
AN ANALYTICAL VIEW OF PERFORMANCE EVALUATION IN TELECOMMUNICATION SECTOR

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Abstract

The article presents a comparative analysis of specific performance evaluation practices in telecommunication sector. The analysis presents statistically significant differences in the scope of individual performance dimension evaluation depending on the share of foreign investors in the equity stock of locally or internationally active organizations. In parallel there are presented the results of the factor analysis - specific common factors standing behind nine variables that determine the overall performance of telecommunication organizations. To determine the extent to which an organization is successful and its processes efficient, it unconditionally requires a comprehensive evaluation of the status of its performance.

Keywords: business, performance, telecommunication sector, organizations, performance

1. Introduction

Multinational companies (MNC) are often trying to find a balance between the need to standardize its own human resource management (HRM) practices beyond national borders and to adapt them to local practices and customs [1]. An appropriate balance between these two requirements will positively influence the performance of the organization [2]. Currently, the focus on questions relating to the issue of performance appraisal in all sorts of companies can be described as necessary and highly relevant, justifying the need for such studies due to the fact that competitive pressure on the quality of personnel in the conditions of a globalized world continuously increases, which ultimately increases the possibility of streamlining processes in this area. The trend of implementing more efficient policy into the performance evaluation of multinational organizations is also confirmed by many studies. The current state of knowledge of this issue is described in studies published by Agrawal [3], Garengo [4], Jafari [5], Turgut [6], Kondrasuk [7], all of which served as a basis for the subsequent empirical survey. It is clear that the procedures applied in the human resources management at the international level often represent a combination of national and local systems, concepts that affect staff's behaviour

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[8]. Behaviour of expatriates in the host country is often linked to factors such as culture, economic, political, and legal systems, organization specific factors, such as strategy, structure, and corporate culture [9].

2. Current state of knowledge of the analysed issue

Performance can be defined as the achievement of specified task measured against predetermined or identified standards of accuracy, completeness, cost and speed. In an employment contract, performance is deemed to be the accomplishment by a commitment in such a manner that releases the performer from all liabilities laid down under the contract. Efficiency and effectiveness are ingredients of performance apart from competitiveness and productivity and training is a way of increasing individual's performance [10].

The performance of organizations is now becoming an increasingly hot topic, since it integrates all areas of business activities that need to be combined to get functioning and prosperous company with a long perspective [11]. Performance appraisal is one element of the performance management process which involves different measurements throughout the organizations but it is the element which is important if organization is to take advantage of their most important asset employees and gain human capital advantage [6]. There are other processes within the organizations such as technology and design, but it is the human factor which is the most difficult to replicate. Therefore the most valuable strategy implementation and delivery of the organizational strategic target is accomplished the best through high performance people [12].

New modern concepts of performance appraisal in organizations have, paradoxically, their origins in the traditional system. However, the new concepts are based on the assumption that a company is efficient when it can achieve pre-defined strategic objectives. Choosing appraisal methods means to determine the procedures for working with the criteria as well as the conditions under which they are to be used [13]. The literature states and describes a variety of appraisal methods, some of which are still divided into different variants. In other words, an attempt to find an optimal appraisal concept has led to the development of a plethora of different methods that can be used to appraise the performance of an employee. The relevant literature provides two most common and popular groups according to the complexity of the evaluation criteria [6]: absolute standard methods, relative standard methods.

When assessing the performance appraisal methods a classification according to the criteria of varied nature is generally used. From the time perspective we should mainly focus on three periods - the past (past performances), present (the current situation) and future (aimed at achieving future performance). The main time period should, however, remain the future since it is the most important. The classification of performance appraisal methods oriented to the past and future were firstly described by Werther and Davis [14].

The choice of effective and optimal measurement and performance management tools is often a difficult and complex task that fully depends on the nature and objectives of the organization itself [15]. Based on the above, the article's aim is to carry out a comparative analysis of performance evaluation practices as a key human resource management practice with reference to the differences in its implementation in multinational and local organizations active in the area of telecommunication sector. Monitoring performance and ensuring conformity to agreed-upon standards are significant elements in the managerial control system of firm [16]. Performance appraisal is a formal, structured system for measuring, evaluating and influencing an employee's job-related attributes, behaviours and outcomes. Its focus is on discovering how productive the employee is and whether they can perform as effectively or more effectively in the future [17]. The presented concept constitutes an important input, which is helpful for the development of an organization as a whole, including the development of its employees, i.e. the development in the entire vertical of its management [18].

3. Objectives and methods

Formulation of the main research task focused on analysing the method of performance evaluation practice implementation from the aspects of statistically significant differences in the scope of individual performance dimension evaluation depending on the share of foreign investors in the organizations' equity. The research sample consisted of the set of small, medium and large enterprises active in telecommunication sector. As already stated in the hypotheses, the selection criteria consisted of the number of employees/size of the enterprise and the type of equity, i.e. multinational organizations or organizations locally active. The research sample consisted of 49 companies operating in telecommunication sector. The research used basic descriptive statistics. The focus was placed on interviewing decision-makers ideally from the middle and top management or staff directly involved in the performance evaluation. Statistical methods applied - Kruskal-Wallis - it is a non-parametric version of the one-way analysis of variance ANOVA. When using Kruskal-Wallis test the null hypothesis assumes that group measurements have equal medians. Another statistical method used was Chi-square test of independence testing the null hypothesis which expresses the independence of the variables. In order to simplify and reduce the original amount of data while maintaining a substantial part of the information, the multivariate statistical method of factor analysis was applied. The linear combination of factors approximates the original observation, and captures the hidden relationship between the original variables while:

- factors consist of several variables,
- variables are not significant (> 0.5) in several factors,

4. Sample description and the basic evaluation of primary data

In order to carry out the comparative analysis of performance evaluation practices as a key human resource management practice with reference to the differences in its implementation in multinational and local organizations active in telecommunication sector, the following hypothesis has been formulated - **H1:** *There are statistically significant differences in the evaluation of various performance dimensions based on the share of foreign investors in the organizations' equity.*

In order to estimate the parameters it is necessary to estimate the number of common factors. The initial choice may not be final and can be changed during the process of solution-finding. We used the criterion of eigenvalues (Kaiser's rule) in which factors are considered significant if their eigenvalue is greater than 1. It is quiet reliable to use this tool, but in practice a combination of several criteria is preferred. Thus, the combination of the Kaiser's rule and trivial factors criteria was used. A factor is considered to be trivial if significantly correlates with only one indicator. Therefore it is not included in the common factors. As shown in Table 1 the background of nine variables matrix is formed by two common factors. Therefore the following two common factors can be used to describe the variability of respondents' answers.

Table 1. Extraction, Main component - Eigenvalues (H1).

Value	Eigenvalue	% of the total Variance	Cumulative sum of eigenvalues	Cumulative (%)
Factor 1	3.186358	35.40398	3.186358	35.40398
Factor 2	1.011013	11.23348	4.197372	46.63746

According to the Kaiser rule and the eigenvalues chart we can consider the two factors to be important.

Table 2 examines the correlation between the factors of our choice and indicators. As can be seen none of the factors is trivial, and therefore we do not think about reducing the number of factors.

Factor 1 significantly correlates with three indicators, namely with the overall performance (0.694085), customer satisfaction (0.717999) and individual performance (0.702162). Based on the above and a plus sign in significant correlations the first common factor explaining the variability in respondents' answers can be called Synergy. Taking into account the three dimensions/their interconnection/Synergy they all contributed to the overall efficiency and complexity of the performance management.

Factor 2 significantly correlates with the two indicators, namely learning and growth (0.767678), and behaviour (0.679066). Both of these dimensions/variables are strongly attached to individuals so the factor is called the Employee's Personality. The factor plays a key role in obtaining market competitiveness.

Table 2. Factor Score Coefficients (H1).

Variable – Performance dimensions	Factor loading (normalized Varimax) extraction: main components (the selected loads are >0.6)	
	Factor 1	Factor 2
Organizational performance	0.694085*	0.173467
Financial performance	0.299008	0.555739
The performance of internal processes	0.557658	0.299459
Customer satisfaction	0.717999*	0.082221
Learning and growth	0.026709	0.767678*
The performance of an individual	0.702162*	0.150598
Team performance	0.339542	0.532876
Job behaviour	0.105371	0.679066*
Management activities	0.415750	0.462872

* - the relationship is significant at the chosen significance level $\alpha = 0.05$

With regard to the results of the factor analysis, we can conclude that nine variables that examined the scope of selected dimensions evaluation in organizations are influenced by two factors: Factor 1 – Synergy and Factor 2 - the Employee’s Personality

Table 3 gives the results of the multiple comparison of the average order. However the data doesn’t follow a normal distribution - we have used Kruskal-Wallis test (non-parametric comparison). Based on the achieved p-value equal to 0.0491, which is sharply lower than the critical p-value (5%) at the significance level, we reject the null hypothesis of independence. This means that we have confirmed that the organization’s owner significantly influences the rate of the Employees’ Personality. By rejecting the null hypothesis we know that there is a statistically significant difference between the groups. The multiple comparison of the groups’ order gives an answer to the question ‘between what groups there is a statistically significant difference?’

Table 3. Multiple comparison of the average order - the Employee’s Personality rate.

	Multinational companies (MNC)	Local companies
The average order	93.516	109.61

Based on the multiple comparisons we can conclude that there is a difference between the owners of multinational and local organizations, but it is not statistically significant.

After taking a closer look at Figure 1 we see that the Employees’ Personality rate is affected by whether the organization is multinational or local. The Employees’ Personality rate is higher in multinational organizations.

Table 4 shows values of Pearson’s chi-squared test for the variables’ independence hypothesis in the pivot table. On the chosen significance level $\alpha = 5\%$ for p-values lower than 0.05 we accept the null hypothesis on the

independence of the monitored factors, and therefore it is not necessary to further examine the internal structure of the pivot table.

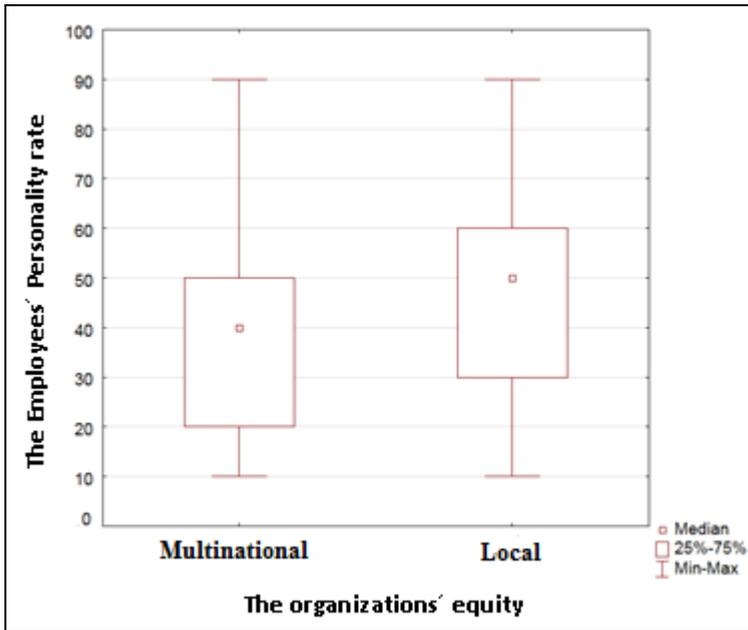


Figure 1. Box plot: the Employees' Personality rate/organization based on the owner.

Table 4. Pearson's chi-squared test values.

Variable – Performance dimensions	Organizations' equity share
Organizational performance	0.6186
Financial performance	0.8966
The performance of internal processes	0.4655
Customer satisfaction	0.4252
Learning and growth	0.0686
The performance of an individual	0.9291
Team performance	0.5737
Job behaviour	0.8706
Management activities	0.9781

* - the relationship is significant at the chosen significance level $\alpha = 0.05$

Based on the results of Pearson's chi-squared test we can reject the alternative hypothesis H1, which means there is no statistically significant difference in evaluating the performance of each dimension from the point of view of organizations' equity share. The hypothesis can therefore be falsified.

5. Results and discussion

On the specific sample of 49 local and multinational organizations we examined the current state of knowledge and the issue of performance evaluation

together with the related constructs. The research observed the proportionality rule - the category of small businesses (up to 50 employees) accounted for 59.19%, N = 29; medium-sized companies (51-250 employees) accounted for 28.57%, N = 14; large companies over 251 employees accounted for 12.24%, N = 6. Local and national organizations accounted for 69.39%, N = 34, and multinational organizations accounted for 30.61%, N = 15. To assess the extent of performance evaluation in organizations by taking into account the size categories of different enterprises we defined the set of dimensions/areas that are subject to the evaluation, specifically the organizational performance, financial performance, the performance of internal processes, customer satisfaction, learning and growth, the performance of an individual, team performance, behaviour, and management activities. Among these dimensions the statistically significant discrepancy was confirmed by the chi-square test only when evaluating and measuring organization-wide performance with respect to different-sized organizations. It was found that while small business rather do not evaluate organization-wide performance, the situation in medium-sized enterprises was mixed, or the stance was neutral, and in large enterprises this dimension met with a positive approach. In most cases SMEs have no formalized and implemented performance management systems and thus related systems of performance evaluation, as confirmed by the mean value of the formalization degree in the survey sample of small organizations (3.52) and large organizations (2.92). Therefore the dimension of organization-wide performance is not taken into account and evaluated. As this is a time and resource intensive dimension for processing, organizations do not have the necessary capacity. Kuvaas study on a sample of 275 small, medium and large businesses tested the positive link between the performance evaluation and organizational performance. The research has shown that in relation to the performance of SMEs the performance evaluation and learning reached a very low rate. The most significant factor, however, was incentive pay – 0.559 [19].

Another important step was to test the dimensions of performance in relation to the share of foreign investors in the equity, i.e. which ones are and which ones are not statistically significant in local and multinational organizations. A surprising finding was that neither case confirmed statistically significant difference. It means that, whether are evaluated these performance dimensions or not we did not observe any differences between local and multinational organizations. The statistically significant difference between organizations was confirmed in the frequency of individuals' performance evaluation when multinational organizations pay closer attention to the human capital on a daily, monthly and annual basis. The situation is different in the case of local companies without foreign capital participation. The performance of employees is generally evaluated quarterly, or not at all. The trend of implementing more efficient policy into the performance evaluation of multinational organizations operating in telecommunication sector is also confirmed by many studies. It is clear that the procedures applied in the human resources management at the international level often represent a combination of

national and local systems, concepts that affect staff's behaviour [20]. Behaviour of expatriates in the host country is often linked to factors such as culture, economic, political, and legal systems, organization specific factors, such as strategy, structure, and corporate culture [21].

6. Conclusions

As already mentioned, the increase in multinational organizations is a result of advancing globalization. Human resources management in a multinational organization significantly differs from human resource management in national or local organizations since multinational organizations operating in different countries employ different types of workers of different nationalities, and human resource management in such an organization is much difficult and complex. The article analysed in detail the specific performance evaluation practice which was subjected to rigorous statistical analysis. The aim of the article was to address the difference in their implementation in national and multinational organizations in telecommunication sector. It can be said that the trend of globalization is a reality, and therefore human resources management shall adapt to it in the best way possible.

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