

Original scientific paper

UDC: 005.96

doi:10.5937/ekonhor2002127B

A CONCEPTUAL FRAMEWORK FOR DESIGNING THE ARCHITECTURE OF HUMAN RESOURCE MANAGEMENT

Biljana Bogicevic Milikic*

Faculty of Economics, University of Belgrade, Belgrade, The Republic of Serbia

Intensive changes in the business environment with significant implications for organizations reflected in increasing their size, thinning structures, the application of new models in the intra- and inter-organizational designs, the growing importance of knowledge management and the application of multi-strategies have produced significant effects on the human resource management (HRM) architecture. As there are a number of different approaches to the HRM architecture in the relevant literature, this paper is aimed at creating an integral conceptual framework for designing this function. For this purpose, the paper analyzes different approaches to HRM design from the standpoint of the main theoretical models of organizational design in order to identify both similarities and distinctions between them, and build up an integral conceptual framework for designing the HRM architecture. These will form the ground for the application of a comprehensive approach in creating, analyzing and understanding the HRM architecture. The research findings suggest that the HRM modern architecture includes six design elements, namely: HRM contingent factors, key stakeholders' interests, the HRM hard components, the HRM soft components, organizational results, and feedback.

Keywords: human resource management, organizational design, human resource management architecture

JEL Classification: M1, M5

INTRODUCTION

The period of intense changes in the business environment primarily driven by the intensification of the globalization process, an economic downturn, demographic changes, education and labor market changes, technology and ICT development, as well

as an increase in the awareness of corporate social responsibility, has led to significant organizational changes. An increasing size, thinning structures, the implementation of new models in intra- and inter-organizational design, the introduction of knowledge as the key organizational resource, the implementation of multiplication strategies and the like have also caused significant effects on human resource management (hereinafter referred to as HRM), which reflect in changes in the purpose, role, work scope, HRM organizational process, stronger

* Correspondence to: B. Bogicevic Milikic, Faculty of Economics University of Belgrade, Kamenička 6, 11000 Belgrade, The Republic of Serbia; e-mail: bogicevicmilikic@gmail.com

strategic management, work division between line managers and employees in the activities of HRM, the emergence of new HRM practices and the increasing importance of the quantitative impact-oriented monitoring of HRM on organizational performance.

The aforementioned changes create a need for systematization in the HRM design approach. The choice of a specific architecture directly affects the size of the contribution of HRM to the overall organizational performance: the greater the degree of alignment between the HRM architecture, on the one hand, and the organization's strategic capabilities and business processes, on the other, the greater the positive impact of HRM on overall organizational performance (Purcell, 1999; Becker & Huselid, 2006, 899). However, when speaking about the relevant literature, there are numerous HRM approaches, perspectives, paradigms and models that have emerged over the years, creating a confusion in contemporary HRM design. It can certainly be attributed to intense changes in the role, scope and manner of business doing in the HRM field.

The initial hypothesis of the paper implies that:

H: In the relevant literature, there is no integral conceptual framework for designing the HRM architecture in modern organizations.

Thus, the paper is aimed at identifying the elements based upon which different approaches to the HRM architecture design can be grouped or differentiated, and proposing an integral conceptual framework for the HRM architecture design and its elements.

The subject matter of this research study are different approaches and perspectives in designing the HRM function, which will be analyzed starting from the main theoretical models of organizational design in order to tie the knowledge from organizational design theory with modern approaches to HRM design.

The key research questions to answer herein are:

- What are the key models of the HRM architecture in the relevant literature?
- Are there any similarities between them, and which similarities are in question?

- What are the differences between them and how can they be explained?
- What are the essential elements of the HRM architecture that can help to better understand the HRM function in the current setting?

Given the nature of the research study, the paper is of a theoretical nature and is based upon the cabinet research of the relevant literature in the fields of organizational theory, organizational design and human resource management. This research is exploratory and aims to provide a better understanding of the researched phenomenon by primarily using the methods of analysis, comparison, classification, deduction and synthesis for drawing conclusions.

In addition to the introduction, the paper consists of three parts and the conclusion. Within the theoretical framework, emergence, different definitions and theoretical perspectives in HRM research are analyzed. In the second part of the paper, an analysis of different approaches to the design of both organizations and HRM is carried out. In the third section of the paper, the research findings and the discrepancies identified between the existing models are discussed, and an integral framework for HRM design in contemporary organizations is proposed. Finally, in the last part of the paper, the key conclusions and the implications of the paper are drawn, and the main limitations and directions of future research in this area are pointed out.

THE THEORETICAL FRAMEWORK

The HRM concept, definition and emergence

Human resource management can be defined in different ways (Bogićević Milikić, 2017):

- as a scientific discipline studying the different aspects of employment in an organization;
- as an important business function in an organization, which includes a range of diverse processes, i.e. jobs and tasks;

- as a part of an organization's management system encompassing all the management decisions, strategies, policies and activities that directly affect the employees of the organization: their behavior, results, attitudes, values and motivation; and
- as a profession.

As a scientific discipline, HRM is an area of organization science dealing with the study of all the aspects of organizational employment, whose origin dates back to 1935 (Bogićević Milikić, 2017). As a scientific discipline, HRM is characterized by a highly fragmented study field. Depending on its research focus, the name of the discipline changed during the 20th century. In the beginning, it was called Personnel Management, whereas in the late 1970s and the early 1980s, the discipline was given a new name, i.e. HRM, under a strong influence of primarily the American literature. The change in the name also marked a qualitatively new phase in the development of the discipline - its focus shifted from controlling labor costs to understanding employees and their capabilities as an important resource within organizations, on the one hand, and to giving strategic importance and role to managing those resources (Tyson & York, 1996, 40). Until the 1980s, researchers were primarily focused on individual HRM activities, so that new research perspectives emerged in the late 1980s and 1990s, namely the strategic, political, economic utility and international perspectives (Bogićević Milikić, 2017). In recent years, talent management has increasingly been discussed, with many organizations being focused on the identification, attraction, development and retaining of talents. The focus is on a reduction in the role of HRM administrative activities and the enhancement of the strategic role and quality of the services provided to "clients" in the organization.

As a profession, HRM developed at the beginning of the 20th century (1915-1920), when many well-known universities in the USA (first Dartmouth College, then Harvard and Columbia), offered specialist education programs for these jobs, upon the initiative of the War Industrial Council. The industrial revolution,

which led to the development of technology, the opening of large factories and the development of specialization, had a decisive impact on the development of the profession and significant effects on employment growth (Bogićević Milikić, 2017). In contemporary conditions, HRM jobs are performed by professional HR managers and experts in various humanities, namely by psychologists, sociologists, anthropologists, social workers, lawyers and economists, all of whom are supposed to have diverse abilities in different areas, such as HRM, psychology (industrial psychology, social psychology), sociology, andragogy, finance, marketing, organizational behavior, ICT, industrial relations and law. The required competencies are strongly related to the roles of HRM (a strategic partner, an administrative expert, an employee advocate and a change agent), and they include the ability to analyze the current and future organizational business goals and the role of the HR sector in the process of achieving them, the ability to analyze fluctuation, productivity and/or potential consumer issues in order to propose adequate solutions pertaining to the HRM field (the strategic partner role); the overcoming of employee resistance to the latest HRM policies and practices, technologies and/or job descriptions (the role of the change agent); the guidance and counseling service for employees and the presentation of employees' views to the management of the organization (the role of the employee advocate); the creation, introduction and continuous improvement of HRM systems, as well as an insight into the ways technology can make HRM systems more efficient and less expensive (the role of the administrative expert). The following jobs are basically done in the human resource sector: an operational HRM executive, an HR specialist, an HRM business partner (an HRM consultant), an HR manager and an HR director.

As a business function, HRM encompasses a variety of the activities, policies, practices and systems that affect the behavior, attitudes and performance of the employees of an organization, namely organization design and development, job analysis and design, HR planning, employee recruiting, selection, training, learning and development, managing employee performances, remuneration, leadership

development, knowledge management, talent management, employee relationships, collective bargaining, employee health and safety and so forth.

As a part of the management system, HRM includes all the management decisions, strategies, policies and activities that directly affect the employees of the organization: their behavior, results, attitudes, values and motivation. The key functions of HRM are all management levels - strategic, middle and operational management - and they perform significant tasks in the HRM field (Bogićević Milikić, 2017).

An overview of the different perspectives of HRM

When the relevant literature is concerned, it contains different HRM approaches and perspectives. The basic classification implies the difference between personnel management, as a traditional approach to administering various aspects of employment in organizations, on the one hand, and HRM, which is more strategically oriented and sees people as the key

resource of organizations, on the other. According to the differences in the theoretical approach to managing people and practices, J. Beardwell and I. Clark (2007) distinguished between the five different perspectives of personnel management and HRM (Table 1).

In addition to the two foregoing typologies, yet another popular typology includes the other approaches to human resource management (Farnham, 2015), namely:

- personnel management,
- new (distinctive) HRM, and
- HRM.

Their most important characteristics are presented in Table 2.

Contextual HRM is the most recent, but perhaps the broadest approach to HRM, given the fact that it implies a broader context, in which HRM operates and is based upon the postulates of contingent theory, which seeks to explain complex relationships within

Table 1 The different perspectives on people management

	PERSONNEL MANAGEMENT	HRM
The planning perspective	Reactive and marginal within the corporate planning system.	Strategically oriented, the key role of HRM in the corporate planning system.
The people management perspective	Employees are considered to be variable costs and subject to organizational control.	People are the social capital able to develop and be dedicated to work.
The employment relations perspective	It is only natural that there is the dominance of individual interests in the work environment, as well as a conflict of interests between different stakeholders.	Supports stakeholders' common interest and strives to eliminate conflicts.
The system/structure perspective	People control, information from top.	Promotes employee information and participation and open communication with management in order to increase the level of trust and commitment.
The role perspective	Personnel management is specialized, professional and led by personnel experts.	Mostly integrated within line management.

Source: Beardwell & Clark, 2007

and between organizational subsystems and between the organization as a whole and its environment, on the one hand, and their impact on organizational performance, on the other. It historically originated and dominated especially during the 1960s and the 1970s, and is an important step forward from the then universalist theories, and can be classified into the so-called moderate approaches between the two extreme perceptions of organizations: the universalist perception - according to which there is only one best solution for all situations, and the situational perception - according to which each situation should individually be viewed and analyzed (Zeithaml, Varadarajan & Zeithaml, 1988). However, when speaking about practice, contingent theory is often misunderstood and incorrectly equated with the situational approach (Luthans & Stewart, 1977).

When speaking about HRM, the application of contingent theory would imply the following: HRM is an open system made up of the subsystems that interact with each other and with the environment as well. The interactive nature of the HRM elements provides the two basic characteristics (Zeithaml *et al*, 1988, 38-39):

- the adaptability of the system elements (the system elements adapt to each other in order to preserve the system characteristics), and
- the achievement of the same final (desirable) results is possible, starting from different initial assumptions and using different means.

The main assumption is that there is not only one best HRM structure, one leadership style or one way to make decisions, similar to the situational approach. Concrete solutions depend upon various factors and

Table 2 The three paradigms of people management in organizations

The personnel management paradigm	The HRM paradigm	The contextual HRM
Driven by the need of the management to fairly treat people inside the organization.	Driven by the need of the management to ensure competitive advantage in the market at the organizational level.	Guided by the following factors: the role of the state, legislation, trade unions, the forms of ownership affecting HRM, at the national level.
Operates in a stable environment.	Operates in a competitive and dynamic environment.	Operates in regulated market conditions.
A traditional approach to people management with the administrative role.	A distinctive approach to people management, a strategic focus.	Uses a comparative approach in order to understand the factors that influence making decisions on the organization's employees.
A short-term orientation with an <i>ad hoc</i> perspective.	5 long-term orientation, a strategic perspective.	A contingent perspective.
Includes a pluralistic framework for approaching people organization and management.	Includes a unique framework for approaching people organization and management.	Includes a pluralistic framework for approaching people organization and management.
Includes collective negotiations with unions, if any.	Includes a more individualized people management approach than collective negotiations do.	A contingent approach to people management.
Personnel management is led by personnel experts (policy making, implementation, monitoring).	Provides HRM services based on collaboration between HRM experts and line managers.	Provides HRM services in accordance with the national environment.

Source: Farnham, 2015, 6-7.

limitations, and their interconnection (contingency) included in the internal and external environment. Contingent theory aims to:

- identify the important contingent variables that differentiate between different contexts,
- group similar contexts based upon such contingent variables, and
- identify the most effective organizational response for each recognized context.

It means that not every situation is analyzed individually, similar to the situational approach, but recurring contexts are rather sought in order to find the most effective structural model, leadership style and/or decision-making model (Janićijević, Bogičević Milikić, Petković and Aleksić Mirić, 2020). Similar to contingent theory, the relationship between the following three groups of variables is crucial in the contextual HRM model, namely:

- the contingent situational factor of HRM - the situational factors usually external to the organization and HRM, which cannot be influenced by management:
- general environment factors - the factors that exert an indirect influence on the organization, creating a context for the effect of specific factors: legislation, national culture, the educational system, the political system, the economic system, demography, ecology and so on;
- the factors included in a specific environment - the factors that exert a direct and strong influence on HRM: customers, suppliers, competitors, technology, socio-political factors and so on;
- HRM responses - the organizational and managerial activities undertaken due to the existing or anticipated characteristics of the contingent factors: changes in the structure, the management style or the decision-making style, and
- organizational performance - it depends on the compliance of the contingent factors and the HRM response to them within a given context: efficiency, a profit, productivity, employee satisfaction, return on capital employed, the employee turnover rate and so on.

The success of HRM depends on its ability to adapt to the environmental factors it is influenced by. In order to be efficient and achieve the highest performance level, HRM needs to be in accordance with the contingencies in its environment, thus maintaining the equilibrium needed for proper operation. That is the reason why contingent theory is often regarded as an example of equilibrium theories (Donaldson, 2001).

Organizational performance is the main dependent variable in the HRM model (Luthans & Stewart, 1977; Donaldson, 2001); situational factors are the main independent variables (Luthans & Stewart, 1977), whereas changes in HRM as a response to the influence of the independent variables act as the mediator variable, since they initiate changes in the dependent variable. In a nutshell, changes in the independent variable lead to changes in the mediator variable, which then continues to a change in the dependent variable.

RESEARCH FINDINGS: THE CHARACTERISTICS OF THE HRM DESIGN MODELS

In order to test the initial hypothesis reading that, in the relevant literature, there is no integrated conceptual framework for designing the HRM architecture in modern organizations and answer the research questions, the main approaches and models of both organizational design and HRM design are analyzed based upon the review of the relevant literature in the field of organizational theory, organizational design and human resource management. Different methods of scientific reasoning, namely analysis, comparison, classification, deduction and synthesis, are used for this purpose.

The models of organizational design

In order to create an integral conceptual framework for HRM architecture design, it is necessary to start from the main theoretical models of organizational design, which can indicate the prevailing approaches

to design, the main design elements in modern organizations, i.e. the elements that are and can be design elements, those that are not and the manner in which they are interrelated. Models are important for understanding a phenomenon, precisely because they focus attention on the most important elements, thus providing a deeper understanding of the phenomenon. The importance of organizational design for individual organizations manifests through its role in shaping the organization that will enable the effective achievement of organizational strategies/goals.

Organizational design is the process of the systematic and purposeful shaping and aligning of the elements of an organization - the structure, the formal communication system, the division of labor, the control, coordination and accountability systems (Hamel & Prahalad, 1994) - in order to successfully achieve organizational goals (Mohrman, 2007) through an adequate and timely adaptation to changes in both the external and the internal environments. Organizational design can also be understood as a result of the organizational design process (Stanford, 2018). Organizational design is often mistaken for the organizational structure - it is only one of the elements of organizational design (Galbraith, Downey & Kates, 2002; Stanford, 2018). The most important role of the knowledge of organizational design is the ability to create an adequate organization, and its detailed analysis and improvement as well.

Over the years, numerous definitions have emerged in the literature pertaining to the definition of organizational design, among which the following are widely popular both in theory and in consulting practice:

- Leavitt's Diamond Model,
- Contingent Design Models,
- Galbraith's Star Model, (4), Congruence Model,
- McKinsey 7-S Model, and
- Burke-Litwin Causal Model.

The overview of the basic elements and factors of organizational design in the mentioned models is accounted for in Table 3.

HRM design models

The first HRM models emerged during the 1980s, essentially being the design models aimed at providing an analytical framework for HRM research - strategies, policies, processes, practices, situational factors, stakeholders, performance and so forth (Bratton & Gold, 2012) - and legitimizing HRM and distinguishing it from the other approaches (Guest, 1997, 273).

As for the relevant literature, the following HRM models are cited as the most popular:

- the early model,
- the Harvard model,
- the Guest model,
- the Warwick model,
- the Storey model and
- the 5-P model.

Their elements are presented in Table 4.

A little while later, in the late 1990s and at the beginning of the 21st century, the term "HRM architecture" began to be used in the relevant literature instead of "models" in order to explain all the components of HRM in organizations and the relationship between them. However, different definitions in the literature initiated considerable confusion in understanding the term.

According to B. E. Becker and B. Gerhart (1996), the HRM architecture consists of the three main components: HRM philosophy, HRM policies and HRM practices.

D. P. Lepak and A. Snell (1999, 32) describe the architecture as a framework linking different employment models, employee-employer relationships and different configurations (systems) of HRM. Based upon the contributions of transaction cost theory, resource dependency theory and human capital theory, they believe that, depending upon the value of human capital and the particularity of

Table 3 Different approaches to organizational design

APPROACH	The elements and factors of organizational design	Authors
Leavitt's Diamond Model	<ul style="list-style-type: none"> • Tasks, • Technology, • The structure, • People. <p>Changes at any point of the diamond lead to changes in some or all of the other design elements, whereas failure to manage the elements and their relationships can lead to a wide variety of problems in the organization.</p>	H. J. Leavitt (1964)
Contingent Design Models	<ul style="list-style-type: none"> • The elements of the structure: specialization, the number of hierarchical levels and a span of control, authority delegation, formalization and departmentalization. • The contingent contextual factors (the factors of the general environment: legislation, national culture, the education system, the political system, the economy, demographics, ecology and so on; the factors of the specific environment: buyers, suppliers, competitors, technology, socio-political factors; the factors of the internal environment: technology, a strategy, organizational culture, maturity and the size) cause organizational reactions to changes in the structure which, in the compliance with the contingent factors, influence organizational performance (efficiency, a profit, productivity, employee satisfaction, return on capital employed, the employee turnover rate, etc.). 	T. E. Burns i G. M. Stalker, (1961); A. D. Jr. Chandler (1962); J. Woodward (1965); P. Lawrence i J. Lorsch (1967); J. Thompson (1967); C. Perrow (1967); P. M. Blau (1970;1972); R. P. Rumelt (1974); C. W. Hofer (1975); L. E. Greiner (1972); J. Child (1973); H. Mintzberg (1979); M. Porter (1980)
Galbraith's Star Model	<ul style="list-style-type: none"> • The strategy • The structure (specialization, the number of hierarchical levels and a span of control, authority delegation, and departmentalization). • Processes (work processes, resource allocation) • Human resources (recruitment, selection, training and development) • The rewarding system • There is interconnectedness and an influence between each of the design elements. 	J. R. Galbraith (1973; 1977)
Congruence Model	<ul style="list-style-type: none"> • inputs (environmental factors, resources, organizational history, and strategies) • transformational processes (the task, individuals, formal organization, informal organization) • outputs (products, organizational functioning, individual behavior, group behavior, relationships between groups in the organization, individual performance). • In order for an organization to be successful, there must be congruence between all the design elements. 	D. A. Nadler i M. L. Tushman (1980)
McKinsey 7-S Model	<ul style="list-style-type: none"> • Systems, • Strategy, • Structure, • Style, • Shared values, • Staff, • Skills. 	R. Pascale i A. Athos (1981) T. J. Peters i R. H. Jr. Waterman (1982)
Burke-Litwin Causal Model	<ul style="list-style-type: none"> • Transformational variables: the external environment, a mission and a strategy, leadership, organizational culture, individual and organizational performance. • Transaction variables: the structure, management practices, systems (policies and procedures), organizational unit climate, job requirements, motivation, individual needs and values. <p>There is feedback in the model: transformational variables (among which the strongest influence is the influence made by the external environment) exert an influence on transaction variables, which in turn affects transformational variables.</p>	W. Burke i G. Litwin (1992)

Source: Author, based on the review of the literature

human capital for a particular organization, there are four different configurations, i.e. HRM systems, for different types of employees:

- creating human capital alliances (low value, a high specificity),
- human capital contracting (low value, a low specificity),
- human capital development (high value, a high specificity), and

- the external employment of human capital (high value, a low specificity).

The HRM architecture of an organization comprises different HRM systems within the organization; each employee is involved in some of the four different systems, depending upon their individual values and specificities for the organization. The role of the HRM configuration is to strike the right balance - equity between its employees and their organization in

Table 4 Different theoretical HRM design models

HRM MODEL	THE ELEMENTS OF THE MODEL	AUTHORS
Early model	<ul style="list-style-type: none"> • Selection, performance evaluation, development, rewarding. 	C. J. Fombrum, M. M. Tichy i M. A. Devanna, (1984)
Harvard model	<ul style="list-style-type: none"> • Situational factors, stakeholders' interests, HRM policies, HRM performance, long-term consequences and feedback. 	M. Beer, B. Spector, P. Lawrence, D. Quinn Mills i R. Walton (1984)
Guest model	<ul style="list-style-type: none"> • HR strategy, HR policies, HRM performances, desired behaviors, performance and financial outcomes. 	D. Guest (1987, 1997)
Warwick -model	<ul style="list-style-type: none"> • The external context: socio-economic, technical, political, legislative, competitive. • The internal context: culture, the structure, leadership, technology, business results. • The content of the business strategy: goals, market, the strategy, tactics. • The HRM context: the role, the definition, the organization, HRM results. • The HRM content: workflows, work systems, rewarding systems, employee relationships. 	C. Hendry i A. Pettigrew (1990)
Storey model	<ul style="list-style-type: none"> • Beliefs and assumptions, strategic aspects, the role of line managers, the key HRM areas. 	J. Storey (1992)
5-P model	<ul style="list-style-type: none"> • HR Philosophy - the statement of how an organization views its human resources and their role in its overall business success, and how they should be treated and managed as well. • HR Policies - a guide to the creation of HR practices and programs. • HR Programs - uniting the coordinated efforts of HRM to implement the organizational changes that result from the strategic needs of the organization. • HR Practices - the activities undertaken so as to implement HR policies and programs: employment, learning and development, earnings and performance management, employee relationships and administration. • HR Processes - the formal procedures and methods used to implement HR plans and policies in practice. 	R. S. Schuler (1992)

Sources: Bratton & Gold, 2012; Armstrong & Taylor, 2017; Marchington, Wilkinson, Donnelly & Kynighou, 2016.

terms of how much they contribute, on the one hand, and what they receive in return, on the other.

S. Kepes and J. E. Delery (2006; 2007) point out the fact that the HRM architecture consists of two basic components - organizational climate and the HRM system (philosophy, policies and HRM practices). According to the authors, organizational climate reflects all the HRM formal and informal practices that serve as the glue that holds the entire organization together. HRM philosophy refers to the general principles that define the value and treatment of employees in a specific HRM system. HRM policies are a guide and a benchmark for various HRM activities - what the organization wants to achieve, not how it will achieve it. Practices are the activities and techniques used in the implementation of HRM policies. HRM practice implementation processes are the processes detailing how practices are to be implemented.

One group of authors (Becker, Huselid & Ulrich, 2001; Becker & Huselid, 2006; Hird, Sparrow & Marsh, 2010) believe that, in addition to the HRM system, process, function structure and competencies, the HRM architecture also has to include the behavior of all the employees of the organization that results in a specific performance - it encompasses all that is included in HRM, not only the structure of the HRM function.

According to M. Armstrong and S. Taylor (2017, 31), the HRM architecture is the HRM system that integrates HRM philosophies, takes into account the external and the internal environments and consists of the three basic components:

- HRM strategies - which define the directions of activities in different HRM fields,
- HRM policies - which define the purpose of HRM and provide a guidance to the creation and implementation of different HRM activities, and
- HRM practices - which consist of the HRM activities focused on the governance and development of employees and labor relations management.

DISCUSSION: THE CREATION OF AN INTEGRAL CONCEPTUAL FRAMEWORK FOR THE HRM ARCHITECTURE DESIGN

The characteristics of the key organizational design models

Analyzing the organizational design models presented in Table 3, several conclusions can be drawn about the dominant approaches in organizational design:

- some design models are true “theoretical” models, whereas others are a result of consulting experience and practice (McKinsey’s 7-S model, Galbraith’s star model);
- a small number of design models do not take into account the factors of the external environment as the integral elements of the design, so they represent the so-called closed models of the organization (e.g. Leavitt’s model, the “star” model, and McKinsey’s 7-S model), which makes it difficult to apply them in the modern conditions of the dominance of the organizational open models;
- the number of design elements differs for every model, ranging from 4 (e.g. Leavitt’s model) to 12 (e.g. the Burke-Litwin causal model), which increases the complexity of the application and understanding of the model, so most models have the optimal number of elements, ranging from 5 to 7;
- some design models could be classified as rational organizational models (e.g. contingent design models), whereas others can be classified into social organizational models, which dominate in contemporary conditions (they include the organizational human, i.e. social, dimension);
- only rare models, and quite unjustifiably, include the existence of feedback (e.g. the Burke-Litwin causal model).

The foregoing gives rise to the following key design features of modern organizations:

- The forward-looking model of organizational design should be based on the assumption of the organization as an open system, which has been present since the 1950s and which includes the contingent factors of both the external and the internal environments that crucially influence the design of organizational design.
- The model of organizational design should include the minimum required number of the elements sufficient for its understanding, which means 5 to 7 elements according to the conducted analysis.
- In addition to the rational dimension (once organizational goals are defined, organizational design is created in a clear and logical manner), the organizational design model necessarily has its social dimension as well (individuals in the organization do not always behave in accordance with defined rules and policies, but first modify them in accordance with their needs, and only then adapt to them).
- The model of organizational design should also include the feedback that explains the interrelationship between the elements in the model (the interplay of the variables in the model) and ensures the sustainability of the model over time. In order to provide feedback, organizational performance needs to be an element of the model.

The organizational design model should be aligned with the important trends that characterize the business and work environments and should include the following: an increased use of teams and the intensification of the cross-functional work that creates the need for an additional communication and information flow, an increased use of dispersed, global working groups, continuous reorganization and restructuring, costs and a more efficient use of the work space, increasing employee satisfaction while attracting new talents (Stanford, 2018, 24-25). Modern models of organizational design focus on the development of horizontal structures, employee independence, a more intensive information exchange, the multi-strategy and organizational culture that encourages a faster adaptation to changes in the environment (Daft, Murphy & Willmott, 2017, 41)

The characteristics of the main HRM design models

The analysis of the different approaches to defining the HRM architecture has led to the following conclusions:

- In some definitions, the architecture and the system overlap (Armstrong & Taylor, 2017), whereas in some other definitions, the architecture contains multiple different HRM systems (Lepak & Snell, 1999; Kepes & Delery, 2006; 2007).
- As many as eight different elements are listed as the components of the HRM architecture in different models, namely:
 - organizational climate (Kepes & Delery, 2006; 2007),
 - the HRM strategy (Armstrong & Taylor, 2017),
 - HRM philosophy (Becker & Gerhart, 2006; Kepes & Delery, 2006; 2007; Armstrong & Taylor, 2017),
 - HRM policies (Armstrong & Taylor, 2017),
 - HRM practices (Becker & Gerhart, 1996; Armstrong & Taylor, 2017),
 - HRM processes (Becker *et al*, 2001; Becker & Huselid, 2006; Hird *et al*, 2010),
 - employee behavior in the organization (Becker *et al*, 2001; Becker & Huselid, 2006; Hird *et al*, 2010), and
 - employment models (Lepak & Snell, 1999).
- Some of the aforementioned elements of the HRM architecture cannot stand for the design elements, and they are organizational climate and employee behavior in the organization. These two components are not the elements of the HRM function design, but rather represent the result and consequence of the HRM design features and its implementation within a particular organization - they are an integral part of organizational performance.

- Some HRM design models include contingent factors (external and/or internal), while some include stakeholders' interests, whereas others do not.
- In some models, the impact of HRM on performance is important, unlike in the other models.

Based upon the abovesaid, it can be concluded that the initial hypothesis of the paper implying that, in the relevant literature, there is no integral conceptual framework for designing the architecture of HRM is confirmed.

The components of the integral framework for HRM design

An analysis of the basic organizational design models has revealed the dominance of open contextual social (natural) models, which take into account both the factors of the internal environment and the factors included in the external environment, where people and their relationships, values, behavior and performance are an important element of the largest number of the models. The majority of the models include a total of 5-7 elements. When HRM design is concerned, the analysis of the various models indicated a lack of a consensus on both the HRM design elements and on their definition and understanding.

Considering the previous analysis, it is believed that the HRM design model should be contextual, i.e. adaptable to the contingencies included in the external and the internal environments that strongly affect the characteristics of HRM, so the magnitude of the positive impact of HRM on an organization's performance will depend upon the organization's ability to adapt its HRM design to the characteristics of these contingencies. It is necessary to include feedback in the model. Accordingly, the integral conceptual framework for HRM design, i.e. its key elements, is suggested below (Figure 1).

The contingent factors of HRM. The contingent factors create a context for the functioning of HRM, thus

exerting a direct influence. Therefore, they have to be the element of the design taken into consideration when creating, analyzing and changing it. The most important contingent factors of HRM that have a direct impact on the design of the HRM architecture include the two main groups of factors: the external and the internal.

The external contingent factors relate to the external context of an organization, and include (Farnham, 2015, 17) the following:

- the economic context (the macroeconomic policy, the market and prices, the market structure, the size of organizations, public expenditure, the size of wages, employment and unemployment, labor and capital markets, the inflation rate, the GDP growth rate, etc.),
- the socio-cultural context (the demographic characteristics of the total and the working age population: the gender, age and the level of education, cultural values and attitudes, belongingness to religious communities, the ethnic structure, etc.),
- the technological context (information-communication technologies, technological changes, research and development, etc.),
- the political context (political parties, the government, the opposition, the public and state administration, local authorities, international organizations, the EU),
- the legal and legislative context (the law on labor, the law on obligations, the consumer protection law, the law on health and safety, the law on trade, regulatory bodies, courts, etc.), and
- the ethical context (work ethics, business ethics, corporate social responsibility, human rights).

The internal contingent factors include the three basic groups of factors:

- organizational characteristics (the strategy, the size, the organizational structure, organizational culture, and technology),

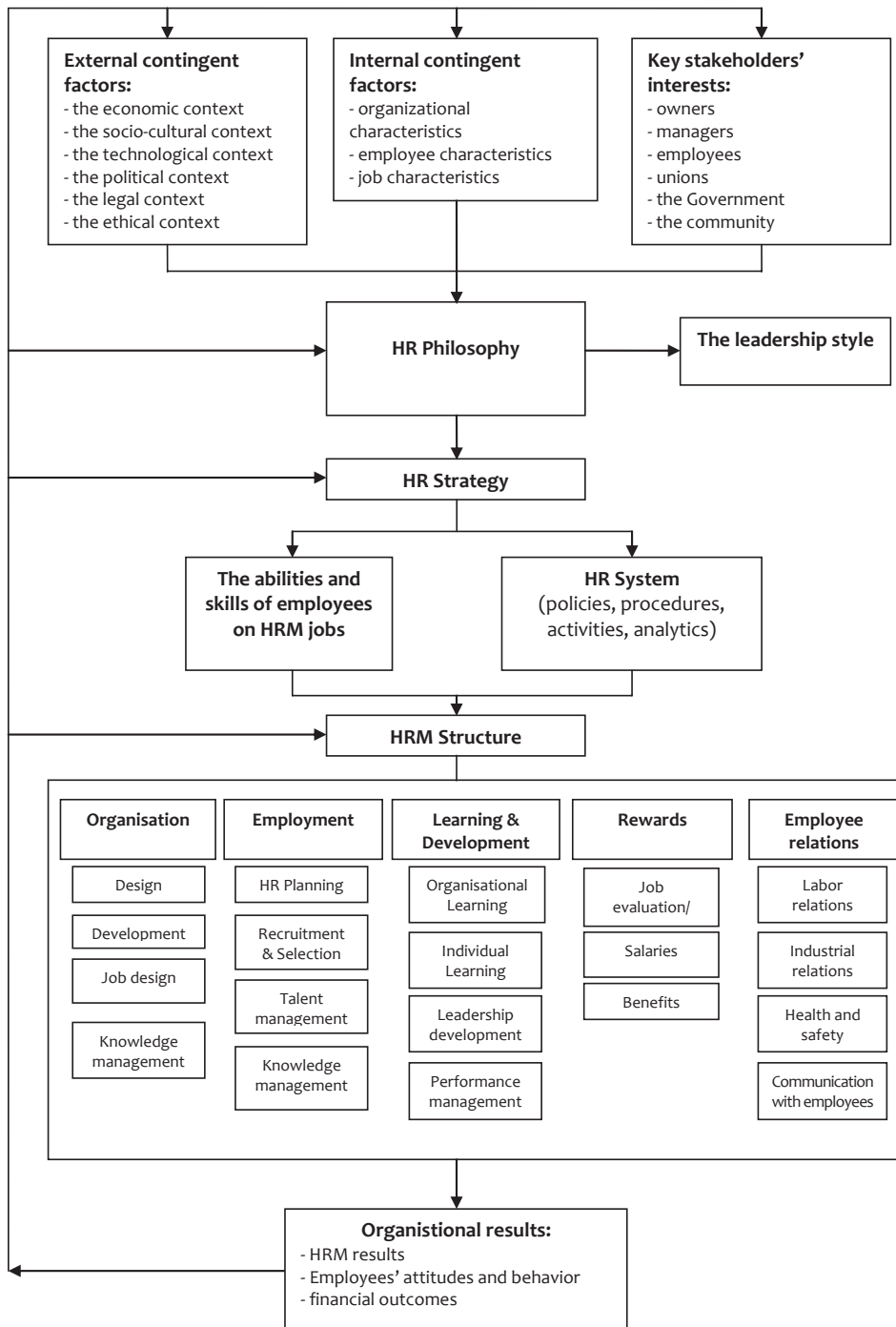


Figure 1 The HRM architecture

- employee characteristics (personal characteristics, interests, motivation, attitudes, abilities), and
- the characteristics of the jobs that are done in organizations (the nature of jobs, requirements, occupational autonomy, etc.).

The contingent factors of HRM shape HRM philosophy, and the HRM strategy through it, determining the company's attitudes towards the employees, how the company (management) understands the needs of the employees, their value for the company, desirable approaches to work, which then determines how the company will treat its employees, i.e. how it will manage its human resources.

Key stakeholders' interests. Stakeholders include the entities, individuals and groups that have an interest, both direct and indirect, in the functioning of the organization and its achievement of its goals (Janićijević, Bogičević Milikić, Petković and Aleksić Mirić, 2020). In order to achieve their goals, interested groups exert a significant influence on the shaping of the HRM architecture. Among them, the most important stakeholders are:

- owners (an increase in the company value in the long run, return on invested capital),
- managers (an increase in a profit, an increase in the share price),
- (an increase in the salary, the balance of private life and work, personal development),
- the government (an increase in employment, an increase in the average wage, compliance with labor and labor regulations),
- the social community (corporate social responsibility), and
- trade unions (an increase in the labor price, the improvement of working conditions, the strengthening of employment security, employee protection, etc.).

The hard components of HRM. The hard components of HRM are visible and tangible, easier to create and modify, and they represent the basic foundations of

the HRM architecture. They include the following elements (Bogicevic Milikic, 2017):

- the HRM strategy - it defines the objectives of HRM and the directions of activities in the different areas of HRM;
- the HRM system (policies, procedures, analytics and activities);
- the HRM structure, including the organizational roles of employees within the HRM function - their number and the required profile of expertise depending upon the chosen structural model: centralized, decentralized, a brokerage model or a matrix model with centralized administrative services.

In our model of architecture, the term "structure" assumes all the important areas of HRM (processes/activities/sub-activities) that have to be taken into account regardless of the chosen model for their structuring. Within each identified main functional area of HRM (Organization, Employment, Learning & Development, Rewards, Employee Relationships), appropriate activities are grouped according to their functional similarity. Regardless of the fact that they are graphically separated in Figure 1, all the included HRM areas/activities/processes are interrelated and affect each other, and cannot be observed in isolation. The graphic separation of the five proposed HRM areas only aims to indicate the areas of the HRM professionals' functional expertise.

The soft components of HRM. This group of elements is, by its very nature, quite "intangible", since it refers to people - their values, abilities and behavior; so, it changes much more difficultly and much more slowly compared to the hard elements of the HRM architecture. The soft components of HRM include the following:

- HRM philosophy - the common values that determine access to HR within an organization, the value and treatment of employees in a specific HRM system,
- the capabilities and skills of HRM employees: strategic HRM, business skills, problem solving,

analysis and critical thinking, research skills, statistical skills, selection interviewing skills, learning and development, negotiation skills, change fostering and leading, leadership skills, persuasion and an influence, conflict management and political skills (Armstrong & Taylor, 2017), and

- the leadership style in the organization, since all line executives are HRM function holders.

Organizational results. Since the introduction of the strategic approach to HRM, the achievement of planned and desired organizational results is both the goal and purpose of having an organization and an effective HRM. There are three sets of results relevant to the evaluation of HRM effectiveness, and they include the following:

- HRM results (HRM metrics - a set of the quantitative indicators that depict the quality and effectiveness of HRM and its contribution to the achievement of the organization's goals,
- employees' attitudes and behavior - their motivation, commitment, satisfaction and work engagement, and
- financial results - average productivity, revenue, a profit and so on.

Feedback. There is feedback in the model: the contingent factors (external and internal) and the key stakeholders' interests exert an influence on both the hard and soft components of HRM, which then affects organizational results, and in turn all the other elements of the HRM design. The feedback in the proposed model indicates the nature of the variables included in the model. The independent variables in the proposed HRM design model are contingent factors (external and internal) and the interests of the key stakeholders. The intervening (interpretive) variables in the model are the soft and hard components of HRM, while the organizational results are the main dependent variable.

CONCLUSION

Based upon the analysis of the different models of organizational design and HRM design, an integral conceptual framework for designing the HRM architecture is proposed in this paper. The analysis of the various general organizational design models has confirmed the existence of a number of the design models based upon completely different assumptions (open vs. closed organizational models) and including a different number of elements (ranging from 4 to as many as 12). Similar results were also found in the analysis of different HRM design models. By comparing the different HRM design models, their similarities, as well as numerous differences between them, are pointed out, thus confirming our initial hypothesis that, in the relevant literature, there is no integral conceptual framework for designing the HRM architecture. This provided the rationale for building such a framework. Starting from the assumption that organizations are open models, and therefore HRM is an open model as well, and the integration of different approaches, simultaneously taking into account the optimal number of the elements of the model, a conceptual framework for designing the HRM architecture which has six basic components is proposed, those components including:

- HRM contingent factors,
- key stakeholders' interests,
- the hard components of HRM,
- the soft components of HRM,
- organizational results, and
- feedback.

It is believed that the proposed framework will provide a good basis for the legitimization of HRM, a useful analytical framework for exploring the individual elements of the HRM architecture and the starting point for the creation of and changing the HRM architecture in practice. It is also believed that the proposed framework can contribute to the development of a more systematic and comprehensive approach to the study and understanding of HRM in

modern organizations, both in theory and in practice. For theory, an important contribution and implication of this paper reflect in the fact that management should approach the designing of the HRM architecture starting from all the contextual factors, first defining the philosophy and strategy of HRM, then defining the policies, procedures, activities and analytics needed to evaluate the quality and efficiency of HRM based upon the existing and a desired mix of the skills and knowledge of the HRM professionals. The choice of a specific model for the HRM structure will, to a large extent, depend upon the size and structure of the company, as well as the other contextual factors (such as work technology, the ICT development level, a leadership style, a strategy, etc.). It is also necessary for the management to clearly define the goals they want to achieve at the organizational/group/individual level(s) and monitor their achievement. HRM design must include feedback, i.e. adjusting the architecture in accordance with both the degree of the accomplishment of desired results and changes in the external and the internal contexts. One of the possible implications of the paper is the application of change in the proposed design approach to the other support business functions that fall within the so-called central part of Porter's value chain, such as the financial function, the ICT function, research and development, and so forth.

The paper has several limitations that should be mentioned, which future research may eliminate. First, a limitation reflects in the theoretical nature of the research study. Therefore, in future research, it is necessary to check whether the proposed framework is applicable in practice through empirical investigation on a larger sample, which would include different types of organizations (small, medium-sized and large, economic and noneconomic), different legal forms of organizations (profit and non-profit, private, state-owned and those in mixed ownership, national and global, etc.), which would create the necessary preconditions for making more generalized and more definite conclusions. Second, the proposed framework did not take into consideration the nature of the impact of the soft and hard components of HRM, i.e. it did not take into consideration which soft/hard components of HRM may have a moderating

and which may have a mediating impact, or both, in different situations and in which particular situations, which is also an important research direction in this area. Third, based upon the review of the relevant literature, the proposed framework contains certain elements within each of the six components of the HRM architecture. It would be desirable to check each of the components, as well as their content, through empirical research in order to determine whether some components/elements should be added or excluded, which those components/elements are, and why they should be added or excluded. Finally, the proposed HRM architecture framework was created at one point in time; given the intensification of the changes in the context, organizations, the characteristics of the working age population, education, legislation, globalization, the work environment and the jobs themselves, it needs to be constantly reviewed and innovated so as to meet the needs of modern organizations.

ACKNOWLEDGMENTS

This paper is a part of the research Project (No. 179062), which is funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

REFERENCES

- Armstrong, M., & Taylor, S. (2017). *Armstrong's Handbook of Human Resource Management Practice*. London, UK: Kogan Page.
- Beardwell, J., & Clark, I. (2007). An introduction to human resource management. In J. Beardwell, & T. Claydon (Eds.). *Human Resource Management: A Contemporary Approach*. Harlow, UK: Financial Times Prentice Hall.
- Becker, B. E., & Gerhart, B. (1996). The impact of human resource management on organizational performance. *The Academy of Management Journal*, 39(4), 779-801. doi:10.2307/256712

- Becker, B. E., Huselid, M. A., & Ulrich, D. (2001). *The HR Score Card: Linking People, Strategy and Performance*. Boston, MA: Harvard Business School Press.
- Becker, B. E., & Huselid, M. A. (2006). Strategic human resource management: Where do we go from here? *Journal of Management*, 32(6), 898-925. doi.org/10.1177/0149206306293668
- Beer, M., Spector, B., Lawrence, P., Quinn Mills, D., & Walton, R. (1984). *Human Resource Management: A General Manager's Perspective*. New York, NY: Free Press.
- Blau, P. M. (1970). A formal theory of differentiation in organizations. *American Sociological Review*, 35(2), 201-218. doi:10.2307/2093199
- Blau, P. M. (1972). Interdependence and hierarchy in organizations. *Social Science Research*, 1(1), 1-24. doi.org/10.1016/0049-089X(72)90055-5
- Bogičević Milikić, B. (2017). *Menadžment ljudskih resursa*. Beograd, RS: Ekonomski fakultet Univerziteta u Beogradu.
- Bratton, J., & Gold, J. (2012). *Human Resource Management: Theory and Practice*. Basingstoke, UK: Palgrave Macmillan.
- Burke, W., & Litwin, G. 1992. A causal model of organizational performance and change. *Journal of Management*, 18(3), 523-545. doi.org/10.1177/014920639201800306
- Burns, T. E., & Stalker, G. M. (1961). *The Management of Innovation*. London, UK: Tavistock Publications.
- Chandler, A. D. Jr. (1962). *Strategy and Structure: Chapters in the History of the American Industrial Enterprise*. Cambridge, MA: MIT Press.
- Child, J. (1973). Predicting and understanding organization structure. *Administrative Science Quarterly*, 18(2), 168-185. doi: 10.2307/2392061
- Donaldson, L. (2001). *The Contingency Theory of Organizations*. Thousand Oaks, US: Sage.
- Daft, R. L., Murphym, J., & Willmott, H. (2017). *Organization Theory & Design: An International Perspective*. Boston, US: Cengage Learning.
- Farnham, D. (2015). *Human Resource Management in Context: Insights, Strategy and Solutions*. London, UK: CIPD.
- Fombrun, C. J., Tichy, M. M., & Devanna, M. A. (1984). *Strategic Human Resource Management*. New York, NY: John Wiley.
- Galbraith, J. R. (1973). *Designing complex organizations*. Reading, MA: Addison-Wesley Longman Publishing.
- Galbraith, J. R. (1977). *Organization design*. Reading, MA: Addison-Wesley Longman Publishing.
- Galbraith, J., Downey, D., & Kates, A. (2002). *Designing Dynamic Organisations*. New York, NY: AMACOM.
- Greiner, L. E. (1972). Evolution and revolution as organizations grow. *Harvard Business Review*, 50(3), 37-46.
- Guest, D. (1987). Human resource management and industrial relations. *Journal of Management Studies*, 24(5), 503-521. doi.org/10.1111/j.1467-6486.1987.tb00460.x
- Guest, D. (1997). Human resource management and performance: A review and research agenda. *International Journal of Human Resource Management*, 8(3), 263-276. doi.org/10.1080/095851997341630
- Hamel, G., & Prahalad, C. K. (1994). Strategic intent. *Harvard Business Review*, 67(3), 63-77.
- Hendry, C., & Pettigrew, A. (1990). Human resource management: An agenda for the 1990s. *International Journal of Human Resource Management*, 1(1), 17-43. doi.org/10.1080/09585199000000038
- Hird, M., Sparrow, P., & Marsh, C. (2010). HR structures: Are they working? In P. Sparrow, A. Hesketh, M. Hird, & C. Cooper (Eds.). *Leading HR* (pp. 23-45). Basingstoke, UK: Palgrave Macmillan.
- Hofer, C. W. (1975). Toward a contingency theory of business strategy. *Academy of Management Journal*, 18(4), 784-810.
- Janićijević, N., Bogičević Milikić, B., Petković, M. i Aleksić Mirić, A. (2020). *Organizacija*. Beograd, RS: Ekonomski fakultet Univerziteta u Beogradu.
- Kepes, S., & Delery, J. E. (2006). Designing effective HRM systems: The issue of HRM strategy. In R. J. Burke, & C. L. Cooper (Eds.). *The Human Resources Revolution: Why Putting People First Matters* (pp. 55-76). Amsterdam, NL: Elsevier.
- Kepes, S., & Delery, J. E. (2007). HRM systems and the problem of internal fit. In P. Boxall, J. Purcell, & P. M. Wright (Eds.). *The Oxford Handbook of Human Resource Management* (pp. 385-404). Oxford, UK: Oxford University Press.
- Lawrence, P., & Lorsch, J. (1967). Differentiation and integration in complex organizations. *Administrative Science Quarterly*, 12(1), 1-47. doi:10.2307/2391211

- Leavitt, H. J. (1964). Applied organization change in industry: structural, technical and human approaches. In W. W. Cooper, H. J. Leavitt, & M. W. I. Shelly, (Eds.). *New perspectives in organization research* (pp. 55-71). New York, NY: John Wiley.
- Lepak, D. P., & Snell, S. A. (1999). The human resource architecture: Toward a theory of human capital allocation and development. *Academy of Management Review*, 24(1), 31-48. doi:10.2307/259035
- Luthans, F., & Stewart, T. I. (1977). A general contingency theory of management. *The Academy of Management Review*, 2(2), 181-195.
- Marchington, M., Wilkinson, A., Donnelly, R., & Kynighou, A. (2016). *Human Resource Management at Work*. London, UK: CIPD.
- Mintzberg, H. (1979). *The Structuring of Organizations*. Upper Saddle River, US: Prentice-Hall.
- Mohrman, S. A. (2007). Organization design for growth: The human resource contribution. *CEO Publication*, G 07-10 (520), 1-32.
- Nadler, D. A., & Tushman, M. L. (1980). A model for diagnosing organizational behavior. *Organizational Dynamics*, 9(2), 35-51.
- Pascale, R., & Athos, A. (1981). *The Art of Japanese Management*. New York, NY: Warner Books.
- Perrow, C. (1967). A framework for the comparative analysis of organizations. *American Sociological Review*, 32(2), 194-208. doi:10.2307/2091811
- Peters, T. J., & Waterman, R. H. Jr. (1982). *In Search of Excellence: Lessons from America's Best-run Corporations*. New York, NY: Harper & Row.
- Porter, M. (1980). *Competitive Strategy*. New York, NY: Free Press.
- Purcell, J. (1999). Best practice or best fit: Chimera or cul-de-sac. *Human Resource Management Journal*, 9(3), 26-41. doi.org/10.1111/j.1748-8583.1999.tb00201.x
- Rumelt, R. P. (1974). *Strategy, Structure, and Economic Performance*. Harvard, UK: Harvard University Press.
- Schuler, R. S. (1992). Strategic human resources management: Linking the people with the strategic needs of the business. *Organizational Dynamics*, 21(1), 18-32. doi.org/10.1016/0090-2616(92)90083-Y
- Stanford, N. (2018). *Organisation Design: The Practitioner's Guide*. London, UK: Routledge.
- Storey, J. (1992). *Developments in the Management of Human Resources*. Oxford, UK: Blackwell.
- Thompson, J. (1967). *Organizations in Action*. New York, NY: McGraw-Hill.
- Tyson, S., & York, A. (1996). *Human Resource Management*. London, UK: Made Simple Books.
- Woodward, J. (1965). Review of industrial organization: Theory and practice. *American Sociological Review*, 32, 313-315.
- Zeithaml, V. A., Varadarajan, P., & Zeithaml, C. P. (1988). The contingency approach: Its foundation and relevance to theory building and research in marketing. *European Journal of Marketing*, 22(7), 37-64. doi.org/10.1108/EUM000000005291

Received on 19th May 2020,
after revision,
accepted for publication on 17th August 2020.

Published online on 19th August 2020.

Biljana Bogicevic Milikic is a Professor at the Faculty of Economics, University of Belgrade, where she teaches subjects in the field of organization theory and HRM. She received her PhD at the Faculty of Economics, University of Belgrade. The key areas of his scientific research interests are: organizational design, organizational behavior, HRM and public sector reform.