

A Role of Human Resource in Intellectual Organization

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Abstract

Recently, many Japanese corporations have been urged to review the way of their human resource in organization. In these context of organizational learning, we will discuss a role of human resource in an organization from the intellectual point of view.

Introduction

The purpose of this paper is to consider about how the human resource in an organization should be. Firstly, the concept of "intellectual organization" and the indicator to measure it will be presented, Secondly, the concept of human resource in an organization will be reviewed from the accounting aspect. Finally, the relationship between intellectual organization and human resource will be discussed.

Intellectual Organization

In this paper, we assume that the degree of "how intellectual" is understood by the height of "the organizational intelligence coefficient α [4]." The definition of "Organizational Intelligence" is collective, intelligent problem-handling capability of an organization, and an integration where human intelligence is combined and interacts with machine intelligence [3]. The coefficient is summarized in the follows:

It is proposed as a proxy, which shows the intelligent side of the activity of an

organization. The result of management is achieved through the multiplier effect of the intelligent ability and the physical strength of an organization. The former is organizational intelligence coefficient α and the latter is geometric average of capital and labor. A certain result of management at the period is shown by the amount of the value added. Here, V stands for the value-added, A for the capital asset and E for the number of employees. From the above, the relation of equation (1) is approved. And the coefficient α is derived from equation (1).

$$V = \alpha \times \sqrt{A \times E} \quad (1)$$

$$\alpha = \sqrt{\frac{V}{A} \times \frac{V}{E}} \quad (2)$$

The right side of equation (2) is a geometric average of capital productivity (V/A) and labor productivity (V/E). Therefore, the coefficient α is suitable for the above definition.

Human Resource in Accounting Aspect

Accounting methods to measure human resource have being developed variously. In them, two methods have been evaluated highly. One is behavioral science conversion method [2], and the other is measurement method of individual value [1].

The former has excellent merits of the following. They are to be able to measure the characteristic of the organization in non-monetary and to be able to obtain the monetary value on the non-monetary base. However, some difficulties are in it, too.

The latter is to understand the value as the individual expectation can be achieved. All the elements, which compose the model, have characters as the variable. The value of the variable is decided depending on various conditions, and realizable value of the individual can be measured ultimately. This model is evaluated as an exquisite and unique one to intend non-monetary measurement of personal value. To execute this

method, however, it is necessary to add a further examination to various variables and to develop the measurement method of them concretely. The above is the typical measurement method of human resource.

Role of Human Resource in Intellectual Organization

For the organization in this paper, "using the resource as effectively as possible" was synonymous with being intellectual. And it was assumed that the degree of intelligence of an organization could be measured by the organizational intelligence coefficient α . There, human element was represented by the number of employee as E .

$$\alpha = F(E) \tag{3}$$

$$\frac{\partial \alpha}{\partial E} < 0 \tag{4}$$

We assume that the organization value of R. Likert or the individual value of Flamholtz can be measured by overcoming some difficulties. Setting the value of human resource measured by the above methods to be H , from the outline, the α can be expressed as follows.

$$\alpha = G(H) \tag{5}$$

$$\frac{\partial \alpha}{\partial H} \geq 0 \tag{6}$$

H is the one measured considering to the value, an aptitude distribution and effective use of the human resource. Therefore, it is considered that measuring H will become a method by which we are able to search quantitatively for the ideal way of the human resource in the organization. H has close relation with A , especially with the use of the information systems. It is expected that we can develop a quantitative research of the organization further by introducing H .

Conclusion

We considered about the relationship between the human resource and intellectual organization, and discussed from the quantitative approach, which is data depending method. We felt the approach has still various difficulties. For those topics, we usually use System Dynamics approach, which is structure depending method. Then it might be better to combine them together.

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