, as the company did not have any property to pledge as collateral. Following our in-house review of the information obtained through the interview, we decided to continue the assessment of the company by acquiring further, more detailed information.

According to the president, MV's trademarks, which are used for all of its products, have high recognition in the market. Using (2) Intellectual Property Search Sheet, we conducted IPDL search to see the status of the trademarks. The two trademarks found in the search were identical to the company's logos. We also confirmed that the trademarks have been registered with the JPO.

(2) Use of intellectual asset information in corporate rating and trading policy

In another interview conducted with the president, we collected MV's business details in accordance with (3) Intellectual Asset-Based Management Evaluation (Business Prospects) Interview Sheet. We gained detailed information about the elements that form the source of MV's intellectual assets, particularly trademark rights. MV's concentration on the high-end segment, setting of higher prices, and advertising efforts to raise brand recognition were recognized as the source of trademark value. The manager's quality and human assets were also seen as the key components of MV's intellectual assets. We assumed that these components are linked to the company's future cash flow and form the basis of profitability.

Upon obtaining (4) Intellectual Property Evaluation Sheet (for Trademark Rights) from an IP valuator, we added the estimated intellectual asset value into the actual balance sheet and made the decision as to what rating to give to the company. Following an in-house discussion of trading policies in consideration of the corporate rating, we decided to proceed with the financing of the company.

(3) Use of intellectual asset information in the process of credit approval

In the process of credit approval, using (5) Intellectual Asset-Based Management Evaluation (Profitability), we projected future cash flow based on past performance, and made an assessment of MV's repayment ability. The key assumptions underlying our future cash flow projection were profit levels and a sales growth rate that were consistent with qualitative data gained from intellectual asset information. The intellectual asset information showed growing demand for MV's products and increasing brand recognition, which made its sales-growth, higher-profitability scenario plausible. As a result of a review of future cash flow projections, including one under the conservative scenario, our bank showed a positive stance toward financing the company.

(4) Comprehensive judgment of creditworthiness

Ahead of a final financing decision, we carried out risk checks to see if all the intellectual asset information had been put under review, in accordance with (6) Intellectual Asset-Based Management Evaluation Financing Checksheet. We completed the identification of inherent risks, following a comprehensive assessment of information gained from each check sheet and the intellectual asset valuation report. As a result, we came to the following conclusion.

Our comprehensive review of information on MV's intellectual assets found that, helped by its human assets including the manager, the company, with the use of its core asset trademark, created a strong brand value within a segment of consumers different from that of its competitors. The brand and its underlying qualities, such as high functionality and design excellence, enjoy high recognition among customers. This gives the company an advantage over its rivals in the high-end market.

This advantage is reflected in the high prices being set, which accordingly allows for higher profitability. As far as past performance shows, sales growth is expected to continue. The trademark valuation report by an external institution found no problems in the validity of the trademarks, and they were estimated to be worth ¥338 to 363 million. This shows that values that do not appear in the financial statement can also be taken into consideration in the actual balance.

We identified a clear link between the qualitative intellectual asset data and the key assumptions underlying the future cash flow projection. Based on the future cash flow projection, we concluded that the operating funds and funds for the opening of new outlets would be fully recoverable. However, in consideration of the steep increase in loans payable caused by a rapid sales growth, we decided to finance the company with the pledge of the trademark rights as collateral.

**(1) Simple Interview Sheet
Trademark Rights Edition**

1. Corporate profile

Company name	Mountain View Co. Ltd.
Representative	Makoto Tanaka
Contact person	Department Manager Mr. Nomura
Contact	03-2222-2222
Business description	Wholesaling and selling of outdoor goods
Human assets Manager's career history and qualifications	The president, an outdoor sports lover, has long experience in outdoor leisure, such as mountain climbing, rock climbing and camping overseas. He also follows outdoor goods trends abroad. (Other information concerning the manager will be collected at the time of Interview (3).)

2. Business summary (Overview of brands and trademarks)

1. Product brand

Organizational assets	Brand name (Trademark)	Name of product(s)	Product outline and features	Trademark rights granted or not
	Rock Moon	Climbing ropes, karabiners and gloves	Rock-climbing goods intended for professionals	

2. Corporate brand

Organizational assets	Brand name (Trademark)	Name of product(s)	Product outline and features	Trademark rights granted or not
	Mountain View	Barbecue sets, etc.	Camping goods	Granted
		Fleece wear, caps, etc.	Outdoor clothing	Granted

* This section needs to be filled out if the company has been licensing its trademark rights to other companies

Relationship assets	Brand name (Trademark)	Licensee	Licensed products	Trademark rights granted or not

3. Brand strategy

Organizational assets	<p>MV has been building its corporate brand “Mountain View” that targets young consumers. While continuing to follow the basic principle of its brand strategy, the company will pursue its clear goal of establishing its corporate brand, by conducting effective sales activities targeted at retailers and specialty retail stores in large-scale retail stores and running competitor-conscious advertisements. In particular, MV has set a basic policy of running advertisements in outdoor leisure & sports magazines in a scale that is at least twice as much as those done by other low-ranking specialized manufacturers and import agents, in an effort to prevent the competitors’ advertising efforts from contributing to their sales.</p> <p>MV’s new brand “Rock Moon,” which was launched in order to differentiate itself from two outdoor giants that employ full-line strategy in the outdoor leisure and sports market, has succeeded in cultivating demand for its new products that target rock climbers who opt for goods intended for professionals. The company will consider launching a new product brand if it can be expected to spur demand of high-end products that target specific market segments. The company is also making efforts to ensure a good balance between the corporate brand business and individual brand businesses.</p> <p>MV does not plan to license its trademark to other domestic nor foreign companies. While focusing on brand building in the domestic market, the company began to consider the development of overseas markets by exporting the current line of products. The company has filed trademark applications in some foreign countries (countries of northern Europe, Russia, and the U.S.).</p>
Relationship assets	<p>(Target market and primary users)</p> <p>The corporate brand “Mountain View” targets young consumers. “Rock Moon” targets rock climbers who opt for goods intended for professionals.</p>

4. Sales of branded (trademark) products

(Unit: million yen)

Organizational assets		Term prior to the preceding term	Preceding term	Current term	Next term	Term following the next term
		December XX	December XX	December XX	December XX	December XX
Sales of Mountain View goods		454	624	842	985	1,153
Outdoor goods		287	374	505	581	668
Clothing		196	250	337	404	485
Sales of Rock Moon goods		80	110	149	186	233
Rock-climbing goods intended for professionals		80	110	149	186	233
Total sales		534	734	991	1,171	1,386

* Fill in product sales if the company makes use of its own product brand or corporate brand.

Fill in licensing revenues if the company has been licensing its trademarks to other companies.

5. Profitability rate

(Unit: million yen)

Organizational assets		Term prior to the preceding term	Preceding term	Current term	Next term	Term following the next term
		December XX	December XX	December XX	December XX	December XX
Company-wide sales		563	734	971	1,171	1,386
Company-wide gross profits		289	331	411	491	582
Company-wide operating profits		48	47	49	60	80
Company-wide gross margin ratio		51%	45%	42%	42%	42%
Company-wide operating margin		9%	6%	5%	5%	6%

6. Use of funds

After experiencing growth for the last three terms, the company expects increased revenue for the next fiscal term. The company is in need for roughly 100 million yen in funding for operating costs, caused by mounting inventories and accounts receivable as sales grow, and 50 million yen for the opening of a shop, including rental deposits and store renovation expenses, as it plan to open a company-owned outlet in Tokyo’s major commercial area, for a total of 150 million yen.

**(2) Intellectual Property Search Sheet
Trademark Rights Edition**

1. Search results for patents owned by the company

Conduct IPDL search using as a keyword

Product brand name	Number of trademarks
Moon Rock	1

Details are shown in the attached search results.

Conduct IPDL search using as a keyword

Corporate brand name	Number of trademarks
Mountain View	1

Details are shown in the attached search results.

* If neither of the above two keywords refines search results,

Conduct IPDL search using as a keyword, and refine search

using applicants: on the advanced settings screen.

Refined search (company name or representative's name)

Circle one of the two choices

Product brand name	Number of trademarks

Corporate brand name	Number of trademarks

Details are shown in the attached search results.

2. Confirmation and list of the trademarks

Brand name	Registration number	Trademark title	Information on progress
Mountain View	7391XXX	Mountain View	Registered on DD/MM/YY Annual fees for 10 years paid
Moon Rock	3832XXX	Moon Rock	Registered on DD/MM/YY Annual fees for 10 years paid

If there are any trademark applications filed abroad.

Brand name	Domestic registration number	Foreign trademark		
None				

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

Company name	Mountain View Co. Ltd.
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Business features**1. Customers**

Interview items		Responses
Relationship assets	Target customers (Attributes, market size and regions, etc.)	The company targets skilled outdoor enthusiasts, primarily men in their late 20s and 30s, a generation that begins to have more disposable income and seeks high-quality goods and tools. The company currently focuses on sales in the Kanto and Shinshu regions. According to an industry marketing research, the market is worth 30 billion yen.
	Customers' needs from the company (Quality, safety, expensive looking, etc.)	Consumers used to seek lower prices and minimum functionality rather than design quality in climbing goods. But those who can afford are increasingly seeking stylishness and high functionality. The company provides products that meet such consumer needs.
	Stability of customer needs (Fashionability)	Consumer population has been divided into two market segments: low-end and high-end. High-performance goods are among the most popular in the company's products.

2. Sale

Interview items		Responses
Organizational assets and relationship assets	Product's selling price	MV's products show a mixed price patterns. The company's products are priced around 20% higher than those sold by other companies.
	Past marketing periods and sales volumes (number of outlets)	Sales have shown a steady increase since the launch of business five years ago. Sales volumes vary with each product. Sales of Moon Rock products intended for professionals have seen strong growth.
	Product life cycle and trends	The company has a new product cycle almost every year. It boosts replacement demand by releasing new products.

3. Competitors

Interview items		Responses
Organizational assets	Known competitors and their share in the market	Outdoor giants Company Q with a market share of 30% and Company K with a share of 40%. They together account for 70% of the market.
	Competitors' prices	Competing products are cheaper by around 20%. But the company's products may be comparatively low in price for their quality.
	Competitors' marketing strategies	They employ a low-margin, high-turnover policy, targeting families and general users. They focus on sales to nationwide mass market retailers.
	Differences between the company's products and competitors' branded products (Advantages of the company)	The company adopts an entirely different strategy from the two rivals. High performance and high fashion are the key elements of its products. The brand concept pursues expensive-looking and sturdiness.

4. Analysis of manager and know-how

Interview items		Responses
Human assets	Manager's business strategy	The company targets market segments that do not overlap the two outdoor giants' targets. It pursues its policy of raising name recognition in the outdoor market, with an advertising strategy that focuses on design excellence and convenience in its products.
	Manager's marketing expertise	The president himself makes proposals in an effort to place MV's products on better parts of the shelves at big retailers, succeeding in creating a win-win relationship with those retailers. He selects contract manufacturers himself, keeping strict quality and cost control systems in place.
	Manager's financial management skills	Although the company's cash flow and borrowings are managed by Managing Director Mr. K, an ex-banker, and the president, a former sales representative, who is good with figures, their sales projections are largely based on expectation.
Organizational assets	Know-how such as customer service, recipes, etc.	The company provides support services at big outdoor shops to make customers aware of the functionality of its products. The company also has an online membership system and delivers information such as fashionable usages and how to use the products.

5. Licensing to other companies/franchising (if applicable)

Interview items		Responses
Relationship assets	Licensee	None
	Licensing conditions (Charges provision for handling know-how, etc.)	None

(5) Intellectual Asset-Based Management Evaluation (Profitability) Checksheet
Trademark Rights Edition

Company name	Mountain View Co. Ltd.
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1. Sales by product (outlet-by-outlet) and by trademark

(Unit: million yen)

Sales of in-house products and sales through company-owned outlets		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 and relationship assets	Outdoor goods (Tools and climbing goods)	282	405	535	767	901
	Clothing	153	218	289	404	485
	Subtotal	1,058	1,447	1,995	2,557	1,386
	Sales of Mountain View good	370	530	700	985	1,153
	Sales of Rock Moon goods	65	93	124	186	233
Subtotal	1,058	1,447	1,995	2,557	1,386	

(Unit: million yen)

Sales through licensing and franchising		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 and relationship assets	Product 1 (Outlet 1)					
	Product 2 (Outlet 2)					
	Product 3 (Outlet 3)					
	Subtotal	0	0	0	0	0
	Trademark 1					
	Trademark 2					
	Trademark 3					
	Subtotal	0	0	0	0	0

2. Profitability rate

Company-wide

(Unit: million yen)

		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	Company-wide sales	435	623	824	1,171	1,386
	Company-wide gross profits	212	281	349	495	580
	Company-wide operating profits	26	40	42	60	80
	Company-wide gross margin ratio	49%	45%	42%	42%	42%
	Company-wide operating margin	6%	6%	5%	5%	6%

Branded products sales (if data available)

(Unit: million yen)

		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	Sales of branded products					
	Gross profits from branded products					
	Operating profits from branded products					
	Gross margin ratio for branded products					
	Operating margin for branded products					

3. Future cash flow (trial balance sheet attached)

(1) Company's business plan

Estimated sales	It assumes annual sales growth of 18% —half the annual sales growth of 37% for the past two years.
Estimated expenses	Purchase cost ratio: 57.3% General administrative expenses (including advertising expenses): 38.3%
Other	The number of days sales outstanding and the average age of inventory are set at the same level of those for the current term.

(2) Conservative scenario

Estimated sales	It assumes annual sales growth of 6% —one third of (1).
Estimated expenses	Purchase cost ratio: 57.3% General administrative expenses (including advertising expenses): 38.3%
Other	The number of days sales outstanding and the average age of inventory are at set the same level of those for the current term.

(3) Common underlying assumptions (based on the company's business plan)

Terms of collection and payment

Interview items		Responses
Organizational assets and relationship	Terms of collection from buyers	To be closed on the last day of the month that follows the month in which delivery is made, and to be paid the end of the month after the following month.
	Terms of payment to suppliers	To be paid the end of the month that follows the month in which purchase is made.

Use of funds

Interview items	Responses
Use of funds (Store development costs, etc.)	About 50 million yen to be spent on rental deposits for new outlets and store renovations (short term loans)
Use of funds (Increases in working capital, such as accounts receivable and inventories)	About 100 million yen for increased operating funds (short term loans).
Use of funds (Promotions expenses)	None
Fundraising scale and repayment schedule (Consistency with profitability)	The 150 million loans are fully recoverable even under the conservative scenario attached to this report. Follow-up short-term financing is planned for the 100 million yen out of the total amount.

Future Cash Flow (Trademark Rights Edition)

(1) Company's business plan

(Unit: 1,000 yen)

Items		Month												Next year	Year following the next year	Third year	Fourth year	Fifth year	
		Apr.	May	Jun	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.						
Amount brought forward (1)		110,000	93,012	76,033	152,688	133,356	114,038	99,734	95,443	90,167	90,904	91,655	142,294	110,000	142,948	175,448	158,005	192,993	
Balance of current account	Current income	Cash sales																	
		Collection of accounts receivable	67,583	72,583	77,583	82,583	87,583	92,583	102,583	107,583	112,583	117,583	122,583	127,583	1,171,000	1,386,000	1,635,480	1,929,866	2,277,242
		Advance received																	
		Miscellaneous income																	
		Other non-operating income																	
	Other																		
	Total current income (2)	67,583	72,583	77,583	82,583	87,583	92,583	102,583	107,583	112,583	117,583	122,583	127,583	1,171,000	1,386,000	1,635,480	1,929,866	2,277,242	
	Current spending	Cost of purchased goods	43,333	48,333	53,333	58,333	63,333	63,333	63,333	63,333	68,333	73,333	78,333	83,333	760,000	887,000	1,035,222	1,208,213	1,410,112
		Labor costs																	
		Selling and administrative expenses	36,417	36,417	36,417	36,417	36,417	36,417	36,417	36,417	36,417	36,417	36,417	36,417	437,000	502,000	592,360	698,985	824,802
Advance payments																			
Temporary payments																			
Other selling and administrative expenses																			
Interest expenses		1,321	1,313	1,679	1,665	1,651	1,638	1,624	1,610	1,596	1,583	1,694	1,680	19,053	22,500	23,340	25,680	26,520	
Other non-operating expenses																			
Total current spending (3)	81,071	86,063	91,429	96,415	101,401	101,388	101,374	101,360	106,346	111,333	116,444	121,430	1,216,053	1,411,500	1,650,922	1,932,878	2,261,434		
1 + 2 + 3 Balance (4)	96,512	79,533	62,187	138,856	119,538	105,234	100,943	101,667	96,404	97,155	97,794	148,448	64,947	117,448	160,005	154,993	208,801		
Financial balance	Financial income	Withdrawal of fixed deposits																	
		Short-term loans payable			100,000								50,000		150,000	50,000	50,000	50,000	50,000
		Long-term loans payable			50,000										50,000	100,000	50,000	100,000	50,000
		Capital increase													0				
		Refund of income taxes													0				
	Other																		
	Total financial income (5)	0	0	150,000	0	50,000	0	200,000	150,000	100,000	150,000	100,000							
	Financial spending	Payments into fixed deposits													0				
		Repayment of short-term loans payable													0				
		Repayment of long-term loans payable	3,500	3,500	3,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	60,000	72,000	72,000	72,000	72,000
Total repayment of loans (Of that, amount to be paid within this month)														0					
Investment expenses														0					
Opening of outlets/Fixed asset purchases			50,000											50,000					
Income taxes			6,000						6,000					12,000	20,000	30,000	40,000	50,000	
Other													0						
Total financial spending (6)	3,500	3,500	59,500	5,500	5,500	5,500	5,500	11,500	5,500	5,500	5,500	5,500	122,000	92,000	102,000	112,000	122,000		
4 + 5 - 6	93,012	76,033	152,688	133,356	114,038	99,734	95,443	90,167	90,904	91,655	142,294	142,948	142,948	175,448	158,005	192,993	186,801		
Amount carried forward to the following month																			

Balance of short-term loans payable	322,000	322,000	422,000	422,000	422,000	422,000	422,000	422,000	422,000	422,000	472,000	472,000	472,000	522,000	572,000	622,000	672,000
Balance of long-term loans payable	206,500	203,000	249,500	244,000	238,500	233,000	227,500	222,000	216,500	211,000	205,500	200,000	200,000	228,000	206,000	234,000	212,000
Total amount of loans payable	528,500	525,000	671,500	666,000	660,500	655,000	649,500	644,000	638,500	633,000	677,500	672,000	672,000	750,000	778,000	856,000	884,000

Future Cash Flow (Trademark Rights Edition)

(2) Conservative scenario

(Unit: 1,000 yen)

Items		Apr.	May	Jun	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Next year	Year following the next year	Third year	Fourth year	Fifth year		
		(1)																		
Amount brought forward		110,000	108,237	108,162	203,400	202,652	201,917	201,196	200,489	193,796	193,116	192,450	243,353	110,000	245,948	331,828	311,865	274,706		
Balance of current account	Current income	Cash sales																		
		Collection of accounts receivable	65,475	69,113	72,750	72,750	72,750	72,750	72,750	72,750	72,750	72,750	76,388	80,025	873,000	925,380	980,903	1,039,757	1,102,142	
		Advance received																		
		Miscellaneous income																		
		Other non-operating income																		
		Other																		
	Total current income (2)		65,475	69,113	72,750	72,750	72,750	72,750	72,750	72,750	72,750	72,750	76,388	80,025	873,000	925,380	980,903	1,039,757	1,102,142	
	Current spending	Cost of purchased goods	35,250	37,208	39,167	39,167	39,167	39,167	39,167	39,167	39,167	39,167	41,125	43,083	470,000	540,000	620,426	712,829	818,995	
		Labor costs																		
		Selling and administrative expenses	27,167	27,167	27,167	27,167	27,167	27,167	27,167	27,167	27,167	27,167	27,167	27,167	326,000	335,000	355,100	376,406	398,990	
		Advance payments																		
		Temporary payments																		
		Other selling and administrative expenses																		
		Interest expenses	1,321	1,313	1,679	1,665	1,651	1,638	1,624	1,610	1,596	1,583	1,694	1,680	19,053	22,500	23,340	25,680	26,520	
Other non-operating expenses																				
Total current spending (3)		63,738	65,688	68,012	67,998	67,985	67,971	67,957	67,943	67,930	67,916	69,985	71,930	815,053	897,500	998,866	1,114,915	1,244,506		
1 + 2 + 3 Balance (4)		111,737	111,662	112,900	208,152	207,417	206,696	205,989	205,296	198,616	197,950	198,853	251,448	167,948	273,828	313,865	236,706	132,343		
Financial balance	Financial income	Withdrawal of fixed deposits																		
		Short-term loans payable			100,000								50,000		150,000	50,000	50,000	50,000	50,000	
		Long-term loans payable			50,000										50,000	100,000	50,000	100,000	50,000	
		Capital increase													0					
		Refund of income taxes													0					
		Other																		
	Total financial income (5)		0	0	150,000	0	0	0	0	0	0	0	50,000	0	200,000	150,000	100,000	150,000	100,000	
	Financial spending	Payments into fixed deposits													0					
		Repayment of short-term loans payable													0					
		Repayment of long-term loans payable	3,500	3,500	3,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	60,000	72,000	72,000	72,000	72,000	
		Total repayment of loans (Of that, amount to be paid within this month)													0					
		Investment expenses													0					
		Opening of outlets/Fixed asset purchases			50,000										50,000					
		Income taxes			6,000					6,000					12,000	20,000	30,000	40,000	50,000	
Other														0						
Total financial spending (6)		3,500	3,500	59,500	5,500	5,500	5,500	5,500	11,500	5,500	5,500	5,500	5,500	122,000	92,000	102,000	112,000	122,000		
4 + 5 - 6 Amount carried forward to the following month		108,237	108,162	203,400	202,652	201,917	201,196	200,489	193,796	193,116	192,450	243,353	245,948	245,948	331,828	311,865	274,706	110,343		

Balance of short-term loans payable	322,000	322,000	422,000	422,000	422,000	422,000	422,000	422,000	422,000	422,000	472,000	472,000	472,000	472,000	522,000	572,000	622,000	672,000
Balance of long-term loans payable	206,500	203,000	249,500	244,000	238,500	233,000	227,500	222,000	216,500	211,000	205,500	200,000	200,000	200,000	228,000	206,000	234,000	212,000
Total amount of loans payable	528,500	525,000	671,500	666,000	660,500	655,000	649,500	644,000	638,500	633,000	677,500	672,000	672,000	672,000	750,000	778,000	856,000	884,000

(6) Intellectual Asset-Based Management Evaluation Financing Checksheet
Trademark Rights Edition**1. Check for profitability**

Checked items		Criteria	Judgment and grounds
To examine business profitability (organizational assets) in all aspects	Cash flow stability	<ul style="list-style-type: none"> Are the buyers stable? Does the company have adequate past performance? 	<ul style="list-style-type: none"> Most of the buyers are outdoor specialty retailers. According to past performances, sales is stable and in an upward trend.
	Marketability (Customers and their needs)	<ul style="list-style-type: none"> Does the company have clear customer targets? Do the company's products match the needs of its customers? Is the target market size large enough, compared with its sales plan? 	<ul style="list-style-type: none"> The company's products target men in their 30s who opt for high-end products. Its high-performance and stylish products match high-end users' needs. The target market is estimated to be worth 30 billion yen. The market size is about one tenth of the market for general users.
	Underlying assumptions for income and expenditure plan	<ul style="list-style-type: none"> Is the company's unit sales price at an adequate level? Is its manufacturing unit price at an adequate level? Will enough gross profits be secured? Are promotion expenses at an adequate level? Will enough operating profits be secured? 	<ul style="list-style-type: none"> The prices includes premium for high quality work and are set about 20% higher than those sold by other companies. The production unit price is higher than that of other companies but the cost rate is lower than that of other companies. The gross profit margin is 45%, which is higher than the industry average and at an adequate level. The advertising expenses of 100 million yen a year are relatively high. But they are below the level of profits. Operating profits are low because of large advertising expenses.
	Balance with fundraising efforts	<ul style="list-style-type: none"> Does the amount of funds raised conform with the amount for use? Does the company's cash management secure enough financial resources to repay? 	<ul style="list-style-type: none"> In light of the past sales growth rates, the company's request for 100 million yen funding is reasonable. There are no signs of cause for concern about the 50 million yen funding for the opening of outlets, if provided with a mid-to long-term repayment plan.

2. Intellectual property due diligence

Checked items		Criteria	Judgment and grounds
Examination of intellectual property rights (organizational assets)	Validity of trademark rights	<ul style="list-style-type: none"> Do the trademark rights belong to the company? Have the trademark rights been registered? Has a pledge been established on the trademark rights? Do the trademark rights have a long enough validity period? 	<ul style="list-style-type: none"> The two trademark rights belong to the company. The two trademarks have been established as trademark rights. They are not pledged as collateral. Annual fees for 10 years have been paid for the trademarks and they have enough validity period.
	Trademark litigation	<ul style="list-style-type: none"> Haven't any requests for trial for cancellation of registered trademark not in use been made? Have any trademark infringement lawsuits been filed against the company's products? 	<ul style="list-style-type: none"> The company makes use of the two trademarks for its business. There is no risk that other companies will make requests for trial for cancellation of registered trademark not in use. No trademark infringement lawsuits have been filed.
	Power of trademark rights	<ul style="list-style-type: none"> Does the company make use of the trademark in business? Does the trademark-driven business generate enough sales? Do designated goods for the trademark correspond to the company's business? Has a trademark right been granted by the patent office of a country (or region) where the products are sold? Does the trademark-driven business have a high profit margin? 	<ul style="list-style-type: none"> The company makes use of the two trademarks for its business. The company maintained good sales records for the past three years. The designated goods for the trademark cover clothing and mountain climbing tools. The company targets only the domestic market. The company has obtained trademark rights only in Japan. The gross profit margin of 45% is relatively high, compared with the industry average.
	Liquidity of trademark rights	<ul style="list-style-type: none"> Are they co-owned rights? Does the company's business know-how play a key role, rather than the trademark? Are the licensees able to sustain their business without the company's trademark (brand)? Are competitors' goods similar to those of the company? Does the company have a large share in the market? 	<ul style="list-style-type: none"> They are not co-owned. Other than the trademarks, the company has sales know-how including services techniques, which only serve as supplementary marketing tools. MV's two rivals, outdoor products giants, may become interested in MV's brands and high-end products that target different market segments from theirs.

3. Examination of intellectual property evaluation reports

Checked items	Criteria	Judgment and grounds	
Examination of third-party valuation of the company's business advantages (organizational assets)	Valuator	<ul style="list-style-type: none"> Does he/she have sufficient ability and enough experience? 	<ul style="list-style-type: none"> The valuator has two years of experiences in appraisals for banks.
	Valuation purpose	<ul style="list-style-type: none"> Has the valuation been made in light of a financial institution's viewpoint? 	<ul style="list-style-type: none"> The appraisals provided by the valuator are intended for banks and are in line with financial concepts.
	Valuation method	<ul style="list-style-type: none"> Has the DCF method (or equivalent methods) been used? 	<ul style="list-style-type: none"> The DCF method applied.
	Trademark rights valuation	<ul style="list-style-type: none"> Has the validity of the trademark rights been examined? Do designated goods for the trademark rights cover the company's products? Has information on the progress of the trademark rights been checked? Have any comments been made about issues surrounding the acquisition of trademark rights? 	<ul style="list-style-type: none"> The patent attorney, a partner of the valuator, has checked the validity of the trademark rights and the designated goods for the trademarks. Information on progress and the completion of annual fee payments have been confirmed. The valuator commented that no significant problems were found.
	Valuation	<ul style="list-style-type: none"> Are the estimated sales adequate in light of the company's corporate information and the market size? Have competitors' business conditions, sales, and market share been taken into consideration? Is the established discount rate reasonable? Is the amount of royalty at an appropriate level? Do the royalty rate and profit margin contradict each other? 	<ul style="list-style-type: none"> Estimated sales are based on the company's past performances. The discount rate is at an appropriate level against WACC. The royalty rate is based on the market data. The royalty rate is not set too high compared with the gross profit margin rate. The royalty rate and gross profit margin rate do not contradict each other significantly.

4. Risk to parties concerned

Checked items	Criteria	Judgment and grounds	
Examination of factors underlying the partners (relationship assets)	Manager (Management team)	<ul style="list-style-type: none"> Has he/she drawn up specific business plans and strategies? Does he/she have marketing expertise and the ability to coordinate people to do business? Does he/she have the financial management skills to manage cash flow and so on? 	<ul style="list-style-type: none"> He employs a strategy that targets market segments that do not overlap the two outdoor giants' targets, by conducting advertising activities and providing services at stores. He makes marketing proposals for giant outdoor retailers and select contract manufacturers. Managing director Mr. K is in charge of financial matters. The president also keeps strict cash management in place.
	Manufacturer and distributor	<ul style="list-style-type: none"> Does the company have a long enough business history? Does the company's trademark have strong name recognition? Are the qualities that sustain the company's trademark based on its original service know-how or recipe? Does the company have enough funds to finance brand (trademark) development? Are there any illicit acts that might damage the brand? Are there any other contract manufacturers or distributors that have problems in their sales performance and credibility? 	<ul style="list-style-type: none"> A new entrant with a five-year-long business history. Its name recognition is still low. It spends large sums in advertising. The company is good at producing design-conscious products. It has a thorough quality control system in place. It secures about 100 million yen a year for advertising. No illicit acts have been found. The company has been building a close relationship with contract manufacturers since the launch of its business. It has enough credibility.
	Licensee	<ul style="list-style-type: none"> Do they have sales channels and marketing expertise? Has the company signed a contract with them? Is the licensing fee rate in line with the market level? Are they on a short-term contract (less than five years) ? Have they presented their sales plan? Do they have enough credibility? 	None

5. Competitors

Checked items	Criteria	Judgment and grounds	
Examination of business advantages (organizational assets)	Competing products	<ul style="list-style-type: none"> Are there any competing products in the market? Are their prices higher than that of the company's products? Is the quality of their products superior to that of the company's products? Do they have a significantly larger share in the market? Who are their target customers? 	<ul style="list-style-type: none"> The two rivals together have a 70% share of the market. They sell low-quality and low-priced products. Their products are directed at families and general users.
	Competitors	<ul style="list-style-type: none"> Are they superior to the company in terms of sales, company size, and name recognition? Do they plan to release new products? Do they have superior development and sales know-how? 	<ul style="list-style-type: none"> The two rivals have a long business history and are superior to MV in terms of name recognition, business scale and sales volume. Competitors that target the low-end market do not plan to enter the high-end market. They do not seem to have know-how to make high-performance products.

(4) Sample of intellectual asset valuation report by an external institution

We have provided a sample report for intellectual asset valuation by an external institution below.

The valuation report comprises the following three parts:

1. Trademark research
2. Market research
3. Valuation

“1. Trademark research” summarizes search results for the validity of trademark rights and “2. Market research” shows research results for the targeted market. “3. Valuation” illustrates the economic value of intellectual property rights. We carried out a brand valuation using the Royalty Relief Method on the premise of projected sales, while taking into consideration the trademark and market research results.

1. Trademark research

○Outline of trademark rights

The scopes of trademarks subject to the assessment are shown below.

[Trademark 1: Trademark No. 7391xxx]

Date filed: YY/MM/DD

Date registered: YY/MM/DD

Right holder: MV

Trademark: shown on the right hand side

(Sound: Mountain View)

[Classification of goods and services, and designated goods and services]

Class 28 Sports equipment

Mountain View

[Trademark 2: Trademark No. 3832xxx]

Date filed: YY/MM/DD

Date registered: YY/MM/DD

Right holder: MV

Trademark: shown on the right hand side

(Sound: Rock Moon)

[Classification of goods and services, and designated goods and services]

Class 28 Sports equipment

Rock Moon

○Status of trademark

We confirmed the validity of the above two trademarks and the completion of annual fee payments in the Intellectual Property Digital Library (provided by the National Center for Industrial Property Information and Training). The trademark register shows that they are not already pledged as collateral and no trademark license has been granted.

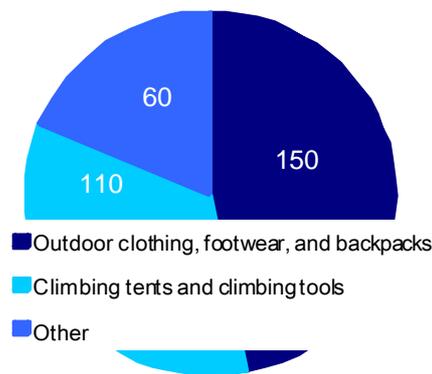
2. Market Research

○Outdoor sports products market trends

After experiencing moderate declines since 20XX at levels around ¥2.2 to 2.3 billion, following its peak at ¥2.6 billion in 19XX, the market for outdoor sports-related products, including mountain climbing tools, camping equipment such as tents and barbecue tool sets, and outdoor clothing and footwear, is showing a rebound in recent years, marking ¥2.5 billion in 20XX and ¥2.6 billion in 20XX (“Leisure White Paper,” Japan Productivity Center). This growth is considered to have been led by consumers’ return to outdoor leisure activities, particularly by the recent rock-climbing boom among men. Though no field-specific market data is available for MV’s business fields of outdoor clothing, footwear, bags, and rock climbing products, the market for camping and outdoor clothing, footwear, and bags is estimated to be worth ¥1.5 billion as of 20XX, according to an industry group survey (see Figure 1). The Climbing and Outdoor Sports Association’s research shows an increase in the clothing segment’s average unit price for the past few years. In addition to products directed at families, which is the traditional prime segment, the major contributor to the growth is male consumers aged around thirty, a generation with relatively more disposable income, who opt for high-performance, design-conscious products. Accessibly-priced products and mid-to high value-added products are estimated to each account for about half of the 1.5 billion market for outdoor clothing and footwear.

The Leisure Paper also shows an upward trend in the number of men in their late 20s and 30s who enjoy outdoor sports (those who do outdoor leisure activities such as camping twice or more a year), recording 1.18 million in 20XX and 1.29 million in 20XX.

Figure 1 Estimated size of the market for outdoor leisure goods and clothing (¥100 million)



○Competitors in the outdoor goods market

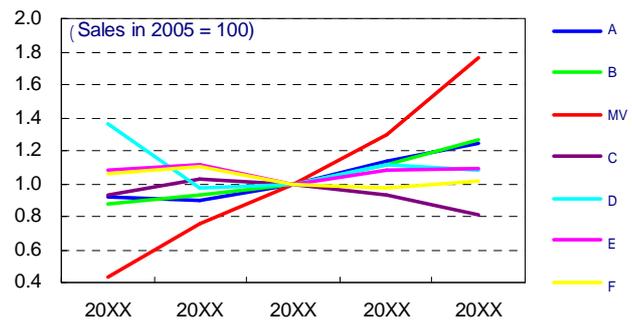
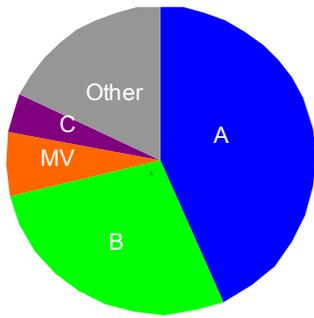
Figure 2 Competitors in the outdoor goods market

Company name	Estimated domestic sales	Domestic share	Head office	Number of employees	Business fields
A	65	43%	Tokyo	2098	Largest outdoor products maker. \5.4 billion in sales account for 86% of the total sales of the company. Overseas sales are estimated to be around \1.5 billion. It primarily offers accessibly-priced products in the camping and mountain climbing fields. It has a nationwide sales network.
B	42	28%	Osaka	1019	\50 billion in sales in the outdoor products business account for 25% of the total sales of the company. It operates in almost the same fields as Company A. It does strong overseas business, with overseas sales accounting for 85% of the total. It is expanding business for its tennis and ski brands abroad.
MV	10	7%	Kanagawa	25	Specialized in outdoor clothing and footwear. It primarily offers high value-added products.
C	6	4%	Osaka	102	The company reentered the market in 20XX with its former brand, following X's withdrawal from the market. It sells accessibly-priced products under the name "Land." Its high-quality brand "Field Camp" is specialized in footwear and bags.
D	5	3%	Aichi	223	The outdoor products unit conducts the business
E	5	3%	Overseas	21	Outdoor apparel maker. It also sells mountain climbing tools intended for professional climbers
Other	17	11%			
	150	100%			

It is estimated that two general outdoor sports and leisure companies (A and B), which operate both in the domestic and international markets, together have over a 70% share of the outdoor leisure market. MV holds a share of 7%, while those ranked lower, including specialized manufacturers of outdoor leisure clothing, footwear, and bags, as well as manufacturers of foreign brands, together account for 20% of the market (Figure 2 and Figure 3). The top two companies, which target families and focus on accessibly-priced products, have different business strategies from MV's (provision of design-conscious, high-quality products for reasonable prices). MV's understanding of consumer needs in the targeted market helped it succeed in boosting demand, steadily increasing its share of the market. The company's sales growth is significant, compared with the lower-ranking makers specialized in high-end products, MV's prospective rivals (Figure 4). Our analysis on the obtained materials revealed that MV's shipment unit price has maintained its current level for the past three years, helped by the release of new products and improvements in the product mix. With the existing cost structure, its marketing efforts to gain a larger share of the market did not affect the current profit profile.

Figure 3 Competitors' shares in the outdoor goods market

Figure 4 Changes in company-by-company sales of outdoor clothing, footwear and bags



3. Evaluation of economic value

(1) Selection of valuation method and basic concept

○ Selection of specific valuation method

We used the Royalty Relief Method, a specific appraisal method under the income approach. This method calculates the royalty costs the company would have to pay to a third party if, hypothetically, the targeted intellectual property were being licensed from the third party, by estimating these costs according to licensing agreements for similar products. Specifically, it uses the company's business plan to estimate the royalties (licensing fees) the company would have to pay if it did not own the trademark rights that it needs to produce the products. It then values the intellectual property rights by calculating the capitalized value of the royalties.

On the basis of MV's past performance records, we estimated the royalties (licensing fees) the company would have to pay if it did not own the trademark rights that it needs to produce its trademark-labeled products, and appraised the value of the trademark rights by applying a discount to this estimated amount of royalties to arrive at their capitalized value.

Economic value of the intellectual property (trademark rights) = Present value of the estimated royalty income

○ Valuation period

Trademark rights can be maintained semi-permanently, as their registration is renewable upon the expiration of the period. However, this report sets the valuation period at ten years from the time of valuation, in consideration of the difficulty of assessing future profitability beyond the company's business plan and the fact that future product development will likely to change the line of products to which the trademark will be used.

○ Effective tax rate

To be set at 40%

(2) Detailed calculation method

○ Estimated royalty income

Royalty income, which serves as a basis for the assessment, was calculated by multiplying projected sales of the business related to intellectual property (trademark rights) by the estimated royalty rate.

1) Scenario based on revised projections

Based on the information gained during the interview by the appraiser, it was determined that the projected sales were to be set at the average of projected sales for the next three terms.

Projected royalty income = average of revised sales projections multiplied by the estimated royalty rate

○Estimated royalty rate

The trademark rights subject to appraisal are intended for outdoor-related products. Of those existing licensing agreements made open to the public, no cases were found to match that of MV, because of the circumstances surrounding the sector and the specialty of MV’s products. Therefore the royalty rate we used in this report was determined by reference to the royalty rate of cases similar to the trademarks in question.

No exact matching royalty rate for outdoor-related goods (camping tools, outdoor clothing, footwear, bags, and rock climbing tools) was available in the foreign data we used as a reference. The table below shows those products that we consider similar to MV’s in terms of their category as outdoor sports products.

Figure 5 Royalty rate for outdoor related products

Product	Royalty rate	Average
Climbing footwear	3.5 ~ 7.5 %	5.5 %
Cold weather outfits for climbing	3.0 ~ 7.5 %	5.3 %
Climbing backpacks	3.5 ~ 7.0 %	5.3 %
Climbing tents	3.0 ~ 8.0 %	5.5 %
		5.4 %

The average of royalty rates for the mountain-climbing goods, which we calculated by figuring out their center values, became 5.4%. We decided to use this figure as an estimated royalty rate for products labeled with the MV trademark. Since its products under “Mountain View” and “Rock Moon” are both categorized as outdoor leisure and sports goods, we used the same royalty rate for both of the trademarks.

According to the financial statement presented by MV, gross profit margins for the past five years have stayed around 42% to 54%. We did not see any signs of problem in applying the estimated royalty rate shown above.

(3) Calculation of expected rate of return

○Calculation of WACC

WACC was calculated by using the following formula.

$$WACC = \frac{D}{D + E} \times (1 - T) \times Rd + \frac{E}{D + E} \times Re$$

D: Interest-bearing debt
E: Shareholders' equity
T: Effective tax rate
Rd: Debt cost
Re: Cost of shareholder's equity

$$Re = Rf + \beta \{ E(Rm) - Rf \}$$

<i>Re</i>	: Expected return on investment
<i>Rf</i>	: Risk free rate
β	: Value of β This indicates changes in the returns on stocks in proportion to stock market fluctuations.
$E(Rm)-Rf$: Market risk premium

WACC was calculated to be 6.25%.

○Calculation of expected rate of return on intellectual property

The expected rate of return indicated by WACC shows that for the whole company and accordingly may differ from that on intellectual property. However, subtracting tangible assets from the company-wide value gives the value of intangible assets including intellectual property rights.

We figured out the expected return on intellectual property in light of that on tangible assets. Following our estimation of the liquidity of the intellectual property, we calculated the addition of an individual liquidity premium of 2.0% to 3.6% to WACC.

$$\begin{aligned}
 &\text{Expected rate of return on intellectual property} \\
 &= \text{WACC} + \text{Individual premium} \\
 &= \text{WACC} + 2.0\% \sim 3.6\% \\
 &= 6.25\% + 2.0\% \sim 3.6\% \\
 &= 8.25\% \sim 9.85\%
 \end{aligned}$$

As a result, we set the expected rate of return at levels ranging from 8.25% to 9.85%.

(4) Setting of sales scenario

○Analysis of MV's sales performances

The table below shows the changes in annual sales by type of product and sales budgets for the next five years, according to the information provided by MV.

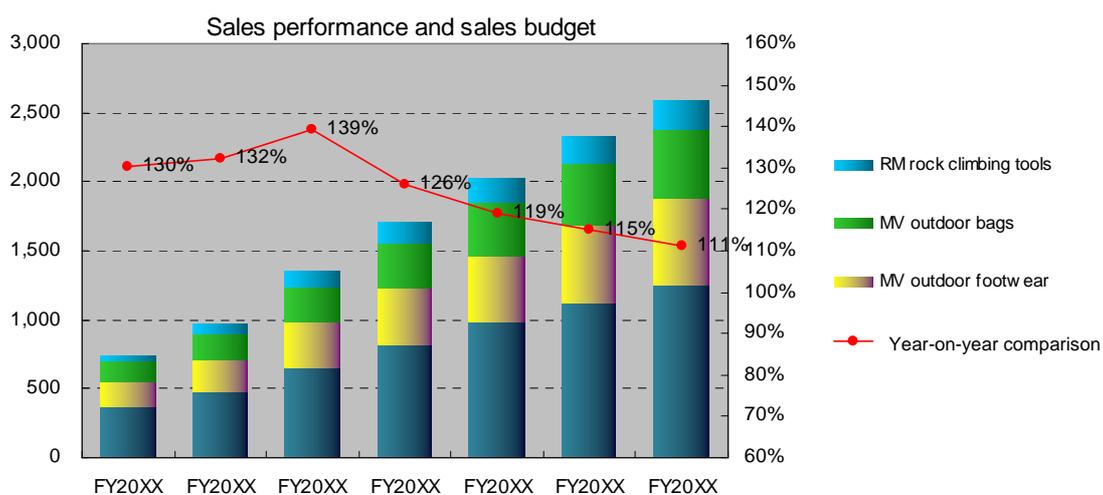
Figure 6 Sales performances for the last three years and sales budgets for the next five years

		Sales performance		Sales budget				
		FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX
Sales (million yen)	MV outdoor high performance clothing	374	480	653	822	979	1,125	1,254
	MV outdoor footwear	181	236	328	413	492	566	627
	MV outdoor bags	149	183	258	325	387	445	492
	RM rock climbing tools	30	72	115	145	173	199	221
	Total	734	971	1,354	1,706	2,030	2,334	2,595

		FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX
		Sales growth from the previous year						
	MV outdoor high performance clothing	122%	128%	136%	126%	119%	115%	111%
	MV outdoor footwear	134%	131%	139%	126%	119%	115%	111%
	MV outdoor bags	122%	123%	141%	126%	119%	115%	111%
	RM rock climbing tools			160%	126%	119%	115%	111%
	Total	130%	132%	139%	126%	119%	115%	111%

		FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX
		Shipping volume						
	MV outdoor high performance clothing	29,714	37,274					
	MV outdoor footwear	11,177	13,986					
	MV outdoor bags	8,507	10,542					
	RM rock climbing tools	1,927	4,714					
	Total	51,325	66,516					

		FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX
		Shipment unit price (thousand yen)						
	MV outdoor high performance clothing	12.59	12.87					
	MV outdoor footwear	16.15	16.88					
	MV outdoor bags	17.50	17.35					
	RM rock climbing tools	15.57	15.27					
	Total	14.29	14.60					



MV specializes in outdoor clothing, footwear, bags, and rock-climbing products in the outdoor leisure and sports market, which has remained around the same level as in past years, as illustrated earlier. The company targets the high-end market segment, primarily men in their late 20s and 30s who opt for stylish and high-performance products.

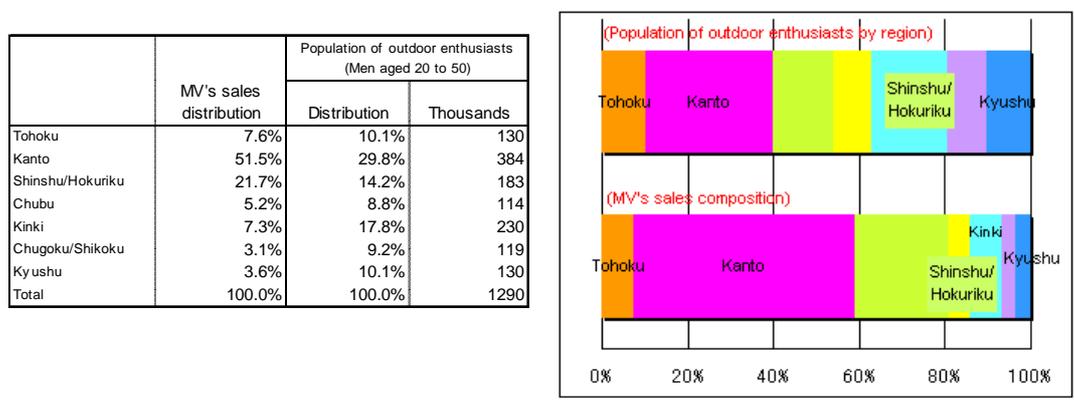
MV has been steadily expanding its business for the past three years at an annual growth rate of 130% to 135%, boosted by the new release of design-conscious camping fleece wear and lightweight outdoor footwear, as well as new lines of rock-climbing products under “Rock Moon,” a new brand launched amid the recent rock-climbing boom (Figure 6).

MV has a plan to reach ¥1.35 billion sales, a year-on-year growth of 139%, for the fiscal year ending in March 20XX. The preliminary report for the January-June term of 20XX shows year-on-year growth of 146%, indicating the company is achieving its sales targets as planned.

○Sales breakdown and estimation of market share by region

MV is currently focusing on business in the Kanto and Shinshu regions, with a plan of stepping up its effort for expanding into the nationwide market starting from next fiscal year.

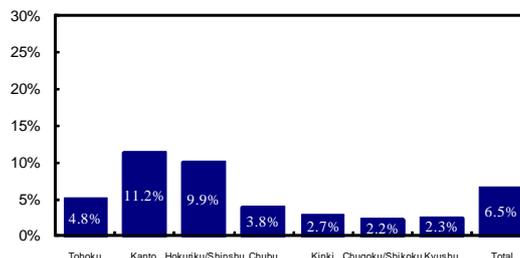
Figure 7 Comparison of MV’s sales by region and outdoor enthusiast population by region



As shown in the above figure, sales in Kanto, Shinshu and Hokuriku regions together account for over 70%, while sales in areas to the west of Kanto account for 20% (Figure 7). The distribution of the outdoor enthusiast population shows that Kinki, Chugoku, Shikoku, and Kyushu together account for 40% of the nationwide total, a sign that they are high-potential markets. (Source: Prefecture-by-prefecture outdoor enthusiast population statistics in 20XX published by the Japan Productivity Center; based on the assumption that the outdoor enthusiast population consists primarily of male consumers in their 20s to 50s uniformly distributed in all regions.)

Figure 8 Estimation of market share of MV's outdoor products by region

	FY20XX MV's sales (Thousand yen)	Estimated market size (Thousand yen)	Market share estimation by region
Tohoku	73,447	1,515,000	4.8%
Kanto	500,342	4,470,000	11.2%
Hokuriku/Shinshu	210,584	2,130,000	9.9%
Chubu	50,584	1,320,000	3.8%
Kinki	70,857	2,670,000	2.7%
Chugoku/Shikoku	30,342	1,380,000	2.2%
Kyushu	35,103	1,515,000	2.3%
Total	971,259	15,000,000	6.5%



We assessed the potential of each regional market from the distribution of the outdoor enthusiast population and estimated MV's sales by region. MV's market share in the Kanto and Shinshu regions last year, in FY20XX, was estimated to be 10% to 11% - almost the same level as MV's self-assessment (Figure 8). MV has a lower market share in Kinki, Chugoku, Shikoku, and Kyushu at around 2% to 3%. As stated in MV's business plan, strengthening sales personnel in those regions is the key to increasing its market share. This strategy will stimulate potential demand, as it did in the Kanto, Hokuriku, and Shinshu regions, and boost its nationwide market share.

○Determination of future sales volume

MV's business plan aims to grab a market share of more than 15% in FY20XX, the largest domestic share of the ¥1.5 billion outdoor leisure and sports market.

Though MV's high-quality, reasonably-priced products have been welcomed by design-conscious consumers, it is likely that the top two outdoor giants, with their workforce for development, sales strength, and name recognition, will start offering new products in the same segment, which will bring real competition in the high-end market.

Changes in the sales of the four specialized manufacturers of outdoor clothing, footwear and bags, ranked lower than MV, show that MV's production development ability and marketing efforts have allowed it to gain market share over those companies. However, it is certainly probable that by taking advantage of their position as specialized manufacturers, they will come up with counter strategies against MV's success.

In the process of creating an assessment scenario, we set the following preconditions for the company's future sales growth, by taking into consideration such a competitive environment, as well as MV's sales performance and market share expansion.

- (1) The outdoor clothing market will stay around an annual level of ¥1.5 billion and MV will pursue market share growth as its key strategy.
- (2) Starting from next year, MV will strengthen its sales force in the Kinki region and to the west and continue to focus on advertising.

- (3) MV will release new products in order to maintain its shipment unit price at the current level.
- (4) MV will gain a nationwide market share of 11% in FY20XX and maintain that level thereafter even with the emergence of new competitors (on the assumption that MV's nationwide business will gain the same level of market share that it enjoys in the Kanto, Hokuriku, and Shinshu regions).

Although accumulated sales for the January-June term of 20XX show steady year-on-year growth, sales for the fiscal year ending in March 20XX are estimated conservatively at an annual growth rate of 135%, the same level as that for the past three years, in consideration of seasonal factors in the outdoor goods market that affect the latter half of the year.

See Attachment 1 on the following page for the details of assumed changes in sales, the sales growth rate, and domestic market share.

(5) Assessed value

As a result of our study shown above, MV's intellectual property (trademarks) has been assessed to have an economic value of 337.68 million to 362.77 million yen.

Assessed value
338 million to 363 million yen

* Rounded off to the nearest million.

For the details of the study, see Attachment 1 and Attachment 2.

[Attachment 1]

Projection of future sales volume for use in evaluation in this report

[MV's business plan (Export sales ratio was determined by appraiser)]

					Sales budget				
		FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX
Outdoor goods market (mid-to high-quality products)	¥1,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
MV's sales budget	¥1,000	563	734	971	1,354	1,706	2,030	2,334	2,595
Domestic sales ratio		96%	96%	96%	96%	95.5%	95.0%	94.5%	94.0%
Export sales ratio		4%	4%	4%	4%	4.5%	5.0%	5.5%	6.0%
Domestic sales		541	704	932	1,300	1,629	1,928	2,206	2,439
Exports		23	29	39	54	77	101	128	156
Year-on-year comparison of domestic sales			130.3%	132.3%	139.5%	125.3%	118.4%	114.4%	110.6%
Year-on-year comparison of exports			130.3%	132.3%	139.5%	141.8%	132.2%	126.5%	121.3%
Domestic market share		3.6%	4.7%	6.2%	8.7%	10.9%	12.9%	14.7%	16.3%

[Scenario for valuation]

					Sales budget				
		FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX
Outdoor goods market (mid-to high-quality products)	¥1,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
MV's sales budget	¥1,000	563	734	971	1,311	1,545	1,698	1,781	1,780
Domestic sales ratio		96%	96%	96%	96%	96.0%	96.0%	96.0%	96.0%
Export sales ratio		4%	4%	4%	4%	4.0%	4.0%	4.0%	4.0%
Domestic sales		541	704	932	1,259	1,483	1,630	1,709	1,709
Exports		23	29	39	52	62	68	71	71
Year-on-year comparison of domestic sales			130.3%	132.3%	135.0%	117.8%	109.9%	104.9%	100.0%
Year-on-year comparison of exports			130.3%	132.3%	135.0%	117.8%	109.9%	104.9%	100.0%
Domestic market share		3.6%	4.7%	6.2%	8.4%	9.9%	10.9%	11.4%	11.4%

Economic Value of Trademark Rights: Royalty Relief Method

I. Underlying Assumptions

Estimated royalty rate	5.4%	41.7%		Discount rate	8.25%	~	9.85%
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II. Cash Flow Calculation (Calculation basis for valuation)

Items	Actual results					Future prospects			
		FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX	FY20XX
Sales subtotal (million yen)		1,545	1,698	1,781	1,780	1,780	1,780	1,780	1,780
Estimated royalty (×)		83	92	96	96	96	96	96	96
Estimated after-tax royalty (×(1 -))		49	53	56	56	56	56	56	56

-1 Discount factor (min)	8.25%	0.92379	0.85338	0.78834	0.72826	0.67276	0.62149	0.57412	0.53037
-2 Discount factor (max)	9.85%	0.91033	0.82870	0.75440	0.68675	0.62517	0.56911	0.51808	0.47163
-1 Discounted cash flow (× -1)		44.93	45.61	44.19	40.81	37.70	34.83	32.17	29.72
-2 Discounted cash flow (× -2)		44.28	44.29	42.29	38.48	35.03	31.89	29.03	26.43

Assessed value of trademark (Discount rate 8.25%)	362.77 million yen
Assessed value of trademark (Discount rate 9.85%)	337.68 million yen