

The Financial Analysis for Advanced Understanding of the Business Management

—The Method of Virtual Management Planning CAI tool—

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Introduction

Generally, The purchase of the technique of financial analysis is made by the training about a university. Usually, the educational contents are the training of drill form are based on a course text, and an exercise according to a business case. By the way, in the financial-policy in actual action of the business enterprise, the mere analysis result is inadequate. It is greatly far from the result of analysis and the management-policy discretion. However, in the field of a common financial analysis, few study means of filling this gap. Then, how using an imagination business planning for attains the tools of analysis that are useful to the discretion of an financial-policy was devised. Furthermore, in order to repeat the feedforward and feedback processes, the plot of the system supported by a computer was considered.

1. The Financial Analysis Method Support for Business Management

Generally, the acquisition of financial analysis is the course of university and it succeeds in it. For example, it is the method of analyzing on a financial statement in a lecture or exercise form etc. Also, in learning by the lecture text of the theory of financial analysis, it is carried forward learning usually in the way, the understanding with each formal ratio of analysis and the practice of the computation problem of the case method.

However, at the drill-type teaching materials, the emphasis of the learning is in numerical ratio itself. The work which advances the understanding of a business management by the financial analysis is done in the seminar as the application. But it is a work to combine some indexes by extracting them^[1]. In the point, the understanding of a business activity, there still is an emphasis in the analysis. It is a way by a simple management game and so on. But, in these ways, the calculation by the ratio of financial analysis and the application by the ratio are separated^[3]. The following procedure is needed ... "How to master knowledge of the management which progressed more".

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1.1 The new financial analysis method which deepens the understanding of business management

A lot of techniques are used for the grasping of the business management. The financial analysis mainly makes financial tables as the output data of the double-entry bookkeeping system and it applies an analysis formula and looks for a various financial ratio. It is the technique to help the management decisions of the person who analyzes a management. Generally, an result of analysis is handled as the basis data to understand the management. As for the fact, “*the understanding* (“*interpretation*” understanding a business activity because of the purpose) of the management” is done under the personal know-how (the knowledge of the experience and the other field and so on).

1.2 The synthetic application of the financial analysis index

However, as for that the next to the analysis is a *black box*, “*the personal interpretation of the analysis person*”, he takes the process of the search for the understanding of management by an analysis person’s underlying^[2]. The decision-making process of the analysis person based on what basis it judged an index by choosing it becomes obscure. Therefore, it thought that the effectivity lay in making the process of the search for problem clarify in gaining the process to apply a synthetically ratio before the step of the understanding of the analysis person. It adds “*the synthetic application of the financial analysis index*” in front of the black box, “*the personal interpretation of the analysis person*”. It thought of the process.

That is the process of the advanced understanding of management through the try which synthesizes financial ratio and going. There is not a way of being established in the matter that except the study to have applied statistics at this point to yet. Therefore, it contrived the way of applying work, the settle of the management plan, to the try to the field, “*the synthetic application of the financial analysis ratio*”.

It is the way of advancing business understanding in the area of the financial analysis through the work to settle on the imagining management plan based on the ratio after calculating a financial analysis. We made a CAI tool to study the effect of such a technique actu-

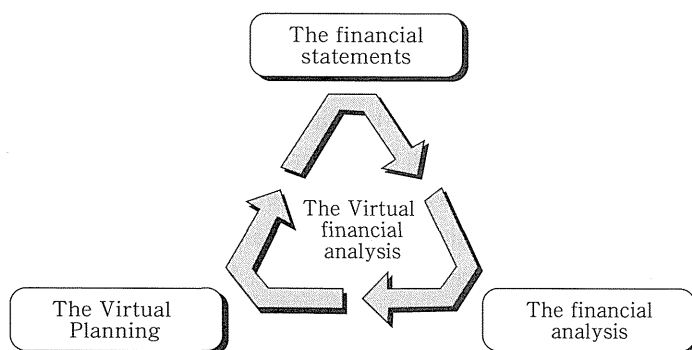


Fig. 1 The scheme of the new analysis for financial management

ally and applied to the try for the new financial analysis learning in the university courses.

2. The Financial Analysis Method Using the Scenarios

The procedure of the analysis of the affairs of a business using the scenarios. First, it manufactures a financial analysis learning scenarios. This time, it made a basis learning point at issue with the university level^[3]. The scenarios takes the process of being retrospective from the result to the plan contrary to the process of being concentrated in the financial statements. It takes the process which the financial indices by the business plan synthesizes from the numerical value of the financial statements.

In the management planning therefore, it worked apart from the indices on financial statements, it assumed the virtual management plan. It takes a series of processes that develop a financial index from the financial statements which compose this virtual management plan. It gives the following result management data beforehand as the preparation of the actual data from financial statements, appropriation statement, human resource data, and so on.

3. The Virtual Planning to support The Financial Analysis

The *Virtual Planning* is a process which repeats constant feedback and a constant feedforward. The plot can be built according to the steps which are shown Figure 2.

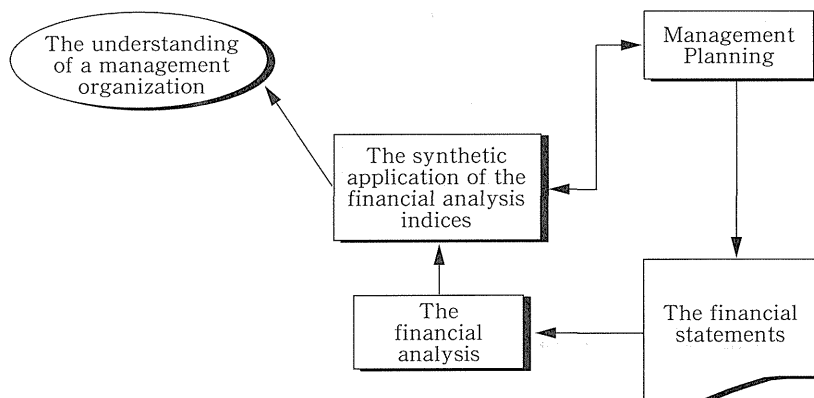


Fig. 2 The view point at analysis of the relation between the planning and the financial data

The 1st step: The Virtual Planning Business Plan

The business plan to finalize the management plan for the following fiscal year. That is, a management policy through the whole management plan is shown and it becomes the terminusquo of the management plan^[4]. In this step, with the decision of profit for the period of the plan and it applies the following management analysis formulas.

—The profit for the period, the profit ratio of gross capital, the ratio of value added to

sales, the profit ratio of value added to sales.

The 2nd step: Embody an activity of the profit-earning activity monthly

It makes the monthly income statement and it monthly expresses the profits-earning activity about that it is possible to execute. Embody an activity plan monthly and express it.

2-A: The column of revenue-earning activity area

It calculates each these ratios and it fixes a value with each of these items which compose the *virtual management plan*. The ratio of value added to the sales which has been 2 fiscal years before and the additional value growth percentage to the last fiscal year. This area calculates the sales of the plan.—The profit for the period, the profit ratio of gross capital, the ratio of value added to sales, the profit ratio of value added to sales.

2-B: The column of the profit-earning activity

The decision of the rate of increase of the personnel expense in this area, it applies the following analysis formulas.—The ratio of value added to sales, the profit ratio of value added to sales.

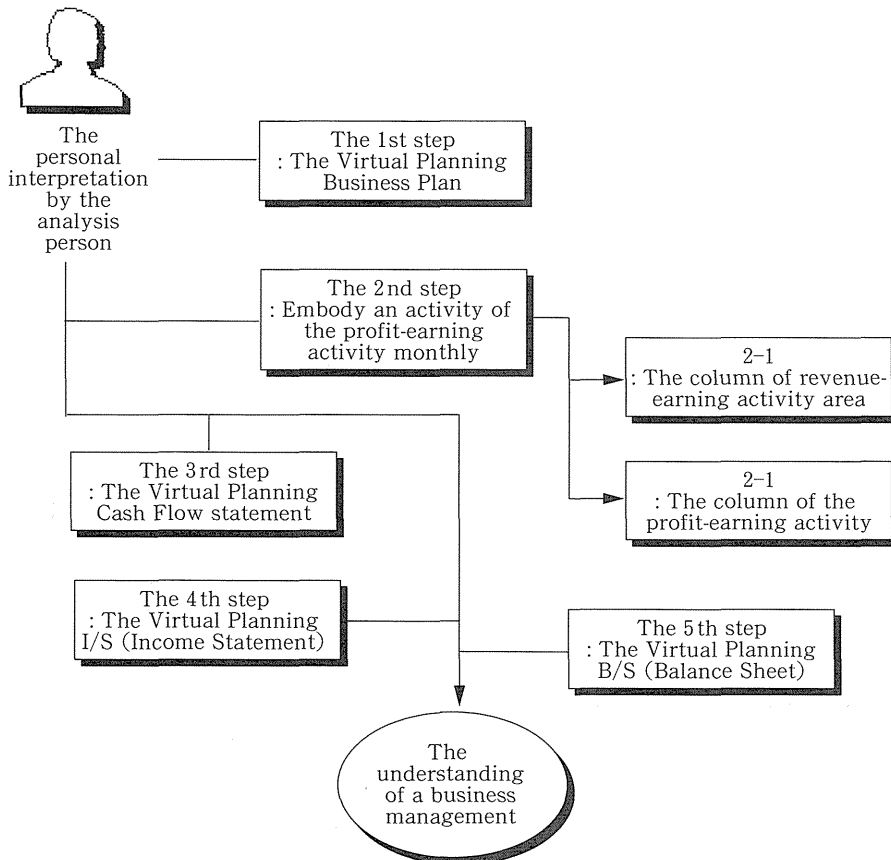


Fig. 3 The Virtual financial analysis procedure

The 3rd step: The Virtual Planning on Cash-Flow statement

The way of the fund procurement and the way of the investments of the fund which has a purpose of the profit winning are shown. Incidentally, it presuppose the conditions which are identical with the past fiscal year. In this step, it apply the financial analysis formulas which belong to the following point at issue. —The ratios of cash flow analysis, the rate of firm growth in the return on capital, the ratio of value added to sale, the relative share, the ratio of profitability analysis, the rate of growth.

The 4th step: The Virtual Planning I/S (Income Statement)

It sets each goal which indicates an activity in the next term as the composition items of the statements of profit and loss. It confirms agreement with the actual results of financial statement and the input mistake and the application mistake of the ratios and so on can be checked. In this area, it applies the following management analysis formulas. —The return on capital, the rate of profit, the ratio of value added to sale, the relative share, the ratio of profitability analysis, the rate of growth.

The 5th step: The Virtual Planning B/S (Balance Sheet)

It is expressed as the virtual planning B/S table based on the past fiscal year's analysis ratios. It becomes the last step of the process of the virtual management planning. It confirms agreement with the actual results of financial statement and the input mistake and the application mistake of the ratios and so on can be checked.

Total column of the virtual planning B/S, the virtual planning general capital which the numerical value of the total column of the fluctuation during the period was fixed as in the management planning table. In this area, it applies the following management analysis formulas.—The return on capital, the ratio of value added to sales, the relative share, the ratio of profitability analysis, the rate of growth.

4. Conclusion

As for the financial analysis, it supports the interpretation of the analysis person^[5]. The conventional financial analysis course of university is excellent on analyzing works. However, only it is insufficient. The business analysis is often required from the purpose to understand management synthetically in a lot of cases. The technique to provide the basis condition of the management decisions via the process to synthesize the result is necessary. The analysis result becomes a decision basis just as it is in this way contains a error. The total management decisions belong to the field of the analysis person.

The utilization with the multimedia data, the hypertext is easy as the learning support teaching materials. At present, it is working with the fullness of the contents. Moreover, it has a purpose of the operation of the file server with the network and so on. After, it wants to expand evaluation object data. Finally, we will develop the part of the CAI system of the

guide on the network.

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