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THE WAY OF TESTING RESULTS INTERPRETATION FOR GIVING EMPLOYMENT PURPOSES

The subject of our Conference is Human Capital Development. Many investigations both of theoretical and practical nature have been dedicated to this theme. However, carrying out of this particular Conference shows that there exist a lot of problems in this vast sphere of human activity. That is why I would like to suggest in my work some conceptual approaches to the problem of human capital development from an employer's position.

It is necessary for any employer the human capital to be used as much effectively as possible. Due to common reasonings we may come to the conclusion that harmonization between working conditions and human idea about desired working conditions in the broad sense of the word (including perspectives of intellectual, spiritual and career growth as well as social protection, etc.) is one of the main conditions of the personnel working with maximum effectiveness. Speaking briefly, the harmonization of a person and his working place ought to be reached. Hence, we have to investigate a person, on the one hand, and working conditions of each particular working place on the other hand.

The problem of a person and his working place harmonization can be solved by means of testing. We can single out two types of tests, they are:

- Tests for definition of mental facilities (human intellect), his knowledge and skills (Let us designate letter I (Intelligence) to great amount of such type of tests);
- Psychological tests for defining of psychological characteristics (letter C (Character) is for great amount of second type tests).

It should be noted that many testing systems exist at present time. In our work we refer only to the activities of a very famous company in the sphere of personnel estimation "Pilat HR Solutions" which estimates in the process of testing the following aspects of a person: intellectual characteristics (level of development and style of thinking), "psychological portrait": individual and personal as well as social and psychological characteristics; communicative skills, peculiarities of inter-personal interaction; motivational and will qualities; style of management and loyalty degree to the company; the degree of managing skills development: aiming, planning, delegating of powers, managing of projects, managing of people; factors that motivate the employee to effective activities; other aspects depending on a company requirements.

Great amount of parameters in different testing technologies results in great difficulties in making of final decision. In our work two-dimensional presentation of testing data is suggested that, in authors' opinion, is to facilitate the process of decision making.

Let the group I have n_1 of the tests described numerically by the criteria (marks) $I = [1, 2, \dots, n_1]$, and the group C have $C - n_c$ of the tests described numerically by the criteria (marks) $C = [1, 2, \dots, n_c]$.

Let us present the measurements data on the graph. C is the horizontal axis and I is the vertical one. The criteria can be marked on axes and we can show the points, whose coordinates are the criteria [I] and [C] as shown in Figure 1. We can name the given Figure as Human Table (HT). Thus, the psychological and intellectual image of the person is created.

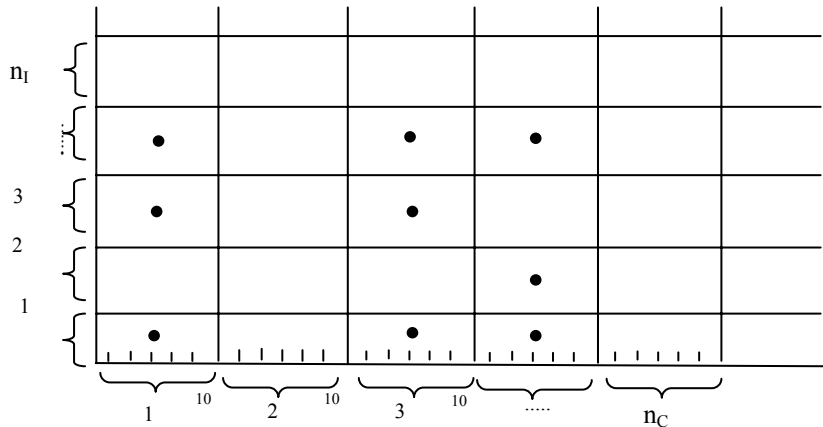


Fig.1 Human Table

Two notes should be taken into account.

1. Each factor must be normalized and be varied from zero to unity. The unity corresponds to maximal value of positive quality.
2. Some factors (parameters) in the group can be mutually exclusive, so some squares can contain no points.

Further we should investigate the desirable requirements to the working place and make the similar figure and set the desirable points. The given table is named the Working Place Table. This will be the ground of the employee acceptance for work.

We should note that when maximum criteria are equal to unity the points will be at the crossing of horizontal and vertical lines (Fig. 2).

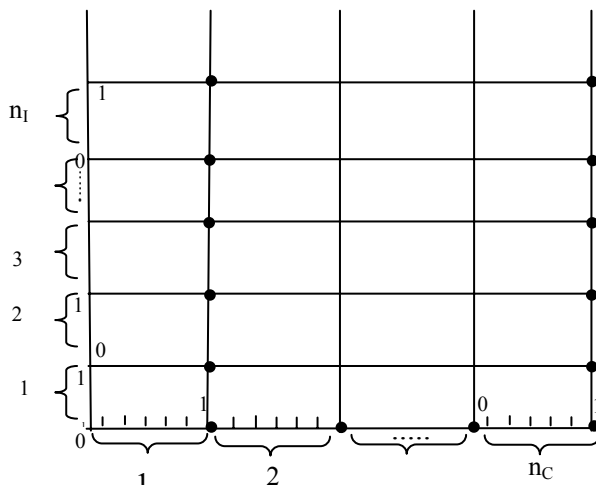


Fig. 2. Reference Table

We'll call such type of the table the Reference Table (RT). As a rule, RT will not coincide with HT. Thus, the deviation of HT data from RT is expressed in the form of the definite salary level appointed (higher or lower).

The way of IQ presenting. We've already mentioned that IQ ought to be expressed not in the form of a digit but in the form of a vector being the set of parameters.

We can suppose the IQ Correlation Matrix:

$$\text{IQC} = \begin{bmatrix} 1 & a_{12} & \dots & a_{1n1} \\ a_{21} & 1 & \dots & a_{2n1} \\ \dots & \dots & \dots & \dots \\ a_{n1,1} & a_{n1,2} & \dots & 1 \end{bmatrix}$$

Having carried out the investigations, it is possible to set correlation ties and in such a way to reduce the number of tests.

The similar matrix can be suggested for human character properties indication.

The HT measuring. As far as the parameters contained in HT table depend upon person's condition while measuring, it is desirable to repeat measurements several times and define mathematical expectation and standard deviation σ , which shows stability and predictability of human behaviour. When σ is close to zero, a person is more predictable than when $\sigma \gg 0$.