RELEVANCE OF LABOR PRODUCTIVITY UPON HUMAN RESOURCE PERFORMANCE AT SME LEVEL

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Abstract: During the recent years, human resource performance has faced a series of challenges, due to the economical crisis, mainly. Gaining performance, on one hand, and also labor productivity growth, have become the most important targets of an enterprise, whether we speak about the entity in general, whether we refer especially to human resources. It is far more difficult to develop a complex analysis of human resources at SME level, compared with the bigger enterprises. The present paper aims to present a short analysis of the relevance that labor productivity manifest both upon human resource performance and upon HR management in general.

Key words: human resource, performance, labor productivity, SME

1. Human resource performance – prerequisite for organizational success

Before speaking of performance management, performance determinants and methods of stimulation, namely its analysis, it is necessary to address performance in terms of conceptual, both in organizational terms and as a way of behavior or attitude.

From an organizational viewpoint, this general term includes the concepts of "measurement", "analysis", "assessment", performance being also defined as a state of competitiveness of the company, reached by a level of efficiency and productivity that ensure a sustainable presence on the market" (Lala, Miculeac). "The information about the performance of an enterprise is required in order to assess potential changes in the economic resources that the enterprise will be able to control the future."

From a behavioral standpoint, the performance can be seen as a "behavior and nothing else" (according to Currie, 2009), while representing the "cause of a result, but not the result itself." The performance of human resources will not be equal, as long as they usually differ from one individual to another, precisely because each of them is unique in its own way.

In simple lines, the concept of "performance" can be defined as a term determined by two main variables, namely the "competence" and "attitude", the powers themselves are generated by three variables: knowledge, skills and abilities.

In studying each of these notions are some general coordinates to be explained:

We talk about knowledge if we refer to the theoretical aspects of which an individual may benefit, largely the result of cumulative education, be it academic training or other lower level.

If you approach the concept of "skill ", on the other hand, we observe that it is many times confused with the term "ability ", even if the two terms are quite different. By aptitude we understand therefore an innate trait of an individual, which manifests timely triggers that are different for each attribute separately.

Skills, on the other hand, are not native qualities, but are achieved in the practice of the theoretical knowledge acquired to date. The problems often through the experience concept "directly related to the notion of service."

Competence, beside attitude, contributes to individual performance, which is equivalent to a "professional outcome in terms of human resource management."

Literature mentions thus "attitude" as a key factor in achieving performance. The term lies in the existence of the "intent" of an individual to assert main attributes and professional

advantages therefore desire to achieve positive results and highly valued as through the application of knowledge, skills and personal skills, and to "capitalize" core competencies.

Other sources (Stanciu, Ionescu) call productivity, creativity and loyalty as the main factors that drive individual performance.

Of these, productivity is considered to be the ratio between the "input" and "output" in terms of the labor factor, a term that also involves issues easier or harder quantifiable human effort, skills, and so on . It also includes value added, through the "value of service provided extra time or by the action of external environmental change " (Stanciu, Ionescu) is evidence that productivity calculation cannot contain intellectual activities eg.

In a society in constant change, in a dynamic and competitive environment, creativity becomes a necessary condition to ensure continuity in the market while ensuring the loyalty becomes layout stability and balance.

2. Performance appraisal methods – a view from the top

"The concept of "performance" is required to be defined by many variables. We can refer on the one hand results therefore what you get from certain activities, but at the same time we consider the concepts of effectiveness, efficiency, respectively, in terms of, on the one hand the need to perform a whole series of objectives, on the other hand the idea of assessing the cost / result" (Demyen,Lala).

In the literature, the authors studied how the performance can be defined, calculated, how establishing relationships or connections between the various factors that contribute to influencing the activity of an enterprise. Youndt, Snell, Dean, Lepak (Youndt MA, et al, 1996) have outlined ideas that provide a direct link between the performance achieved and the strategies implemented, while other authors (Purcell, Guest), identify a direct link between performance and human resource management as a whole.

In the vision of Donald Currie (Currie, 2009), on the other hand, " the level and quality of performance of an employee is determined primarily by the employee's ability to perform the assigned work", but also the "employee motivation to do thing".

Performance, according to Currie becomes equal with the following relationship:

Capacity x Motivation

P = C x M

Performance varies depending on several criteria, taking into account the type of activity, but also the complexity, standards are set by means of indicators such as:
- The amount;
- The Quality;
- Execution time;
- The costs involved;
- The efficiency of the work performed.

Also, the main factors affecting performance are the capacity and motivation, as was mentioned above, motivation, in turn, is influenced by a number of factors, both organizational and attitudinal or personality.

3. Labor productivity - indicator of human resource efficiency

Labor productivity can be defined in several ways, but the main idea needed to be clarified is that it represents a relationship between the effect of the exploitation process, and the effort provided.

$$W = \frac{Q_{phisical}; Q_{value}; Q_{production}; Q_{destined\,for\,sale}; turnover, VA}{N_p, N_m, N_h, N_z}$$

By analyzing labor productivity is primarily intended to assess the level thereof, and fluctuations in time, aiming at the identification of the main factors influencing the change in

time. The objective of any organization, from this perspective, would be to increase productivity and streamline business activity. An enterprise development is possible only through continued growth of this indicator.

When referring to analyze the level and dynamics of labor productivity can be determined in several forms, both annual and daily or hourly.

1. Annual productivity:

$$W = \frac{Q}{N_s}$$

Where Q - production, turnover or the value added

Ns - number of employees

W - production obtained on average per employee in a given period

2. Daily Productivity:

$$Wz = \frac{Q}{N_z}$$

Nz - working time expressed in man - days

WZ - average production in a day's work in a given period

3. Hourly productivity:

$$Wh = \frac{Q}{N_h}$$

Nh - working time expressed in man - hours

Wh - production in an average hour of work in a given period

If we compare the three indicators in dynamics, one can identify the following correlations:

$I_{Wz} > I_W$, the daily productivity index is greater than the annual productivity index, determining the daily productivity by eliminating waste of time for days

$I_{Wh} > I_{Wz}$, hourly productivity index productivity index is higher than daily index, because hourly productivity is determined at the actual time used.

The factor analysis of labor productivity relationship starts from its calculation:

$$W = \frac{Q}{N_s}$$

The factorial is determined as follows:

$$W = \frac{N_h}{N_s} * \frac{Q}{N_h} = n_h * W_h$$

$$W = \frac{N_h}{N_z} * \frac{N_z}{N_s} * \frac{Q}{N_h} = \overline{dz} * nz * Wh$$

Deviation of labor productivity is determined in absolute size and relative sizes as follows:

$$\Delta W = W_1 - W_0 = \frac{Nh_1}{Nz_1} * \frac{Nz_1}{Ns_1} * \frac{Q_1}{Nh_1} - \frac{Nh_0}{Nz_0} * \frac{Nz_0}{Ns_0} * \frac{Q_0}{Nh_0}$$, in absolute values

$$I_W = \frac{W_1}{W_2} * 100 \quad \Delta I_w = \frac{W_1}{W_0} * 100 - 100$$, in relative values

The main influencing factors are :

$$\Delta W \rightarrow \Delta nh, \Delta Wh \rightarrow \Delta \overline{dz} \, \Delta nz, \Delta S \, \Delta Whi$$

The influencing factors are both of level I and level II , as follows:

- Δnh - average number of hours worked per employee. In this case are involved the following influences: $\Delta\overline{dz}$ the average length of the working day, Δnz - average number of days worked per employee
- ΔWh - hourly labor productivity , where the following changes occur :
ΔS - production structure
ΔWhi - hourly productivity / product.
Measuring the intensity of action of factors, we conclude the following:
- The influence of change in the average number of hours worked by an employee :
$$\Delta W_{(nh)} = (nh_1 - nh_0) * Wh_0$$
  o The influence of change of the average working day
$$\Delta W_{(dz)} = \left(\overline{dz_1} - \overline{dz_0}\right) * nz_0 * Wh_0$$
  o The influence of change in the number of days worked on average per employee
$$\Delta W_{(nz)} = \overline{dz_1} * (nz_1 - nz_0) * Wh_0$$
- *The* influence of change in the hourly labor productivity
$$\Delta W_{Wh} = nh_1 * (Wh_1 - Wh_0)$$
  o The influence of change in the structure of the production
$$\Delta W_{(s)} = nh_1 * \left(Wh_{(s)} - Wh_0\right)$$
$$Wh_{(s)} = \sum gs_1 * Wh_{i0}$$

Where
$Wh_{(s)}$ - the hourly labor productivity recalculated based on the structure of production
Gs - specific weights
Wh_i- hourly productivity product
i - products .
  o The influence of hourly productivity change / product
$$\Delta W_{(Wh_i)} = nh_1 * \left(Wh_1 - Wh_{(s)}\right)$$
Determination of total deviation:
$$\Delta W = \Delta W_{(nh)} + \Delta W_{(wh)}$$
$$\Delta W_{(nh)} = \Delta W_{(dz)} + \Delta W_{(nz)}$$
$$\Delta W_{(Wh)} = \Delta W_{(s)} + \Delta W_{(Wh_i)}$$

The factors acting upon productivity exercises the following influences:
- The average number of hours worked by an employee directly determines the change in the level of labor productivity in proportion to the level of the base period hourly labor productivity.
- The variation of the average working day determines productivity change through the influence upon the average hours worked by an employee in direct proportion to the corresponding levels of the base period average number of days worked per employee and hourly labor productivity.
- Average number of days worked per employee affects the change through the influence of the change in the average number of hours worked by an employee in direct proportion to the level of the base period hourly labor productivity and the duration of the current period average working day.
- Changing hourly labor productivity directly affects labor productivity change in proportion to the current period average number of hours worked by an employee.

- Changes in production structure affects labor productivity change through the influence of hourly labor productivity change in the same direction and proportional to the current period, the average number of hours worked per employee.
- Changes in hourly productivity product generates productivity change through the influence of hourly labor productivity change in direct proportion to the current period , the average number of hours worked per employee.

The labor productivity is mainly influenced by:

- Technological and technical level of the company
- The organization operating
- The quality of the human factor.

The Curve of human functioning (Currie, 2009) illustrates the situation where an individual is forced to cope with extreme situations in the workplace that reach a high level of importance, urgency and calls for a major involvement and high workload . Currie addressing this problem in terms of pressure which creates a situation as the following:
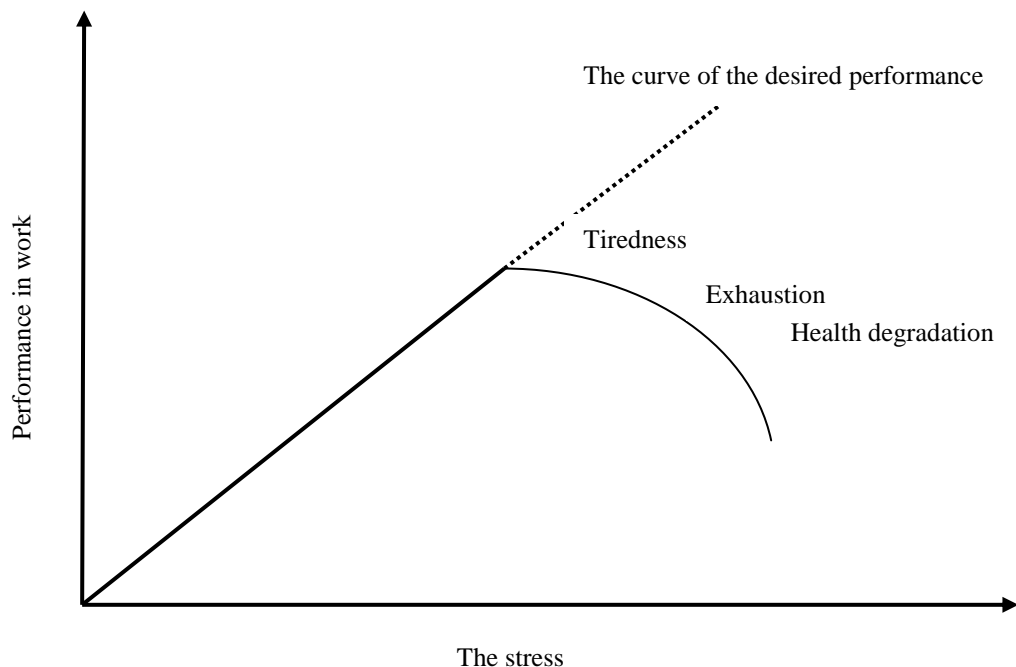

Fig. no.1. The Curve of human functionality
Source: Currie , 2009

The explanation is that high levels of stress reduce work capacity and productivity default and failure to meet the requirements creates additional stress.

However, the change in labor productivity exercises its effects upon other indicators:

1. Change exerted upon production value:

$$\Delta Q_{(Wh)} = T_1 * (Wh_1 - Wh_0)$$

2. Change exerted upon turnover

$$\Delta CA_{(Wh)} = T_1 * (Wh_1 - Wh_0) * \frac{CA_0}{Q_0}$$

3. Change imposed upon the value added

$$\Delta VA_{(Wh)} = T_1 * (Wh_1 - Wh_0) * \frac{CA_0}{Q_0} * \overline{VA_0}$$

4. Change exerted on fixed costs at 1,000 lei turnover

$$\Delta Cf_{/1000(Wh)} = \frac{Cf_0}{T_1 * Wh_1} * 1000 - \frac{Cf_0}{T_1 * Wh_0} * 1000$$

5. Changes exerted on gross profit

$$\Delta Pb_{(Wh)} = T_1 * (Wh_1 - Wh_0) * \frac{CA_0}{Q_0} * r_{Pb_0}$$

6. Changes exerted on return on equity

$$r_{(Wh)} = \frac{\Delta Pb_{(Wh)}}{Capital_{permanent} \; sau \; Capital_{propriu}} * 100$$

Performance of an organization depends largely on the individual performance of human resources and their performance as a whole. One of the main objectives of an economic entity is to generate performance whether we refer to the individual level or speaking of teams. For this, however, it is necessary that the performance may be quantified by a set of indicators, traditional or, alternatively, new indicators in terms of their use.

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