



# KEY INDICATORS OF THE QUALITY OF HUMAN RESOURCE POLICIES AND ACTIVITIES

Daliborka Đukić<sup>1\*</sup>,  
Filip Unić<sup>2</sup>

<sup>1</sup>The First Economics School,  
Belgrade, Serbia

<sup>2</sup>Recruitment Lead, MiNDS doo,  
Belgrade, Serbia

---

## Abstract:

The era we live in is characterized by discontinuous changes that impose the necessity for the company's leadership to seek out new sources of competitive advantage. Innovative technology is no longer the dominant basis of differentiation. In the 21<sup>st</sup> century, marked by the rapid proliferation of technological innovations, a paradox that underscores the enduring significance of individuals as the primary drivers of differentiation emerges. Everything comes from human ideas. People innovate processes, define the production program, implement financial strategies. This leads us to the evolution of human resources management from an administrative to a strategic function, which allows it to connect people and organizational performance in a specific way. As the basic problem of human resources management is the lack of quantitative indicators and the causal relationship between investment in people and yield, a space for a set of indicators of quality of HR policies and practice is created. For the management, they represent a specific source of information and guidance for decision-making. The paper starts from the theoretical basics of human resources management, key indicators of the quality of HRM activities are presented, the discipline of human resources accounting is critically presented. The results of the research show that there is an insufficient development of human resources management in relation to the EU and countries in the region, but they show a tendency for improvement.

---

## Keywords:

human resources management, quality of HR policies, human resources accounting.

---

## 1. INTRODUCTION

Given that the 21<sup>st</sup> century is indeed the era of the internet revolution and changes in the behavior patterns of all economic entities, it is crucial to find an adequate response to the emerging situation. Therefore, company management turns to people, and measures the quality of human resource policies, realizing that people are the primary generators of competitive advantage. According to Ocean Tomo Study of Intangible Asset Market Value from 2020, intangible assets are now responsible for 90% of all business value.<sup>1</sup> The conventional approach views the human resources function as administrative and does not consider its strategic dimension. With the change in the paradigm of companies and the shift of the economy and management towards behavioral aspects, qualitative elements of business gain importance. Furthermore, the development of practice and theoretical literature in this area further affirms Human Resource Management (HRM). Today, it is advocated that people are the most important resource of any organization. These changes imply the desire of management to measure employee performance and examine the quality of human resource policies for control and improvement. The aim of this paper is to explore the way information is used and decisions are made regarding human resource management policies.

Correspondence:  
Daliborka Đukić

e-mail:  
daliborka.djukić@gmail.com

<sup>1</sup> <https://oceantomo.com/INTANGIBLE-ASSET-MARKET-VALUE-STUDY/>



Additionally, the authors' desire is to contribute to breaking the prejudices about the impossibility of quantifying the human resource management process. Moreover, this paper aims for an integrated and interdisciplinary approach to the study of HRM, linking it with finance, accounting, and psychology. The methods used in this paper include description, comparative analysis, and desk research. The description method helps in presenting the characteristics of contemporary HRM and tools for analyzing its policies. Comparative analysis is used to compare the prevalence and quality of HRM practices in Serbia, the EU, and some countries in the region. Finally, desk research is the method used to collect and process secondary data on the mentioned topic.

## 2. STRATEGIC DIMENSION OF HUMAN RESOURCE MANAGEMENT

Over the past 20 years, there has been a shift in the positioning of human resource management from a peripheral function to one of the main functions within companies. This evolution is due to changes in the environment, the search for new competitive advantages, increased organizational flexibility, the emergence of new employment arrangements, and so on. Human resource strategy can be seen as a company's intentions regarding employee management expressed through policies, philosophy, and procedures (Torrington et al, 2020). The strategy exists even if it is not explicit or written on paper. Strategic human resource management involves planning the use of human resources and activities to achieve the organization's goals. This concept emerged in the 1980s in the United States (Bogićević Milikić, 2017) and represents a new version of human resource management, constantly linked to organizational strategy.

In relevant literature, three theoretical models of strategic human resource management are recognized:

1. The Universal Model<sup>2</sup> advocates the existence of one best way to manage human resources within a company. This model emphasizes the fact that a high level of commitment is associated with high performance, without taking into account the competitive strength of the company. Guest suggests that the goals of human resource strategy are:
  - Strategic integration, which involves the full involvement of the human resources department in strategic planning;
  - Commitment, which refers to employees' perception of themselves as part of the company;

- Flexibility, which entails adaptability and modification in response to changes;
  - Workforce quality.
2. The Fit Model<sup>3</sup> involves two forms of fit: external (where HR strategy fits into business strategy) and internal (when all HR policies within the HR department are aligned).

Between these two approaches lies the Harvard Model of HRM, which considers the interests of stakeholders and situational factors. This model is based on two main factors that influence the selection of human resource policies: stakeholder groups (shareholders, management, government, community, and unions) and situational factors (workforce characteristics, labor market, technology, legal, and social values). When the impact of these two groups of factors is analyzed, and work systems, compensation policies, and employment policies are formulated, the results are related to commitment, competencies, cost-effectiveness, and group alignment. All of these actions are taken with the aim of achieving favorable long-term consequences such as organizational effectiveness, individual well-being, and societal welfare.

3. The Resource-Based Model<sup>4</sup> emphasizes the importance of human resources in achieving competitive advantage. It argues that a company should continuously improve its employees' competencies to achieve its goals. Personal aspirations and employee goals should not be forgotten on this path.

One of the recent trends in human resource management is the consistency with the philosophy of total quality management, which focuses this function on customers. When we say customers, we mean managers, employees, or the strategic management team. Line managers cooperate with HR managers, making them clients. The strategic management team seeks analysis and solutions for people-related issues, and employee rewards fall within the HR sector, so employees can also be defined as clients.

### What is the current situation regarding HRM development in the region?

According to some data and research that conducted a comparative analysis between Slovenia and Serbia (Table 1), the situation is as follows:

1. In only 24.3% of Serbian companies, the head of the HR department was involved in the Board of Directors. This is significantly lower than the average for the European Union (55%) and Slovenia (57%).
2. In 55% of Serbian companies, performance assessment of the HR department is conducted. In Slovenia, this happens in 33% of cases, and in the EU, it is 39% of surveyed companies.

2 Torrington, D., Hall, L. & Taylor, S. (2020). Human resource management. Edinburgh: Pearson Education Limited, p. 69

3 Same, p. 67

4 Same, p. 69

**Table 1.** Primary Responsibility for Human Resource Policy Decisions (% of Companies).

	Slovenia (1999-2000)	Average EU (1998-1999)	Serbia (2006-2007)
<b>Recruitment and Selection</b>			
Line Manager	11	7	33.3
Line Manager in collaboration with the Human Resources Department	35	40	23.3
Human Resources Department in collaboration with Management	45	43	30
Human Resources Department	9	10	13.3
<b>Training and Development</b>			
Line Manager	13	7	37
Line Manager in collaboration with the Human Resources Department	32	38	13
Human Resources Department in collaboration with Management	46	44	33
Human Resources Department	9	11	17

Source: <http://www.doiserbia.nb.rs/img/doi/0038-0318/2009/0038-03180902157B.pdf>

3. The assessment of cost-effectiveness of the HR function is done by 32% of companies in Serbia and 36% in Slovenia.

It can be concluded that Slovenia is closer to EU results than Serbia for multiple reasons. First, the competencies of human resource professionals in Serbia and Slovenia differ. In Slovenia, studies and courses in this field have been available since the mid-1950s, while in Serbia, this happened much later. To adopt a strategic mindset among professionals in this field, it is necessary to acquire qualifications in business, human resource-related technologies, and change management. As much as 43% of employees in the human resources sector in Serbia have less than five years of experience in this field. The second reason relates to the traditional view of the human resources sector as predominantly administrative in Serbia. Third, in Serbia, it is rarely advocated that human resources are a source of competitive advantage. Instead, belief in technology and competitive advantage based on a company's financial strength is prevalent. As the fourth factor, a high degree of centralization and autocratic leadership is mentioned in Serbia, resulting in the formulation of strategy by a narrow circle of people without consulting line or middle managers.

### 3. INDICATORS OF HUMAN RESOURCE MANAGEMENT SUCCESS

In this field, the first work was published in 1984 by Jack Fitz-enz and is titled "How to Measure Human Resource Management." Later works are the result of the joint efforts of the Saratoga Institute, the American Society for Personnel Administration, and the Society for Human Resource Management. Now, we can list over 40 metrics

used to analyze the quality of human resource policies. As previously mentioned in the first part of this paper, human resource management is a complex set of activities. Accordingly, the set of success indicators in these processes is also numerous. There are various ways to classify these indicators, and in this paper, they will be classified based on the following activities:

1. Workforce Diversity
2. Organization of the Human Resource Management Function
3. Recruitment and Hiring
4. Employee Compensation
5. Employee Turnover

#### 3.1. Workforce Diversity

The term "workforce diversity" began to be used in the mid-1980s. Marginalized groups have less authority than others and are reserved for entry-level positions. There are still prejudices about specific groups. Workforce diversity can be measured in various ways, usually reduced to the participation of certain groups in the total workforce percentage, their rights, and obligations. Recruiters in the human resources sector insist on workforce diversity for innovation, maximizing talent potential, generating more ideas, and improving financial performance.

#### 3.2. Organization of the Human Resource Management Function

Key indicators of the quality of the organization of the human resource management function include: HR management costs per employee, average salary of employees



in this sector, the share of HR sector costs in total operating costs, the share of outsourcing costs in HR sector total costs, and the number of employees in the organization per one HR sector employee.

According to Gartner, most HR functions are spending between USD 1,350 and USD 3,800 per employee in 2018.<sup>5</sup>

### 3.3. Recruitment and Hiring

When discussing recruitment, it is defined as the process of attracting a sufficient number of quality candidates to fill job positions. Within this group of indicators, it is necessary to mention the following:

1. **Source of Candidates:** This method assesses how candidates came across job openings. It can be through referrals, job postings on websites, agencies or cooperatives, job fairs, or collaboration with universities.
2. **Selection Ratio:** This is the ratio of the number of hired employees to the total number of candidates in the organization.<sup>6</sup>
3. **Cost per Hire:** This is calculated by dividing the total recruitment costs by the number of recruited candidates. Internal costs include recruiter time (average hourly rate times hours spent on recruitment), manager time (manager's hourly rate times hours spent on recruitment), employee onboarding time (employee's hourly rate times hours needed for orientation), lost productivity, etc. External costs include advertising expenses, agency fees, candidate-related costs, training costs, etc. According to research by the Society for Human Resource Management, this amount ranges between \$3,000 and \$5,000, depending on the size and industry.<sup>7</sup>
4. **Recruitment Effectiveness:** Often measured by the yield ratio, which is the ratio of candidates who successfully completed the recruitment process to the number of candidates who entered the recruitment process. This can be illustrated with a job posting for an HR administrator position. 250 candidates applied, but only 50 resumes were suitable (yield ratio 5:1). Of these fifty resumes, ten candidates were invited for an interview (yield ratio 5:1). Only 5 out of 10 candidates attended the first interview (yield ratio 2:1). Out of those five, two made it to the final interview (yield ratio 5:2). One received a job offer (yield ratio 2:1), and that person accepted the offer (yield ratio 1:1). Recruitment effectiveness has significantly improved in recent years thanks to numerous software solutions that enable automatic resume scanning and, consequently, the selection of the best candidates.

<sup>5</sup> <https://www.gartner.com/en/human-resources/trends/budget-staffing-report>

<sup>6</sup> Sturman M. (2003). Utility analysis: a tool for quantifying the value of hospitality human resource interventions. *School of Hotel administration collection*

<sup>7</sup> <https://resources.workable.com/tutorial/faq-recruitment-budget-metrics>

### 3.4. Employee Compensation

Two common forms of evaluating employee compensation systems are the compa-ratio and turnover analysis. **Compa-ratio:** This is used to assess an individual's position in the pay range. It's calculated as the ratio of an individual's current salary to the midpoint of their pay range, multiplied by 100 to express it as a percentage. A compa-ratio of 100 means the actual salary matches the organization's pay policy. A compa-ratio above 100 indicates the employee is paid more than the company's policy, while a compa-ratio below 100 indicates the employee is paid less (Brown, K. 2018). **Turnover Analysis:** This is performed when a new employee is hired at a lower salary than the previous worker in that position. Turnover analysis is calculated using the following formula:

$$\frac{\text{Total turnover rate in general or individual wages}}{\text{Total percentage increase in average wages}} \quad (1)$$

Other indicators used in practice include:

1. **Average salary increase;** Indicates the competitiveness of the company in the labor market.
2. **Number of recommendations for reclassification vs. the total number of employees;** Reflects the company's competitiveness in the labor market.
3. **Percentage of overtime hours;** Reveals work-life balance and potential burnout.
4. **Ratio of the average salary in the company to the average salary in the industry or society;** Indicates the company's competitiveness in terms of compensation.

### 3.5. Turnover

The turnover rate is calculated as the number of employees who leave the organization during one year divided by the average number of employees in the organization. The result is multiplied by 100 to express it as a percentage.<sup>8</sup> Another way to measure turnover is the employee stability index, which is the ratio of the number of employees who have been with the organization for more than a year to the number of employees a year earlier. Managing turnover is important due to the costs associated with this process. There are direct and indirect costs related to replacing workers. Direct costs include advertising, training, time spent on filling the job vacancy, and selection costs. Indirect costs include orientation costs for new hires, decreased productivity, and costs related to the departure of candidates, such as the time spent (Table 2). The cost of turnover can also be calculated by multiplying the last year's salary by a coefficient ranging from 1.5 to 2.5, according to research by the Society for Human Resource Management annually.

<sup>8</sup> Bogičević Milikić B. (2017). *Menadžment ljudskih resursa*. Beograd: CID ekof. p. 524.

**Table 2.** Turnover Costs of Nurses per Employee in Australia.

Type of Costs	Activity	Amount
Direct costs	Advertising and Training	913\$
	Vacant Positions	21878\$
	Recruitment	1554\$
Indirect costs	New Employee Orientation	5072\$
	Productivity Decline	7380\$
	Employment termination	12457\$

Source: Roche M., Duffield C., Homer C., Buchan J. & Dimitrelis S. (2015).

Factors that are significant for turnover planning include job demand, resource mobility, and employees' psychological well-being. One method for turnover management is the analysis of employee satisfaction and exit interviews. Employee satisfaction analysis is a proactive tool that can help prevent further departures from the organization. It's essential to utilize the information gathered from employee satisfaction surveys effectively and generate practical ideas based on them. Exit interviews, on the other hand, are a reactive tool that forms an impression of the departing candidates and provides suggestions for improving human resource management processes.

#### 4. FINANCIAL TREATMENT OF HUMAN RESOURCES

Human resource accounting can be defined as a paradigm and a set of metrics for quantifying the effects of human resource strategies using costs and the value of people as an organizational resource. Human resource accounting is essential because it provides a framework for modern human resource management while also offering information for defining further guidelines regarding personnel strategies and policies. Regarding the financial treatment of human resource costs, it's necessary to mention that the primary use of these costs is to calculate indicators of human resource management success within the organization and for budget control. Currently, there is no international financial reporting standard that regulates this area, but International Accounting Standard 38<sup>9</sup> related to intangible assets allows for the valuation of non-material assets. Unfortunately, human resource costs are not found in reports for investors, which raises issues. In financial statements, the line item "total assets" does not clearly indicate the value of human capital, and there are no indications of how much an organization has invested in its employees. Traditionally, accounting treats every dollar spent on investing in employees as a period cost.

This means that the company's result will be lower during investment periods, leading to the paradox of worse performance when, in fact, the company begins to prosper by investing in its employees. This can create a conflict between long-term and short-term goals, potentially leading to shortsightedness in employee investment by traditional accounting.

There are several methods to overcome the problem of presenting human resource costs in financial statements. The first option is to create a separate report in which all significant investments in human resources will be shown. The second option is to include these costs in the intangible assets report, categorizing them by types. This method was proposed by Arthur Andersen & Co. and allows for a breakdown of intangible asset costs by categories. The third method is to include these costs in a financial report that is not subject to audit.<sup>10</sup>

##### 4.1. Valuation of Intellectual Capital

Intellectual capital can be defined as invisible assets, including employees' competencies and business knowledge that are beneficial for a company's operations.<sup>11</sup> Two key elements of the intellectual capital framework are strategy and measurement. Strategy refers to the acquisition of knowledge and its impact, while measurement pertains to human resource accounting and the financial framework. When it comes to the valuation of any asset, it essentially means assigning a monetary value to a particular category. In the valuation of intellectual capital at the organizational level, whether it's monetary or non-monetary valuation, the value-added coefficient of intellectual capital is often used (Table 3).

9 <https://www.ifrs.org/issued-standards/list-of-standards/ias-38-intangible-assets/#:~:text=IAS%2038%20sets%20out%20the,monetary%20asset%20without%20physical%20substance.>

10 Flamholtz E. (1999). *Human resource accounting*. New York: Springer science+Business media. str. 34.

11 Same, p. 548.

**Table 3.** Methods for Valuation of Intellectual Capital.

	Nemonetary valuation	Monetary valuation
<i>Organizational intellectual capital valuation</i>	Intellectual Capital Index Business IQ	Market-to-book value ratio Tobin's Q Invisible balance sheet Calculated intangible value Added economic value
<i>Individual intellectual resource valuation</i>	Scandia Navigator Balance Scorecard Intangible Assets Monitor Value chain score board Dynamic intellectual capital valuation Danish guidelines MERITUM guidelines Value creation index Intellectual capital rating	Human capital cost accounting Inclusive valuation methodology Intellectual property valuation Technology Broker The value explorer

Source: Radić S. (2016).

Hermanson developed two methods for evaluating human capital. The first method is called the Unpurchased Goodwill Method<sup>12</sup> and assumes that the reason for achieving a return rate higher than the industry average lies in high-quality individuals who are not included in official financial reports. The advantages of this method include objectivity and cost-effectiveness, as it utilizes all information from publicly available sources. The main limitation of this model is that earning is influenced by various factor, so goodwill does not belong to HR alone. Second, the model does not suggest how to estimate the contribution rate of HR to determine the HR value. When the industry as a whole is declining, the valuation of goodwill based on HR as suggested by the model does not explain the valuation (Das et al, 2012)

Human capital is calculated using the following formula (Table 4):

$$(PU - LAU * rB) / rB \quad (2)$$

*In this formula:* PU represents the profit of company U, LAU stands for the assets of company U, rB is the efficiency rate of the sector (expressed as sector profit as a percentage of total assets, e.g., 10%).

**Table 4.** Human Capital Valuation Example.

Company	A	B	V	G	Sector Average
Total assets estimated by market value	100	50	200	150	125
Annual profit	15	5	25	5	12,5
Profit as a percentage of total assets	15%	10%	13%	3%	10%
Excess profit/loss compared to the average	5%	-	3%	-7%	
Human capital	50	-	50	-100	

Source: Streich D. (2009).

## 5. CONCLUSION

In this paper, we explored the application of key indicators of HR quality policies in contemporary practice. We examined the dimensions of HR management, the impact of HR policies on a company's value, the economic justification for using HR information systems, and the importance of specific indicators for making business decisions related to HR policies and overall business strategy. Based on the research results, several conclusions can be drawn. Firstly, human resource management has both value and cost dimensions. HR roles include strategic, operational, and administrative functions. The strategic role adds the most value (comprising 60% of the total value created by these three roles), while having the lowest cost dimension (only 10% of the total costs of all three roles). The administrative role has the highest cost dimension (60% of the total HR costs) but the lowest value dimension (around 10% of the total value of all three roles). Secondly, a connection was established between the HR system and the accounting value of a company. As early as 2001, Becker demonstrated that a 35% improvement in the HR system resulted in a 10-15% increase in accounting value.



The essence is to identify key indicators of HR policies and practices in HR management, monitor them, and continuously improve them. This allows for measuring improvements in the HR system. The conclusion that there is a positive relationship between improving HR practices and activities and the growth of accounting value is somewhat logical. Companies that invest time and money continuously in their employees and improve their HR strategies will undoubtedly be perceived more favorably by their investors.

In conclusion, there has been a significant shift and progress in the HR system. From a traditionally administrative and secondary function to a strategically important supporting function in a company, it took a lot of effort, work, and research. The hard work of numerous HR experts and changes in the social and other frameworks in which the competitive game is played have helped the affirmation of HR management and increased its prevalence.

## 6. LITERATURE

- Bogićević Milikić, B. (2017). *Menadžment ljudskih resursa*. Beograd: CID Ekonomskog fakulteta
- Brown, K. (2019). Annual Report on Employee Compensation, Finance & Operations Committee, University of Minnesota, p 10, [https://regents.umn.edu/sites/regents.umn.edu/files/2019-08/docket-finance\\_operations\\_committee-may2019.pdf](https://regents.umn.edu/sites/regents.umn.edu/files/2019-08/docket-finance_operations_committee-may2019.pdf)
- Das, Sudhir Chandra & Topno, Harshit. (2012). Valuation of Human Capital: An Analysis of Practicing Models. *KAIM Journal of Management and Research*, Vol.4 No.1-2 ISSN 0974-9462, pp.97-101
- Gao F., Newcombe, P., Tilse, C., Wilson, J. & Tuckett, A. (2014). Models for predicting turnover of residential aged care nurses: a structural equation modelling analysis of secondary data. *International Journal of Nursing Studies* 51. pp 1258-1270
- Flamholtz, E. (1999). *Human resource accounting*. New York: Springer science+Business media
- Ocean Tomo, (2020). *Intangible Asset Market Value Study*
- Radić, S. (2016). Vrednovanje intelektualnog kapitala primenom metode obračunate nematerijalne vrednosti. *Ekonomске ideje i praksa*, broj 22. pp 71-88
- Roche, M., Duffield, C., Homer, C., Buchan, J. & Dimitrelis, S. (2015). The rate and cost of nurse turnover in Australia. *Elsevier, Collegian* 22. pp 353-358
- Torrington, D., Hall, L. & Taylor, S. (2020). *Human resource management*. Edinburgh: Pearson Education Limited
- Streich, D. (2009). *Unpurchased goodwill method-an approach to measure human capital*. Oxford Business & Economics Conference Program