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Assessment of HR competencies in housing and communal utility services taking into account consumer perception

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Abstract. There is the obvious scarcity of theoretical and practical research on human resources competencies assessment and, in particular, on establishing the specific competencies of employees that affect the speed and efficiency of providing services in the sphere of housing and communal utilities. The study aims to identify specific competencies of employees that have impact on delivery of value added services and customer satisfaction. The research methodology is based on an extended interpretation of Feingold's list of competencies in relation to the housing and communal utility sector. The survey conducted helps reveal the specific competencies of human resources that exert a significant impact on the speed and efficiency of providing services in this sphere. The questionnaires were processed using the SPSS software package. The analysis of descriptive statistics allows us to calculate the mean value of the respondents' answers and to determine the most significant competencies. The experience of Serbia indicates that employees of the housing and utilities sector pay special attention to tariff policy, service quality, availability of useful information and open communication with consumers. This helps identify and prioritize staff competencies in the field of problem solving, flexibility, communication, efficiency, use of ICT, adaptive learning, etc. The avenue for future research is the examination of the ways to develop employees' competencies within organizations for providing housing and communal utility services.

Keywords: housing and communal utility services, human resources competencies, specific competencies, service provision, consumer perception, competency assessments.

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INTRODUCTION

Shifts in the demand environment have a major impact on changing the way in which value is added to consumers and business activities are conducted [Schoonover, 2003]. Thus human resources in organizations of all kinds, especially in service organizations, should be organized and reorganized in accordance with the shifts in a way that will ensure the provision of impeccable services to population. Meeting the demands which occur in the environment requires a unique combination of knowledge, skills, attitudes, effective human resource development policies and strategies to nurture the human resources competencies [Šiugždinienė, 2006]. In order to define human resources, we can say that they include the total of knowledge, skills, abilities, creative capabilities, motivation and loyalty to the disposal of an organization. It is the total intellectual and psychic energy an organization can engage in achieving the goals and business development [Urošević, Sajfert, 2012] in both the private and the public sectors. In this paper, we put the main emphasis on utilities which provide housing and communal utility services within the public sector. Human resource competencies play an important role in assisting the organization to deal with changes in the environment [Heffernan, Flood, 2000]. Attention is paid to the housing and communal utility services sector. Furundžić, Ivaniš and Furundžić [2016] stand out that according to the Law on Communal Activities communal activities serve to satisfy life needs of the inhabited population and the surrounding area. The unit of the local self-government ensures the availability, scope, quality and continuity of communal activities, as well as supervision over their performance. Housing and communal utility services represent an important element of the city governance system and the provision of important public services to citizens

[Kemeter, 2009]. The main purpose of management of housing and communal utility services is to provide the greatest possible amount of service at the lowest price and of a good quality [Agapitova, Chahkiev, Gerasimova, 2017]. Therefore, after defining the term of housing and communal utility services and specifying the institution responsible for their implementation there is a need to pay greater attention to defining human resources competencies and determining specific competencies that affect the speed and efficiency of service provision within this sector.

The work is organized in the following way: the theoretical part deals with the competencies of human resources in housing and communal utility services with a focus on contemporary requirements for specific competencies, while the research part focuses on the perception of consumers' opinions on the specific competencies of employees in the process of providing housing and communal utility services and selection the most important competencies from the viewpoint of employees. The research pays special attention to measuring the speed of service provision by employees behind the counters of housing and communal utility services based on their competencies. The *purpose of the paper* is reflected in the emphasis of the human resources competencies in the sector of housing and communal utility services that impact delivery of value added services and customer satisfaction with the experience while receiving the service.

HUMAN RESOURCES COMPETENCIES IN HOUSING AND COMMUNAL UTILITY SERVICES IN LINE WITH MODERN REQUIREMENTS

Housing and communal utility services is a branch of the municipal economy and an essential part of life sustaining infrastructure defining the comfort of human life activities

[Kolykhaeva, 2015]. Specific competencies play a significant role in the provision of these services, which to a certain extent influence the outcome of the provided services. The concept of competency lies at the heart of human resource management [Soderquist et al., 2010]. Rodriguez et. al [2002] propose the definition that competency is a measurable pattern of knowledge, skill, abilities, behaviours, and other characteristics that an individual needs in order to successfully perform work roles or occupational functions. Accordingly, we can say that competencies represent a set of context-specific behaviours that define the appearance of success in a particular setting [Schoonover, 2003]. In the process of developing competencies of human resources, a distinction should be made between the competencies of employees (executors of the task) and the competencies of managers [Kokeza, Urošević, Radosavljević, 2016]. Competency-based human resource processes are premised on a belief that there is a possibility to identify, thereafter isolate more consistently exhibited behaviours by prime performing employees than average performing employees, and accordingly, it should be possible to transmit these competencies through training and coaching activities [Heffernan, Flood, 2000]. Rozhentsova and Mottaeva [2017] state that a company can operate successfully only if it is really focused on quick satisfaction of priority needs of each client, also claiming that the ability to anticipate future changes in the needs of your target audience, as well as an adequate assessment of the capabilities of the company in connection with these changes are equally important. Pynes [2004] concludes that the future viability of an organization and its human resource capabilities are interrelated and thus must be considered without separation. Thus, employees competencies may be regarded as a key factor in business entity's success [Sajfert, Vukonjanski, 2008]. The tasks of civil servants in housing and communal utility services are multifaceted and often very complex, as they include giving policy advice, managing human, financial and other resources, and providing critical services, but they are certainly not limited just to these tasks [Šiugždinienė, 2006]. The diversity of tasks in which they are involved and in which they are expected to be excellent performers also requires a diversity of competencies.

Globalization, along with rapid development of information and communication technologies are affecting the ways of performing work tasks, so among other modern requirements, as knowledge, service and information-based business activities, the digital literacy has become one of the unavoidable competencies in both public and private enterprises [Voogt et al., 2013; Boyles, 2012]. Challenge of modernity in housing and communal utilities in Serbia is definitively the necessity of preparing human resources for the 21st century skills [Shavelson, 2010]. Training is a systematic process to enhance employee's skills, knowledge and competencies [Elnaga, Imran, 2013]. Raising the level of education and training of employees in the public sector can be realized through training and education aimed at enhancing the quality of daily activities in interactions with clients which would eventually lead to better quality of oral and

written communication between the service provider and the service user, and greater efficiency in performance of business operations measured by faster client flows [Živković et al., 2014]. Organizations try to improve their capabilities by investing in training and human resource development, while the latter forms opportunities within the organization for employees to develop their competencies for both their own benefit and the benefit of others [Vathanophas, 2007]. Therefore, Lee and Bruvold [2003] claim that employee development is vital in maintaining and developing the capabilities of both individual employees and the organization as a whole. Public enterprises, as well as other market-oriented companies, should accept the fact that quality of service is not a specific goal or program that can be achieved or fulfilled, but an integral part of the entire management and everyday service delivery process. The user's perception of quality usually relies on repeated comparisons of expectations with a particular service. If the service, no matter how good it is, constantly does not meet the expectations of users, they will perceive that the service is of poor quality. The result of successful creation and delivery of superior value is reflected in a high degree of customer satisfaction and loyalty [Živković et al., 2014].

In order to determine the specific competencies that affect the speed and efficiency of housing and communal utility services made by employees at the counters of these public services, authors have searched through the literature for a possible list of competencies among employees in the public sector. As Novikova and Burmaka [2014] state, the social efficiency of housing and communal utility services should be estimated on the basis of parameters that characterize the degree of public satisfaction with the service provision. Thus, within this paper, initial considerations take into account consumers' opinion on the competence of employees, which will ensure adequate provision of services. Prior to that, it is necessary to specify the competencies that can be identified. Finegold et al. [2010] present the list of 16 competencies described as competencies of the 21st century, divided into five categories, which are: analytic skills (critical thinking, problem solving, decision making, research and inquiry), interpersonal skills (communication, collaboration, leadership and responsibility), ability to execute (initiative and self-direction, productivity), information processing (information literacy, media literacy, digital citizenship, ICT operations and concepts), and capacity for change (creativity or innovation, adaptive learning or learning to learn, flexibility).

METHOD AND DATA

Based on the list of competencies proposed by Finegold et al. [2010] and categories within which they are located, a questionnaire was formed with the aim of using the collected answers to rank and determine the specific competencies affecting the performance of above-mentioned group of employees. The survey covered 217 randomly examined respondents who gave their estimates according to the impact of these competencies on the speed and efficiency of the services delivery. The research was carried out in two phases.

The first step of the first phase relates to the statistical processing of collected data by using the SPSS software package where the analysis of descriptive statistics provided an insight into the mean value of user responses and the ability to determine the most influential competencies. The second step of the first phase is focused on identification of specific competencies according to perceptions of customers based on the setting of limit value. Due to the identified specific competencies, it is possible to start the second phase of the research and obtain another point of view upon this matter, i.e. the view of the employees in the housing and communal utility services themselves. In order to prioritize specific competencies using the Analytical Hierarchy Process Method (the AHP method), an expert group of employees was formed in order to assess to what extent they express some of the specific competencies in their work. The AHP method is founded on determination of relative priority during comparison of certain criteria and sub-criteria achieved by assigning them a rate of importance using the Saaty's scale 1÷9. Saaty stresses out that paired comparisons of certain objects of interest are a natural process that people are able to do in order to express their preference, importance or likelihood [Živković et al., 2015; Saaty, 2001]. According to that, phase two of the research was carried out through the basic steps of the AHP methodology, such as problem statement, development of hierarchy model, criteria comparison, consistency check, determination of significance of criteria and sub-criteria and finally prioritization based on obtained results.

RESULTS

Devlin and Dong [1994] state that it is crucial to obtain reliable and valid measures of service quality from the consumers' perspective. Accordingly, the authors agree that the research should begin with establishing consumers' perspective upon competencies of human resources in housing and communal utility services. The answers of randomly examined respondents, housing and communal service users,

were processed using the descriptive statistic analysis. Table 1 shows mean values of competency impact on housing and communal service provision.

For the sake of further consideration and the ranking of specific competences, the authors adopt the limit value of 3.5. Based on this, as specific competencies that customers have noticed, the further research is going to cover problem solving, communication, productivity, ICT operations and concepts, adaptive learning and flexibility competencies. The findings demonstrate that users mostly lean towards communication and flexibility in providing services against their individual needs. To possess these specific competencies means to provide exceptional housing and communal utility services to the population. The next phase of the research is related to informing the group of employees in the housing and communal utility services department about the results of the collected data from the service users, on the basis of which they could make their own judgment and assess to what extent they express some of the specific competencies, resulting from the previous research phase, in their work. Respondents' answers provide the possibility to prioritize and rank competencies using the AHP method. The AHP approach is used in the decision making process to help people set priorities and make better decisions by taking into account qualitative and quantitative aspects of the decision. Thus, it assumes that the factors presented in the hierarchical structure are independent [Živković et al, 2014; Bogdanovic, Nikolic, Ilic, 2012]. The first step in implementing the AHP method is to define a hierarchical model that consists of four levels: the goal of decision-making (competence prioritization), criteria (client flow rate, quantity of complaints and attitude toward users), sub-criterion (arrival rate, service rate, complaints on the interpretation of user requests, complaints about the outcome of services provided, complaints about the behavior of employees, providing useful information, kindness in approach). The next steps are aimed at determining the significance of criteria and sub-criterion, which leads

Table 1 – Mean values according to performed descriptive statistics analysis

Competency category	Competency within category	Mean
Analytic skills	Critical thinking	2,4654
	Problem solving	3,5069
	Decision making	2,8249
	Research and inquiry	2,0922
Interpersonal skills	Communication	3,9539
	Collaboration	3,4147
	Leadership and responsibility	2,6959
Ability to execute	Initiative and self-direction	3,2673
	Productivity	3,6498
Information processing	Information literacy	3,3917
	Media literacy	3,1429
	Digital citizenship	2,8387
	ICT operations and concepts	3,6590
Capacity for change	Creativity or innovation	2,8111
	Adaptive learning or learning to learn	3,6498
	Flexibility	3,9124
N		217

Table 2 – Significance of criteria and sub-criteria determined by the AHP method

Criteria	Factor significance	Sub-criteria	Local significance	Global significance
Client flow speed	0,648	Arrival rate Service rate	0,167 0,833	0,108 0,540
Number of complaints	0,230	Complaints on the interpretation of user requests Complaints about the outcome of services provided Complaints about the behavior of employees	0,169 0,443 0,387	0,039 0,102 0,089
Consumer relationship	0,122	Providing useful information Kindness in approach	0,500 0,500	0,061 0,061

to the evaluation of alternatives and the ultimate priority of the considered competences. During the evaluation of alternatives, i.e. criteria comparison based on obtained answers from the expert group, it is important to check the consistency in answers, which should be less than 10%. The results of determining the significance of criteria and sub-criterion based on the AHP method are shown in Table 2.

The results obtained indicate the dominant influence of particular sub-criterion, which means that employees in housing and communal utility services pay serious attention to service rate, complaints about the outcome of provided services and to providing consumers with useful information and kindness. Thus, the priority is given to the competencies that are significant in providing housing and communal utility services at the appropriate level. The obtained results define a prioritization in the following declining series: problem solving (0,202)→flexibility (0,198)→communication (0,186)→productivity (0,157)→ICT operations and concepts (0,141)→adaptive learning (0,115). Similar results were obtained in the study of Ural scientists [Silin, Astratova, 2017; Astratova, Bazhenova, 2016].

By comparing the results obtained through the user responses and the results obtained through staff evaluation, it can be concluded that these two sides somewhat agree in answers, considering that the consumers highlight the importance of communication and flexibility of employees in housing and communal utility services, and employees prioritize problem solving and flexibility competencies.

CONCLUSION

Housing and communal utility services are of great importance for meeting the basic life needs of the population. As Azmi, Ahmad and Zainuddin [2009] state, the service quality presents an outcome variable that is regularly related to the effectiveness of HRM, therefore, the human resources and their competencies play a great role in meeting the needs of housing and communal service consumers.

The presented research examines the importance of the humans resource competency in the provision of housing and communal utility services, while taking into consideration not only the standpoint of the user, but also the standpoint of the human resources in the sector. The results of the descriptive statistic analysis of user responses has provided the possibility for extraction of specific competencies of human resources in this sector, which are especially appreciated by users. The findings illustrate that the highest score was recorded for the communication competency (3,9539), which is within the group of competencies based on interpersonal skills, and the flexibility competency (3,9124) from the group of competencies based on the capacity for change. Then, by examining the view of human resources, it can be established that they recognize that particular competencies are more useful during their work than the others among extracted specific competencies. The emphasis of these competencies is enabled by applying the AHP method, which represents the ranking of specific competencies in descending order. According to these results, the priorities are problem solving and flexibility. By comparing and combining these two views, we can notice that the answers are somewhat agreeable. Accordingly the conclusion is that competencies such as flexibility when interacting with users, communication and efficient problem solving affect the speed and efficiency of housing and communal utility services. Therefore, the human resource competencies in the provision of housing and communal utility services have a significant impact on the outcome and validity of the service provided, and these organizations need to take this fact into account and work to nurture and develop the competencies of their human resources. The avenue for future research is the examination of the ways to develop employees' competencies within organizations for providing housing and communal utility services. It is desirable to establish at what level organizations within the public sector are inclined to nurture and develop the competencies of their human resources. ■

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Оценка компетентности персонала в жилищно-коммунальном хозяйстве с учетом потребительского восприятия

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Аннотация. Оценка компетенций человеческих ресурсов, в частности, определение конкретных компетенций персонала, влияющих на скорость и эффективность предоставления услуг в сфере ЖКХ, чрезвычайно мало исследована как в теории, так и на практике. Исследование призвано указать на конкретные компетенции в области человеческих ресурсов в секторе ЖКХ, оказывающие влияние на предоставление услуг с добавленной стоимостью и на удовлетворенность клиентов при получении услуги. Методология исследования построена на расширенном толковании предложенного Д. Файнгольдом списка компетенций применительно к сфере ЖКХ. На основании проведенного опроса были выявлены специфические компетенции персонала, влияющие на скорость и эффективность оказания услуг в данной сфере. Анкеты были обработаны с помощью программного пакета SPSS, анализ описательной статистики позволил получить представление о среднем значении ответов респондентов и определить наиболее значимые компетенции. Опыт Сербии показывает, что работники ЖКХ уделяют большое внимание тарифной политике, качеству оказываемых услуг, предоставлению полезной информации и доброжелательности к потребителям. Это позволило выявить приоритетность компетенций персонала в части практики решения задач, гибкости, коммуникаций, эффективности, использования ИКТ, адаптивного обучения и др. Направление дальнейших исследований можно обозначить как поиск путей развития компетенций персонала, работающего в организациях сферы ЖКХ.

Ключевые слова: жилищно-коммунальное хозяйство, кадровые компетенции, специфические компетенции, предоставление услуг, восприятие потребителя, оценки компетентности.

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