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# The Relationship between the Level and Modality of HRM Metrics, Quality of HRM Practice and Organizational Performance



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**Abstract**

The paper explores the relationship between the way organizations measure HRM and overall quality of HRM activities, as well as the relationship between HRM metrics used and financial performance of an organization. In the theoretical part of the paper modalities of HRM metrics are grouped into five groups (evaluating HRM using accounting principles, evaluating HRM using management techniques, evaluating individual HRM activities, aggregate evaluation of HRM, and evaluating HRM department). In the empirical part of the paper researched concepts are assessed through questionnaires distributed to Croatian organizations with more than 500 employees. Respondents (HRM managers) provided information about HRM metrics their organizations use, overall quality of HRM practice, and financial performance of their organizations. Based on the acquired data, relationships between modality of HRM metrics, quality of HRM and organizational performance are explored.

**Key words**

HRM metrics, HRM evaluation, HRM quality, organizational performance, Croatia

**JEL classification**

M12, M5

## 1. INTRODUCTION

Over the past decade, HRM functions, large and small, have been expected to play an ever-expanding role in the strategic direction of their organizations, as HRM is now considered among top-performing organizations to be a key strategic partner in driving and supporting critical business objectives (Edwards *et al.*, 2007, pp. 1). Namely, it has been proved that the alignment of HRM initiatives with organizational mission, strategies and goals results in greater organizational performance and competitive advantage (see for example Schuler & MacMillan, 1984; Lado & Wilson, 1994; Sparrow *et al.*, 1994; Pfeffer, 1995; Khandekar & Sharma, 2005; Gowen *et al.*, 2006; Wolfe *et al.*, 2006; Kazlauskaitė & Baučiūnienė, 2008; Browning *et al.*, 2009; Guthrie *et al.*, 2009).

Consequently, organizations which want to improve or become best-in-class providers of talent management solutions with demonstrable economic contribution to the organization's bottom line have to make the evaluation of their functions and programs an ongoing activity and priority (Edwards *et al.*, 2007). Gurus in HRM measuring, such as Becker, Boudreau, Cascio, Fitz-enz, Huselid, Phillips, Pulliam Phillips<sup>1</sup> agree that HRM evaluation, called as well HRM metrics or human capital analytics (Fitz-enz's newest term), has to become one of the regular activities of HRM specialists, as they can document HRM's contribution to organizational success only by becoming more quantitative oriented.

However, what is important for proving HRM's strategic role in contemporary organizations is unfortunately still lacking. It is the systematic process for quantifying the economic contribution of HRM services and evaluating how well these services meet the expectations of the clients or stakeholders served, as well as using that information to make improvements (Edwards *et al.*, 2007). In other words, although nowadays a number of HRM metrics is available, covering all HRM areas (from planning human resources, through recruitment and selection, to training and development), HRM experts all around the world are still not proficient in selecting instruments of evaluation, properly collecting data and calculating indicators. Some of them even do not know, and never talk about, the value they are generating because they have no language for it – all their terms are qualitative, subjective, and equivocal (Fitz-enz, 2010).

As HRM experts have to learn to speak in quantitative, objective terms, using numbers to express their activity and value added, since business uses numbers to explain itself (Fitz-enz, 2010), this paper explores HRM metrics both theoretically and empirically. In the theoretical part of the paper the theoretical background of the area, which has been used for the development of the research instrument, is presented. The empirical part of the paper explores the relationship between the way organizations measure HRM and overall quality of HRM activities, as well as the relationship between HRM metrics used and financial performance of an organization.

## 2. HRM METRICS – THEORETICAL BACKGROUND

### 2.1. Reasons for measuring HRM activities

There are three groups of rationales why organizations measure HRM activities: (1) improvement of HRM activities, (2) demonstrating that HRM is a strategic partner in contemporary organizations, and (3) providing evidence that HRM activities impact organizational performance, as table 1 reveals. HRM experts generally start with the evaluation of HRM activities in order to improve them. Namely, given that people play a major role in the success of all organizations and that HRM costs are major expenses in all organization, improvements in HRM programs' efficiency and effectiveness should be a concern for organizations in both industrialized and developing countries (Edwards *et al.*, 2007, pp. 4). It is smart to start with the easiest type of evaluation, and learn about and improve the measuring practice while doing it. As well, this type of measuring results with basic HRM indicators needed for demonstrating HRM's strategic role and proving that HRM adds value to organizations (reasons for measuring of a higher level).

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<sup>1</sup> See for example: Becker *et al.*, 2001; Cascio, 2000; Cascio & Boudreau, 2008; Fitz-enz, 1995, 2000, 2010; Phillips, 1996; Phillips *et al.*, 2001; Pulliam Phillips *et al.*, 2007.

Consequently, this reason for HRM evaluation, although the basic one and of a smaller scope, is the mostly present one. The second group of reasons why HRM experts measure HRM activities is to prove the HRM's existence and position in organizations, that HRM is of the same importance as other business functions (production, marketing, finances, etc.), and to promote the function among all stakeholders. Thirdly, and most importantly, HRM is measured for the purpose of quantifying its worth and contribution to the organizational performance. HRM experts have to prove that HRM has a prominent role in accomplishing organizational goals, as well as that there is a relationship between HRM activities and financial flows. Namely, if outputs of HRM evaluation are inputs of decision-making, job performance on the individual level, and productivity, quality and profitability on the organizational level improve.

**Table 1: Reasons for measuring HRM activities**

<b>Improvement of HRM activities</b>
<ul style="list-style-type: none"> <li>▪ Keeping track of the current level of HRM activities and outputs for the purpose of adjusting (corrective action)</li> <li>▪ Identifying strengths and weaknesses of HRM processes and programs</li> <li>▪ Deciding on the level of HRM program adequacy</li> <li>▪ Deciding whether objectives of an HRM program are met</li> <li>▪ Encouraging improvements (changes) in HRM programs</li> <li>▪ Deciding on replacing or even outsourcing HRM programs</li> <li>▪ Collecting data for the selection of future HRM programs</li> <li>▪ Deciding on the most suitable alternative of an HRM activity because of the financial, material, human or time reasons</li> <li>▪ Improving HRM activities by benchmarking or comparing them with same activities in other organizations</li> </ul>
<b>Demonstrating that HRM is a strategic partner in contemporary organizations</b>
<ul style="list-style-type: none"> <li>▪ Justifying the existence of HRM function (department) in an organization</li> <li>▪ Demonstrating that HRM function is an equally important business function (equal to all other business functions)</li> <li>▪ Demonstrating that HRM function deserved to be a strategic partner in an organization</li> <li>▪ Proving that HRM director should be a member of top executives board</li> <li>▪ Collecting data about the functioning and outputs of the HRM function for the promotion purposes</li> <li>▪ Collecting data about the functioning and outputs of HRM function with the purpose of promoting future HRM programs</li> </ul>
<b>Providing evidence that HRM activities impact organizational performance</b>
<ul style="list-style-type: none"> <li>▪ Determining HRM's contribution to work performance, organizational performance and competitive advantage of an organization</li> <li>▪ Calculating return on investment in different HRM programs</li> <li>▪ Forecasting utility of different HRM programs</li> <li>▪ Developing HRM database which enhances decision-making</li> </ul>

Based on: Fitz-enz, 1990; Phillips, 1996; Cascio, 2000; Fitz-enz, 2000; Greer, 2001; Edwards *et al.*, 2007

**2.2. HRM metrics**

There are many ways of evaluating HRM activities. They can be grouped into five clusters according to their shared characteristics: (1) evaluating HRM using accounting principles, (2) evaluating HRM using management techniques, (3) evaluation of individual HRM activities, (4) aggregate evaluation of HRM, and (5) evaluating HRM department.

**Evaluating HRM using accounting principles.** HRM activities can be evaluated by using a whole range of accounting techniques, methods and principles. The most frequently employed ones are described in brief in table 2.

**Table 2:** Approaches to HRM evaluation based on accounting principles

<b>HR accounting</b>	Keeping track of investments in people (costs of HRM activities such as costs of recruiting, selection, training, etc.) in an organization and measuring changes in these values using standard accounting principles.
<b>HR cost monitoring</b>	Keeping track of costs of HRM activities and programs and using them in comparisons with cost standards (if they exist) or former levels.
<b>HR auditing</b>	A systematic search that gathers, compiles, and analyzes HRM data in depth for an extended period, frequently a year.
<b>HR cost-benefit analysis</b>	Ensuring the optimum level of efficiency in allocating resources by elaborating costs and benefits of an HRM activity or program.
<b>HR utility analysis</b>	A process by which the expected outcomes and the cost of HRM decisions are taken into account in order to determine the relative importance of the payoff.
<b>Return on investment (ROI) in HR</b>	Comparing the cost of HRM programs and activities to the benefits derived from them in order to assess their worth to the organization.

Based on: Cascio, 2000; Cascio & Boudreau, 2008; Phillips, 1996; Phillips *et al.*, 2001; Pulliam Phillips *et al.*, 2007

**Evaluating HRM using management techniques.** HRM activities can be evaluated by using contemporary management approaches, methods and techniques which were originally invented to improve efficiency and effectiveness of organizational practices and processes, as for example those listed in table 3.

**Table 3:** Approaches to HRM evaluation based on management techniques

<b>HR case studies</b>	Examining the success of individual HRM programs, policies or practices and reporting the results of these successes to selected audiences.
<b>HR profit center</b>	Measuring the quality of HRM by observing whether HRM department operates as a profit center (is able to charge the organization for the services and programs it offers, competes with outside firms while doing so, or is even able to offer it's services outside the organization).
<b>HR management by objectives (MBO)</b>	Developing specific objectives and evaluating performance against those objectives.
<b>HR key indicators</b>	Developing key HRM measures that reflect the major efforts of the HRM function and keeping track of their levels.
<b>HR scorecard</b>	Measuring HRM performance by keeping track of number of HRM indicators which are balanced as they cover different areas of HRM.
<b>HR benchmarking</b>	Comparing HRM measures with measures from other organizations that are regarded as having the best industry practices in order to improve.

Based on: Becker *et al.*, 2001; Phillips, 1996

**Evaluation of individual HRM activities.** Evaluating individual HRM activities encompasses controlling of particular HRM function, activity, program, policy or process. Usually it is done by assessing HRM indicators in specific HRM area or subarea, as suggested in table 4.

**Table 4:** Examples of HRM indicators by HRM functions

<b>HRM functions</b>	<b>Examples of indicators</b>
HR planning	<ul style="list-style-type: none"> <li>• Hours of overtime work per employee per year</li> <li>• Replacement rate</li> <li>• Number of external consultancies in an area per year</li> </ul>
Job analysis	<ul style="list-style-type: none"> <li>• Job description factor</li> <li>• Job analysis costs per job</li> <li>• Time required for job evaluation</li> </ul>
Recruitment	<ul style="list-style-type: none"> <li>• Number of applications per recruitment source</li> <li>• Number of selected candidates per recruitment source</li> <li>• Internal employment rate</li> </ul>

	<ul style="list-style-type: none"> <li>• Employees' output (performance) per recruitment source</li> <li>• Early turnover (within the first six months) per recruitment source</li> </ul>
Selection	<ul style="list-style-type: none"> <li>• Employment costs per selection method</li> <li>• Early turnover (within the first six months) per selection method</li> <li>• Number of candidates tested, interviewed, etc.</li> <li>• Employees' output (performance) per selection method</li> <li>• Internal clients satisfaction with the selection process</li> </ul>
Performance management	<ul style="list-style-type: none"> <li>• Percentage of employees which are formally performance appraised</li> <li>• Reliability of performance appraisal</li> <li>• Development and implementation costs of performance appraisal programs</li> <li>• Average time needed for the performance appraisal</li> </ul>
Compensation management	<ul style="list-style-type: none"> <li>• Total compensation costs per total operating costs</li> <li>• Costs of overtime work in total compensations</li> <li>• Average salary per employee</li> <li>• Number of raises</li> <li>• Number of existing benefits</li> <li>• Employees' satisfaction with salary, rewarding practices, benefits or similar</li> </ul>
Training and development	<ul style="list-style-type: none"> <li>• Hours of training per employee</li> <li>• Return on investment (ROI) in training and development</li> <li>• Savings as a result of T&amp;D activities</li> <li>• Annual T&amp;D costs per employee</li> <li>• Changes in knowledge, behavior, attitudes or work performance as a consequence of T&amp;D</li> <li>• Employees' satisfaction with T&amp;D programs</li> </ul>
Career management	<ul style="list-style-type: none"> <li>• Percentage of employees involved in career management programs</li> <li>• Costs of career management program</li> </ul>
Health and safety issues	<ul style="list-style-type: none"> <li>• Number of internal health and safety inspections</li> <li>• Average number of injuries per employee</li> <li>• Average cost of work injury</li> <li>• Time lost due to work injuries</li> </ul>

Based on: Sikavica *et al.*, 2008, pp. 626-629

**Aggregate evaluation of HRM.** Aggregate evaluation of HRM implies evaluation of total HRM, of all HRM initiatives together. There are two dominant ways of overall HRM evaluation: (1) *HR effectiveness index* – a single composite index constructed of individual HRM performance indicators used for evaluating HRM performance as a whole (the most known HR effectiveness indexes are depicted in table 5), and (2) *HR profit-and-loss account* – putting an economic value on total HRM by keeping track of revenues, direct expenses, gross income, indirect expenses and net income of HRM initiatives (Fitz-enz, 2000).

**Table 5:** Examples of HR effectiveness index

Index	Measures/areas of HRM performance which compose the index
<b>Human Resources Effectiveness Index – HREI</b> (Thornburg, 1993 from Phillips, 1996)	HRM expenses / total operating expenses; total compensation / total operating expenses; total cost of benefits / total operating expenses; training and development expenses / total employees; absence rate; turnover rate
<b>Human Capital Index</b> (Watson Wyatt researchers from Grossman, 2000)	recruiting excellence; collegial flexible workplace; communications integrity; clarity of rewards and accountability; prudent use of resources for HRM practices

<b>Schuster's HR effectiveness index</b> (Schuster, 1986 from Baruch, 1997)	assessment centre approach in selection; flexible or "cafeteria" approach in reward system; productivity bonus plan; goal-oriented performance appraisal; alternative work schedules; organizational development
<b>Guthrie's HR effectiveness index</b> (Guthrie, 2001)	internal promotions; performance- (versus seniority-) based promotions; skill-based pay; group-based (gainsharing, profitsharing) pay; employee stock ownership; employee participatory programs; information sharing; attitude surveys; teams cross-training or cross-utilizations; training focused on future skill requirements

**Evaluating HRM department.** The quality of HRM department is another indicator of the level of HRM practice in an organization. There are three areas of HRM department evaluation (Fitz-enz & Phillips, 1998):

- *Service* – the interaction between HRM department and its internal customers, managers and employees of the organization.
- *Quality* – the rate of errors or defects in an HRM service or product.
- *Productivity* – the cost and volume of HRM products and services.

### 2.3. Important characteristics of HRM indicators used

HRM metrics which are used should be carefully selected. Every instrument/indicator is not adequate for measuring every activity, in every organization, at every point of time. There are five main rules for selecting proper HRM controlling instrument/indicator (Pološki Vokić, 2010, pp. 403):

1. Selected instruments/indicators have to measure precisely those aspects of HRM which are crucial for the accomplishment of organizational vision, mission and goals.
2. Selected instruments/indicators have to evaluate HRM comprehensively, meaning that they keep track of all activities, programs, processes, levels etc. present in an organization.
3. Selected instruments/indicators have to evaluate HRM from different perspectives, meaning that they have to assess HRM considering interests of various stakeholders (employees, managers, clients, owners etc.).
4. Selected indicators should be of various types in order to assess HRM integrally (as table 6 suggests).
5. Selecting instruments/indicators should be adequate in terms of the availability of needed data, knowledge for their utilization, time requirements, etc.

**Table 6:** Types of HRM indicators

Attribute	Types of indicators
Measure of evaluation	1. cost indicators 2. time indicators 3. volume indicators 4. errors indicators 5. human reactions indicators
Level of evaluation	1. reaction indicators 2. learning indicators 3. implementation indicators 4. business impact indicators 5. return on investment (ROI) indicators
Nature of evaluation	1. process indicators 2. outcomes indicators
Volume of evaluation	1. HR function indicators 2. overall (aggregate) HR indicators
Benefits	1. human benefits indicators 2. production benefits indicators 3. monetary benefits indicators



Participants	1. individual indicators 2. organizational indicators 3. HR department indicators
Hierarchical level	1. operational indicators 2. tactical indicators 3. strategical indicators

Based on: Baruch, 1997; Fitz-enz, 1990, 2000; Fitz-enz & Phillips, 1998; Phillips, 1996; Pološki Vokić, 2010; Tsui & Gomez-Mejia, 1998

Finally, when deciding on the number of instruments/indicators used, the believing that “the more indicators, the more control” should be avoided (Cravino, 2010). Too many instruments/indicators can only create more confusion, and too much effort expended in measuring takes time and energy away from the management process itself (Cravino, 2010). As well, the list of instruments/indicators should not be a consequence of a popular trend (such as “top 10 HRM benchmarks”), neither collected instruments/indicators should be those which are easy to collect, as the quality of HRM metrics is usually negatively-proportional with the easiness and costs of their collection and implementation.

### 3. METODOLOGY

**Research instrument.** In order to explore HRM metrics present in Croatian organizations, and explore the relationship between HRM evaluation practice and overall quality of HRM as well as organizational performance, a highly-structured questionnaire with three groups of questions was created:

- (1) First group of questions assessed **the existing practice of HRM evaluation** through questions covering three areas: (1) frequency of using seventeen instruments of HRM evaluation (HR accounting, HR cost monitoring, HR auditing, HR cost-benefit analysis, HR utility analysis, ROI in HR, HR case studies, HR profit center, HR management by objectives, HR key indicators, HR scorecard, HR benchmarking, HR effectiveness index, HR profit-and-loss account, evaluation of HRM department’s service, evaluation of HRM department’s quality, evaluation of HRM department’s productivity) which respondents evaluated on a Likert-type scale from 1 (is never used) to 5 (is used on a regular basis), (2) existence of evaluation of individual HRM activities, and (3) number of HRM indicators tracked monthly for each of the nine HRM areas (HR planning, job analysis, recruitment, selection, performance management, compensation management, training and development, career management, other HRM activities).
- (2) Second group of questions assessed **the quality of HRM** in an enterprise. Respondents evaluated their enterprises proficiency in twelve HRM areas (strategic HRM, HR planning, job analysis, recruitment, selection, performance management, training and development, compensation management, non-material motivation, career management, managing relationships within enterprise, HR administration) on a scale from 1 (level 1 = the majority of standard HRM practices in the area are not implemented or regularly used) to 3 (level 3 = highly-developed practices of a specific HRM area are present). The average score of twelve assigned grades was used as the indicator of total HRM quality.
- (3) Third group of questions gathered **information about the enterprises** participating in the survey. Ownership, main activity, and number of employees’ data were gathered in order to secure the heterogeneity of the sample, while the data about net profit in total revenues, return on equity (ROE), and return on assets (ROA) were collected in order to test the relationship between HRM metrics and organizational performance.

**Sample.** With the intention of evaluating the quality of HRM metrics in Croatia as well as the relationship between HRM metrics and HRM quality as well as organizational performance, all Croatian enterprises with more than 500 employees (the list was obtained from the Croatian Chamber of Economy web database) were contacted to participate in the survey (altogether 180 enterprises). Although according to Collins *et al.* (2001, pp. 13) enterprises with 50 and more employees should have formal HRM system, and therefore are eligible for HRM evaluation, having in mind HRM practice in Croatia, the population of the study were Croatian enterprises with more than 500 employees. Namely, in Croatia so far only enterprises

with more than 500 employees were found to have implemented and to carry out on a regular basis a whole range of HRM activities (Pološki Vokić & Vidović, 2008).

A total of 43 properly fulfilled questionnaires were received. The response rate of 23.9% is acceptable as it covers the quarter of all Croatian enterprises with more than 500 employees, as well because HRM research studies frequently have smaller response rates (11% response in Delery & Doty, 1996; 18% response in Cheah-Liaw *et al.*, 2003). More to it, it is assumed that some enterprises were not interested in participating in the survey since they did not want to reveal that their HRM processes are under-developed, which makes the response rate even more acceptable. The profile of the research sample is given in the table 7.

**Table 7:** Profile of enterprises in the sample

	Percentage of enterprises
<b>Ownership structure</b>	state-owned enterprises (27.9%), private Croatian-owned enterprises (30.2%), private foreign-owned enterprises (41.9%)
<b>Main enterprise activity</b>	agriculture and food industry (2.3%), manufacturing (39.5%), electricity, gas and water supply (2.3%), construction (7.0%), wholesale and retail (9.3%), transport, distribution and storage (2.3%), financial services (16.3%), other services (21.0%)
<b>Number of employees</b>	500 to 1000 employees (41.9%), 1000 to 2000 employees (27.9%), more than 2000 employees (30.2%)

**Data collection.** Questionnaires were sent by e-mail personally to HRM directors, together with a brief covering letter explaining purpose and importance of the research. HRM directors, as most knowledgeable and informed people regarding HRM evaluation in their enterprises, were responsible for questionnaires' fulfillment as representatives of their enterprises.

**Data analysis.** Apart from descriptive statistics calculations, correlation analysis (Pearson correlation coefficients) and Kruskal-Wallis H nonparametric tests, depending on the type of data, were conducted in order to identify whether methods used for the evaluation of HRM activities correspond to the overall quality of HRM practice and organizational performance, using Statistical Package for the Social Sciences (SPSS).

## 4. RESEARCH RESULTS

Research results are presented in three parts: (1) description of HRM evaluating practices in Croatian enterprises in the sample, (2) the relationship between HRM metrics used and overall quality of HRM activities, and (3) the relationship between HRM metrics used and organizational performance.

### 4.1. HRM evaluation practice in Croatian enterprises

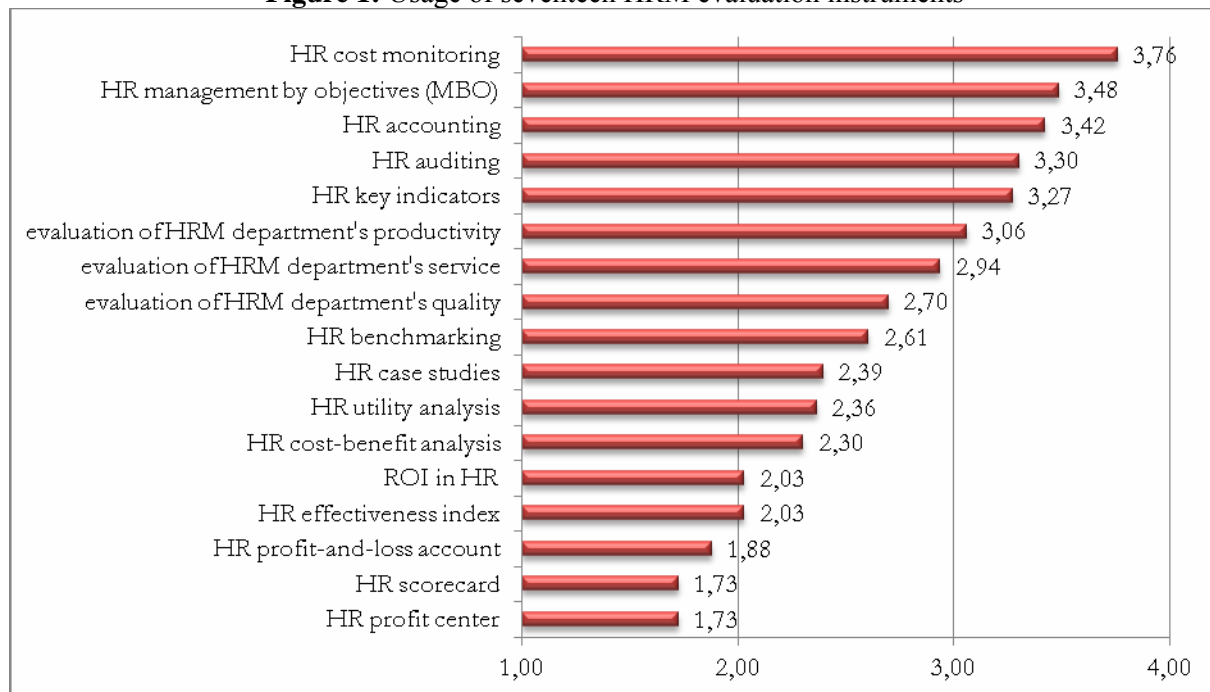
HRM evaluation practices present in the Croatian enterprises in the sample are depicted through: (1) frequency of using different HRM evaluation instruments, (2) existence of evaluation of individual HRM activities, and (3) number of indicators tracked monthly per each HRM area.

Figure 1 reveals that only six out of seventeen HRM evaluation instruments are on average used by enterprises in the sample<sup>2</sup>, compared to eleven instruments not regularly used. Used instruments on average are HR cost monitoring (average = 3.76), HR management by objectives (MBO) (average = 3.48), HR accounting (average = 3.42), HR auditing (average = 3.30), HR key indicators (average = 3.27) and evaluation of HRM's department productivity (average = 3.06), while the most rarely used ones are HR as a profit center (average = 1.73), HR scorecard (average = 1.73), HR profit-and-loss account (average =

<sup>2</sup> Average value on a scale from 1 (not used at all) to 5 (used on a regular basis) greater than 3.0, which is a cutting point between "not frequently used" and "frequently used".

1.88), HR effectiveness index (average = 2.03) and ROI in HR (average = 2.03). Having in mind Phillips *et al.* (2001, pp. 3) approaches to HRM accountability<sup>3</sup>, it is evident that enterprises in the sample are using early and value-added approaches typical for western enterprises from 1960s to 1990s. Leading-edge approaches, such as HR profit center, HR effectiveness index or ROI approach, are really rarely used by Croatian enterprises in the sample.

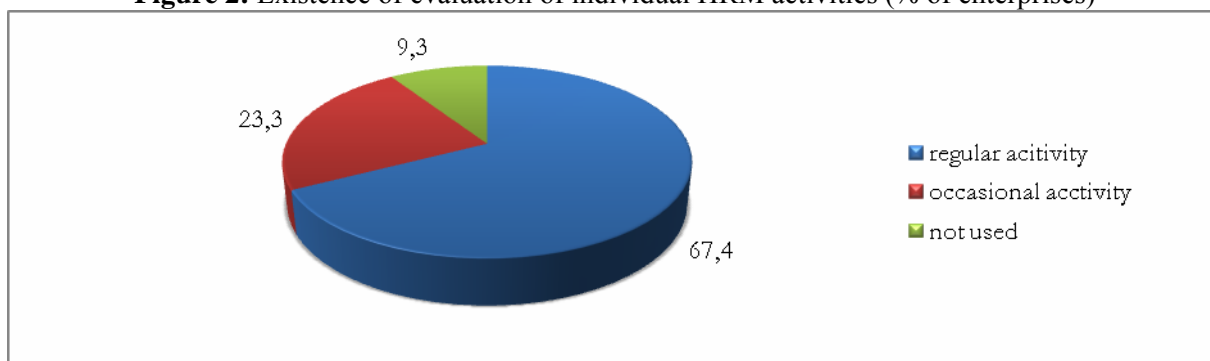
**Figure 1:** Usage of seventeen HRM evaluation instruments



Note: Usage was assessed on a scale from 1 (is never used) to 5 (is used on a regular basis).

However, figure 2 depicts that measuring of individual HRM activities is quite present in Croatian enterprises. 67.4% of enterprises in the sample evaluate quality of individual HRM activities on a regular basis using different qualitative and quantitative indicators.

**Figure 2:** Existence of evaluation of individual HRM activities (% of enterprises)

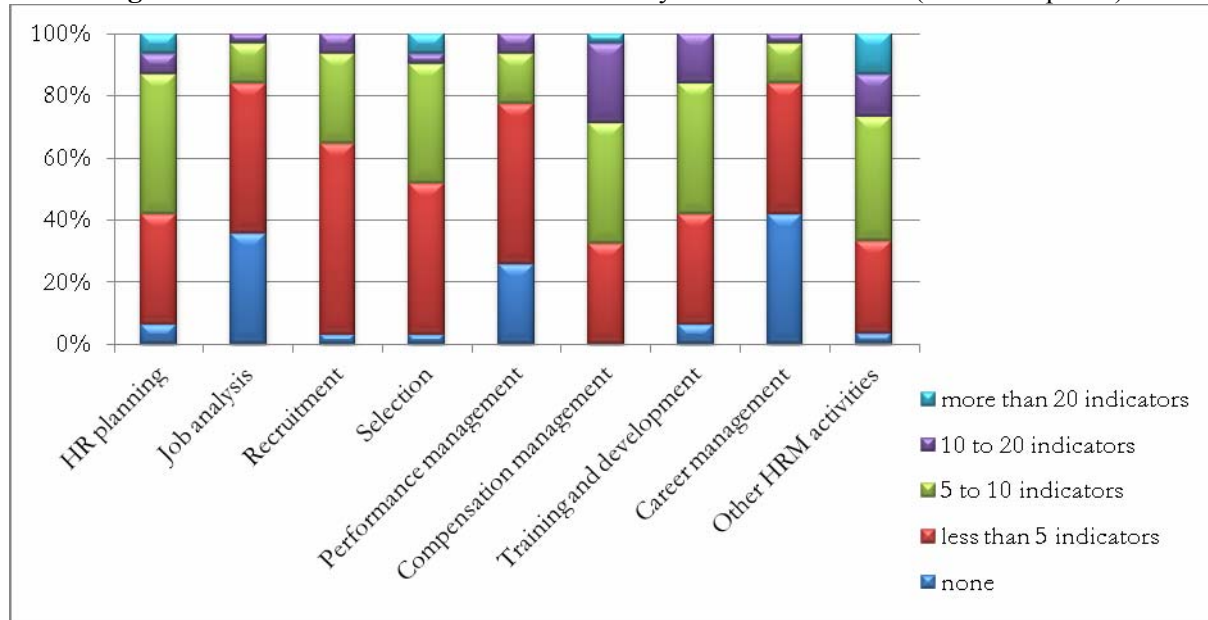


But, further exploration of Croatian enterprises' practices in keeping track of individual indicators of different HRM activities revealed that enterprises in the sample are on average sufficiently engaged only in HR planning, compensation management, training and development evaluation, and other HRM activities

<sup>3</sup> According to Phillips *et al.* (2001, pp. 3), approaches to HRM accountability are: (1) Early approaches used in 1960s and 1970s (HR MBO, Employee attitude surveys, HR case studies, and HR auditing), (2) Solid, value-added approaches used from the end of 1970s and in 1980s (HR key indicators, HR cost monitoring, HR reputation, Competitive HR benchmarking), and Leading-edge approaches used from 1990s (ROI process, HR effectiveness index, Human capital measurement, HR profit center).

(includes HR administration, health and safety issues, employment relations, organizational culture and climate and similar), as figure 3 depicts. In those areas greatest numbers of indicators are collected, which signifies that those areas are more thoroughly observed. As well mode values of those areas are 3, which signifies that in those areas enterprises most frequently keep track of 5 to 10 HRM indicators, while other areas have mode values of 2, which signifies that less than 5 indicators in that area are commonly collected. It can be concluded that enterprises in the sample regularly and comprehensively keep track of their activities in the most fundamental HRM areas, as compensations, education and HR administration are.

**Figure 3:** Number of indicators tracked monthly for each HRM area (% of enterprises)



#### 4.2. The relationship between HRM evaluation practice and overall quality of HRM

It is reasonable to believe that the level of HRM evaluation practice in an enterprise corresponds to the overall level of HRM practice in an organization. Thinking logically, the overall quality of HRM practice is a determinant of an HRM evaluation practice. However, such a hypothesis has to be tested.

Table 8 reveals that the usage of sixteen out of seventeen HRM evaluation methods is significantly related with the overall level of HRM practice in an enterprise.

**Table 8:** The relationship between HRM evaluation method used and overall quality of HRM practice

HRM evaluation method	r	sig.	level of sig.
1. evaluation of HRM department's productivity	0.420	0.017	0.05
2. evaluation of HRM department's quality	0.536	0.002	0.01
3. evaluation of HRM department's service	0.530	0.002	0.01
4. HR accounting	0.105	0.566	
5. HR auditing	0.547	0.001	0.01
6. HR benchmarking	0.687	0.000	0.01
7. HR case studies	0.586	0.000	0.01
8. HR cost monitoring	0.569	0.001	0.01
9. HR cost-benefit analysis	0.505	0.003	0.01
10. HR effectiveness index	0.609	0.000	0.01
11. HR key indicators	0.838	0.000	0.01
12. HR management by objectives (MBO)	0.776	0.000	0.01
13. HR profit center	0.412	0.019	0.05

14. HR profit-and-loss account	0.445	0.011	0.05
15. HR scorecard	0.372	0.036	0.05
16. HR utility analysis	0.548	0.001	0.01
17. ROI in HR	0.549	0.001	0.01

More to it, enterprises which have a practice of evaluation individual HRM activities (see figure 2) have significantly superior HRM practices ( $\chi^2 = 12.478$ ;  $\sigma = 0.002$ ; level of sig. = 0.01).

### 4.3. The relationship between HRM metrics used and organizational performance

As it was presumed that the HRM evaluation practice corresponds with the HRM practice, it was as well presumed that the HRM evaluation practice corresponds with the organizational performance. Namely, researchers all over the world proved the relationship between the quality of HRM practice and organizational performance (Kravetz, 1988; Terpstra & Rozell, 1993; Arthur, 1994; Huselid, 1994; Becker & Gerhart, 1996; Huselid & Becker, 1997; Patterson *et al.*, 1997; Yeung & Berman, 1997; Becker & Huselid, 1998; Ngo *et al.*, 1998; Fey *et al.*, 2000; Wan *et al.*, 2000; Wright & Gardner, 2000; Guthrie, 2001; Pološki Vokić & Vidović, 2004; Pološki Vokić & Vidović, 2008; Guthrie *et al.*, 2009), and as HRM practice was assumed (and then proved) to be significantly related to the HRM evaluation practice, there was a firm ground to assume the existence of a relationship between HRM metrics and organizational performance.

However, net profit in total revenues were found to be significantly related only with the frequency of using three out of seventeen HRM evaluation methods: (1) HR cost monitoring ( $r = 0.423$ ,  $\sigma = 0.022$ , sign. < 0.05), (2) HR management by objectives (MBO) ( $r = 0.378$ ,  $\sigma = 0.043$ , sign. < 0.05), and (3) HR key indicators ( $r = 0.434$ ,  $\sigma = 0.019$ , sign. < 0.05), while return on equity (ROE) and return on assets (ROA) were found to relate significantly only with the usage of HR key indicators method (for ROE  $\rightarrow r = 0.413$ ,  $\sigma = 0.026$ , sign. < 0.05; for ROA  $\rightarrow r = 0.407$ ,  $\sigma = 0.028$ , sign. < 0.05). Furthermore, the relationship between three performance indicators and presence of measuring individual HRM activities, as a fundamental HRM evaluation method, was not found ( $\chi^2$  values were found not to be significant).

Altogether, the statistically significant relationship between HRM metrics and organizational performance was not found. However, the reason for that is not, as it could be assumed, that the data do not support the hypothesis about the relationship between the quality of HRM and organizational performance. Namely, results from this research validate that hypothesis (the statistically significant relationship between HRM quality and organizational performance was found in two out of three relations  $\rightarrow$  HRM quality relates statistically significantly with net profit in total revenues ( $r = 0.480$ ,  $\sigma = 0.009$ , sig. < 0.01) and ROE ( $r = 0.384$ ,  $\sigma = 0.044$ , sig. < 0.05), but not with ROA).

Consequently, the discrepancy of results (in terms that HRM evaluation was found to relate significantly with HRM quality and HRM quality was found to relate significantly with organizational performance, but the significant relation between HRM evaluation and organizational performance was not found) has to be explained through the Pearson correlation coefficients values. Namely, when looking at the coefficients in the table 8 (coefficients of the relationship between the usage of HRM evaluation methods and overall HRM quality), it is evident that these relationships, although significant, are on average moderate.<sup>4</sup> Namely, one coefficient is almost negligible, one is quite small, thirteen signify moderate correlation, only

<sup>4</sup> Interpretations of Pearson correlations coefficients are the following:

Pearson correlation coefficient	Interpretation
(-) 0.00 – 0.19	Slight, almost negligible correlation
(-) 0.20 – 0.39	Low, quite small correlation
(-) 0.40 – 0.69	Moderate correlation
(-) 0.70 – 0.89	High correlation
(-) 0.90 – 1.00	Very high correlation

two are high, and none of the coefficients implies a very high correlation. In the same time, correlations between the usage of HRM evaluation methods and organizational performance indicators are slight in 31 occasions, low in 16 occasions (although one of those 16 is statistically significant), and moderate in four occasions (all significant). Hence, the explanation of the previously mentioned inconsistency could be found in correlation coefficients values of explored relations, as the exploration revealed that altogether they are not high.

## 5. DISCUSSION AND CONCLUSION

The research revealed that Croatian enterprises are at the begging of their HRM evaluation practice. Methods of evaluation which are on average used are mostly early approaches, combined with some value-added approaches, such as HR cost monitoring, HR management by objective, HR accounting and HR auditing, which signifies that the analytics of HRM activities could and should be improved. Leading-edge approaches, such as ROI concept in different HRM activities (for example ROI in training and development or ROI in employees' benefits) should be used more, as those approaches provide answers to the question: "How much more products can be sold or services delivered because of HRM efforts?"

Furthermore, the research proved the relationship between HRM evaluation practice and overall quality of HRM. This linkage was assumed but not yet proved. Hence the results about the firm relationship between the two are expanding the understanding of the area. However, the collected data did not prove the relationship between HRM metrics and organizational performance, which was as well assumed based on the sound logic. Although there is a partial explanation of such a finding – that correlation coefficients are generally low for both relationships (the relationship between HRM evaluation practice and HRM quality, and the relationship between HRM evaluation practice and organizational performance), this should be further explored.

Since overall quality of HRM practice is found to be significantly related to the organizational performance in many researches conducted all around the globe, and this research proved the significant relationship between the HRM evaluation practice and the quality of HRM practice, the assumption that evaluation of HRM efforts should be an every day activity of HRM experts materializes. By analytically and quantitatively approaching their jobs, HRM experts are going to be able not only to provide evidence for their existence and strategic position in organizations, but they are going to be able to improve, incrementally or radically, their everyday activities, and by doing that add value both financially and psychologically to their organizations.

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