

## THE ROLE OF HUMAN RESOURCES IN IMPROVING THE PRODUCTIVITY OF HUMAN LABOR

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### ABSTRACT

The overall development of society is directly related to the development of human capital. The quality of human potential is the main factor of competitiveness and a driving factor for the economy that is based on workers own knowledge and skill. Today, in this constantly changing business environment, the advantages of companies are temporary and variable. The driver of this constant competitiveness are the workers themselves and therefore they are the basic resource in production.

The strategic competitiveness of companies is related to the current interpretation of market success. It can be said that human capital is responsible for successful business marketing. This is a real challenge for the leaders who form the competitive strategy.

The study of human capital, the management of human resources, labor productivity and its evaluation are the main components of maintaining the business competitiveness of companies.

The aim of this paper is to emphasize the importance of labor in overall production, to link productivity to human potential and to emphasize the role of human resources in increasing productivity.

**Keywords:** Human capital, sustainable corporate competitiveness, human resource management

## УЛОГАТА НА ЧОВЕЧКИТЕ РЕСУРСИ ВО ПОДОБРУВАЊЕ НА ПРОДУКТИВНОСТА НА ТРУДОТ

### АПСТРАКТ

Целокупниот општествен развој е во директна врска со развојот на човечкиот капитал. Квалитетниот човечки потенцијал претставува основен фактор за конкурентноста и движечка сила за економијата која се темели на знаењето и вештините на човекот. Денес, во време на променливо бизнис опкружување, предностите на компаниите се привремени и варијабилни. Двигателот на оваа континуирана конкурентност се луѓето и затоа тие значат основен ресурс во производството.

Концептот на стратешка конкурентност на компаниите е поврзан со модерното толкување на успехот на пазарот. Мора да се каже дека за стекнување на успешен деловен маркетинг се' позаслужен е човечкиот капитал. Неговиот развојот представува вистински предизвик за лидерите кои ја формираат конкурентната стратегија.

Прочувањата за човечкиот капитал, начинот на управување со човечките ресурси, продуктивноста на трудот и нејзината калкулација го чинат главниот извор на одржување на бизнис конкурентноста на компаниите.

Целта на овој труд е да се потенцира важноста на трудот во целокупното производство, да се поврзи продуктивноста со човечкиот потенцијал и да се истакне улогата на човечките ресурси во зголемувањето на продуктивноста.

**Клучни зборови:** Човечки капитал, одржлива компаниска конкурентност, менаџмент на човечките ресурси.

## INTRODUCTION

Companies and businesses operate thanks to the existence of appropriate production resources and their employees, with their capability and skill, are the most important part of those resources. Human resource management means directing staff to activities in firms. It is based on a multitude of important categories of organizational behavior, such as: motivation, relationships of individuals and groups, organizational socialization, organizational culture, etc. Treatment of people as resources is a desire to equalize this potential with the treatment of other work resources in companies, both in terms of costs and in terms of functional link with the work process.

Human resources are a treasury of knowledge and skills that are necessary for the performance of the work activities and the progress of the companies. Investing in human resources through the reform of the education system, applying the concept of lifelong education and promoting health and safety at work, by gradually reducing employment in the informal economy (Gray Economy, Informal Economy - part of the economic activity which is not registered in official statistics [8], are key mechanisms for improving quality and increasing labor productivity.

The aim of this article is to emphasize the importance of labor in overall production, to link productivity to human potential and to emphasize the role of human resources in increasing productivity through a given example of

cigarette production in the Tutunski kombinat – Prilep[6].

### Definitions

- Productivity is the measure of the quantity and quality of work performed, taking into account the cost of used resources [1].
- Productivity is the relation between output - goods and services, and input - resources: labor, capital, and management [2].
- Single productivity is the relationship between one input (one resource) and output - produced goods and services offered [2].
- Multiple productivity is the relation between multiple or all input - more or all of the resources, and output - produced goods and services offered [2].
- Human resources is an expression of the overall spiritual and physical potential of employees, which can be hidden or exploited [4].
- Human Resource Management is the design and application of formal systems in an organization to ensure the effective and efficient use of human talent to meet the organizational goals [Mathis & Jackson, quoted by Griffin (4)].

## RESULTS AND DISCUSSION

### 1.PRODUCTIVITY

#### Productivity and Operational Management

Productivity is the production of goods and services. Production is not a constant size, but a process that constantly requires changes in resources, directed by input and output. **Input**, from an economic point of view, means labor, capital and management integrated in the production system. **Output**, in the economy, refers to goods and services. The effectiveness of changes in resources depends the volume of productivity, as well as the value of the produced goods and the services offered. By improving productivity we also improve efficiency. Company managers are responsible for improving productivity. Their task is to increase the value that results from the **output : input** ratio. There are two ways of managing, in order to increase efficiency, as follows:

- Reduce input, and maintain constant output.
- Increase output, and maintain constant input.

Higher production means the employment of many people in companies, which does not mean high productivity. If the goal is to ensure higher production, then it is necessary to provide a way to measure, ie calculate. The measurement of production assesses the ability of a state to improve the standard of living of its people [2].

Increased productivity resulting from the good functioning of labor, capital, and management will increase employee salaries. If labor, capital and management are increased without increasing productivity, prices rise, while

increasing productivity reduces prices as more is produced from the same resources.

#### Measuring Productivity

Measuring productivity can be single (direct) – when only one input resource is used to measure productivity, and multiple times.

- ❖ **Single productivity** is calculated by working hours per produced units of a product (pieces, liters, kilograms, etc.), for example:

**Productivity = Number of produced tonnes of cigarettes : used input**

**EXAMPLE:** If the number of manufactured cigarettes is 5000 tons, and the goods were produced in 4800 hours (for a period of one year, with 16 effective hours per day for a period of 300 days), then:

Productivity =  $5000 : 4800 = 1,04167$   
tons of cigarettes / hour  
or 1041,67 kg cigarettes / hour

- ❖ **Multiple productivity** is calculated by combining service units, such as:

**Productivity = output (labor + materials + capital + other)**

**EXAMPLE of single reproduction :** Ten employees work 8 hours a day and their total cost per payroll is 8000 denars / day, while the general costs are 5000 den /

day. Their productivity is 2750 kg of cigarettes / day (10 workers x 275 kg cigarettes / daily = 2750 kg cigarettes per day).

Productivity (with old technology) = 2750 kg cigarettes per day : 80 working hours / day (10 workers x 8 hours = 80 hours) = 34,38 kg cigarettes / hour.

A new technology has been introduced by which ten employees with unchanged working hours and the same total costs produce 8486,7 kg of cigarettes / day, and the general costs are increased to 6000 den. / day.

Productivity (with new technology) = 8486,7 kg cigarettes per day : 80 working hours / daily = 106,0838 kg cigarettes / hour.

**EXAMPLE for multiple reproduction:**

Ten employees work 8 hours / day, and their total payroll costs are 8000 den / day, while the general costs are 6000 den / day.

Productivity (with old technology) = 2,75 tons / day : 13000 den / day. (total costs 8000 den / day + general costs 5000 den / day) = 0,00021 tonnes / denar or 0,21154 kg / denar = 211,5 g / denar.

Productivity (with new technology) = 8,48665 tons / day : 14000 den / (total costs 8000 den / day + general costs 6000 den / day) = 0,00060619 tonnes / denars or 0,60619 kg / den = 606,2 g / denar.

As an example, labor productivity increases from 34,38 kg of cigarettes per hour to 106,1 kg cigarettes per hour, which means that the increase in work productivity is 2,1%.

$[(106,1 - 34,38) : 34,38 = 2,08606 \approx 2,1\%]$

Multiple productivity increases from 211,5 g / day to 606,2 g / day, which means that the increase is 1,9%.

$[(606,2 - 211,5) : 211,5 = 1,86562 \approx 1,9\%]$

The increase in productivity (single / working by 2,1% and multiple by 1,87%) is due to the improvement of the existing technology, ie the introduction of new modern technology which is primarily a result of human resources, i.e. of their intellectual and creative work.

**Variable values of the productivity**

The increase in productivity, as already mentioned, depends on three variables values: labor (work), capital and management.

**- Labor (work)**

The increase in productivity as a result of invested work is based on a healthier, more educated and better-nourished working power (often also on a shorter working week). In the developed countries, special importance is given to maintaining and increasing the working skills of the employees, which enables rapid dissemination of new technologies, knowledge and skills.

**- Capital**

Capital is an economic value that needs to be fertilized to create added value. It can be physical (production space, machines and equipment, raw materials, semi-products, final products, etc.) and financial (cash, securities, etc.). Almost every person in work uses tools provided by capital investments. Inflation and cuts increase the cost of capital. If invested capital per employee declines,

productivity decline can be expected. A greater use of labor, and the smaller the capital, reduces unemployment in the short-term, but the production makes it less productive (which is also true of agriculture), and thus decreases the daily wage in the long run.

Capital investment is often necessary, but not the only weapon in the struggle to increase productivity. Efficiency in capital utilization usually means balancing between fixed assets and those in human resources.

### **- Management**

Management is an economic resource and a factor of production. The manager is responsible for the effective use of work and capital, and aims to increase productivity in front of them. In that context it includes various advances that have been achieved with the knowledge and application of technologies. New technologies require additional education, trainings etc., which creates high costs. The manager has the task of bringing all operating processes to the optimum level, and to use knowledge, technology and capital more efficiently, which will increase productivity.

### **Measures to increase labor productivity**

Measures taken to increase labor productivity consist mainly of using the positive influence of the factors that act in the direction of its increase. This means that the factors of labor productivity are objectively given opportunities whose realization represents the activities for increasing productivity. Implementation of these activities simultaneously represents the subjective efforts of the team employed in a company to fulfill the objective opportunities contained in the

plan to increase labor productivity. These activities relate to the following:

- Improving the technical equipment of labor,
- Development and improvement of the specialization of the equipment in the company,
- Improving the qualifications and work experience of the employees,
- Rational use of working hours,
- Improving the general organizational conditions of the company,
- Individual and group stimulation of all participants in the work process,
- Control of applied methods in order to increase labor productivity,
- Audit of financial and accounting operations.

The implementation and realization of these measures and the increase in labor productivity at the level of one company (micro level) leads to:

- Reduction of production costs,
- Reduction of selling prices,
- Shortening of the working time,
- Increased production,
- Greater profit,
- Real salaries of employees,
- Greater competitiveness and representation of the company on the market, etc.

In the context of the foregoing, it can be emphasized that the overall struggle for development and progress of the productive forces comes down to using less effort in achieve greater results. Given that increasing labor productivity affects the development of productive forces and the improvement of employees' living standards, it is necessary to be the primary aim in the operating and functioning of each company.

## 2.HUMAN RESOURCES

In the past there were staffing services within working organizations that were responsible for employments and salaries. Today there are HR services (human potential) whose function is much larger (evaluation of the individual's ability in the firm, employment and dismissal, organization of trainings and other employee-related activities). The introduction of the term human resources was followed by sharp criticism because it was interpreted as identifying people as objects, which was degrading to the human being. But soon this interpretation changed and the notion has gained new importance by encompassing employees and their overall power.

### Human Resources Management

The human potential of the employees is the most valuable tool of the company. The main goal of the HR service is to improve labor productivity and therefore its activities are focused on increasing and developing this potential. In order to achieve the goal it is necessary to conduct efficient organization and management of human resources.

The term **management with human resources (human resources management)** encompasses a number of interconnected activities of which the most important are:

- Planning a job offer and demand of human resources,
- Analysis of jobs,
- Recruitment of potential candidates for employment,
- Selection among the applicants for employment,
- Socialization of newly employed,
- Training and development of employees,

- Managing the activities and behavior of employees,
- Motivation,
- Compliance with legal regulations,
- Getting out of work.

The implementation of these activities can be carried out by the Human Resources Service or an external partner of the firm whose roll is human resources. The effectiveness of the implementation of the activities is related to productivity and directly affects the financial profit of the firm. The general goal of managing human resources is to achieve success through employees. In the overall production process, employees should be treated as assets in which to invest as they are a source of competitive advantages.

There are two ways of managing human resources: hard and soft management. According to Cook and Cripps [3], hard management is trying to maximize productivity and profit, to treat workers as resources, and managers as responsible persons in front of shareholders (in the case of reward and promotion, the best worker is selected); while the soft management of human resources is directed towards the development of employees, it usually does not allow giving up dismissals and does not neglect the interests of employees (in the case of reward and promotion, the best worker does not have to be selected because there is hope that the selected person will develop in the near future). Today, hard human resource management is increasingly common, especially in private companies. Soft management is inherent in public enterprises.

Without investing in human potential and skillfully managing it, there is no competition in the market. Investing in human resources is the most cost-

effective investment of investing in any other resource.

### **Strategic importance of human resources management**

Human resource management has a strategic importance that today is reflected in the obligation of companies to the staff. The collective of companies represents human capital composed of a combination of knowledge, experience, skill and ability of the staff. Human capital expresses the investment of companies in attracting, maintaining and motivating an effective workforce [5].

By building human capital, human resources management has the task to develop strategies for selecting competent people and keeping them at work. The staff must meet the strategic goals of the parent company [7].

Behind the success of the firm's strategy for employing or managing human resources stands a capable manager who knows quickly, boldly and decisively to make crucial decisions. Any managerial decision taken, regardless of whether it concerns the management of the firm or human resources management, is of strategic importance since it aims to maximize the existing resources of the company while providing activities with the lowest level of risk and at the same time providing maximum profits for the company. Anticipating the need for human resources with specific knowledge and skills is an important component in the strategy of human resource development.

The human resource development strategy should be conceived for possible perspectives, to increase productivity and increase competitiveness. The labor market also affects this strategy. If the labor market can easily source human resources with the knowledge and skills that the company needs, it will easily find this as a result. Otherwise, it will have to

organize the development of its own staff, with previous analytical choice.

Employee development is a continuous process that, in addition to education, work experience and relationships with other people, also includes the ability of staff to prepare for new things. The difference between development and training is that training enables employees to do permanent work, and through development the employees are trained for performing activities in other jobs, including in things that have not existed before that are planned to be introduced in the future. In this way, developmental activity can serve as a strategic tool for raising the motivation and dedication of employees to work.

The involvement of employees in development programs is carried out through two types of strategies:

- Development Program Strategy designed only for higher levels of management and
- Development Program Strategy involving all employees.

Experience has shown that a human resource development strategy is not just a human resource sector but should be the goal of the whole company. The human resources department should play the role of expert and coordinator [5].

### **Purpose and function of strategic human resources management**

According to Aaker [1], strategic human resources management has three main goals:

- To attract an effective workforce,
- To develop the overall potential of the workforce and
- To keep qualified staff for an extended period.

The same author to strategic management prescribes several functions,

of which the most common are the following: planning with job analysis, recruitment of candidates and their selection, integration of new employees,

professional orientation, training, motivation, team work, promotion of communication, organizational culture and business ethics, etc.

## CONCLUSION

- The importance of human resources for work and the development of production in order to improve labor productivity insures the necessary need to create a plan that will determine the position of human resource management in relation to the overall management process in enterprises and companies.
- The specificity of human resource management indicates the necessity to carry out adequate and quality management of the personnel selection policy and a permanent investment in their development, in order to ensure their qualification and training for the successful potential of all activities and future work obligations.
- The selection of personnel is based on developed appropriate methods and techniques that enable the detection and collection of professionals who are capable and competent in an adequate and defined way to respond to the requirements of modern operation and business. Only with professional staff companies will definitely achieve success and competitive advantage, which they aspire from the beginning of their existence and functioning.
- The wide range of activities that human resource management deals with is necessary for the function and implementation in all organizations and institutions that want to sustain and improve labor productivity and become competitive in the field of their business.

## REFERENCES

- 1.Aaker A.D., 2008. Strategic MarketManagement. Wiley India Pvt.Limited- Marketing, 7-th edition,p.352.
- 2.Bagaric I., 2012. Operativenmenadzment. UniverzitetSingidunum, Beograd. p.269.
- 3.Cook M., Cripps B., 2009.Psychological assessment in theworkplace: A manager's guide.Hoboken, NJ: John Wiley & Sons,p.372.
- 4.Griffin W.R., 2012. Management.South-Western College Pub; 11edition, p.720.
- 5.Miceski T., 2009. Strategiskimenadzment. UGD, Ekonomskifakultet, Stip.
- 6.Poposki Lj.,2014. Tutunski kombinat– Prilep podem i pad. Društvo zanauka I umetnost – Prilep; 1 edition, p.386.
- 7.Suklev B., Drakulevski Lj., 2001.Strategiski menadzment. Ekonomskifakultet, Skopje.
- 8.Informal sector - Wikipedia (the freeencyclopedia):
- 9.[https://en.wikipedia.org/wiki/Informal\\_sector](https://en.wikipedia.org/wiki/Informal_sector)
- 10.Last edited on 23 September 2017