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REGRESSION ANALYSIS OF ORGANIZATIONAL BEHAVIOUR AS A COMPONENT OF THE INTELLECTUAL CAPITAL OF SMALL HOTELS ON THE TOURIST MARKET

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SUMMARY: There are numerous discrepancies in the definition of intellectual capital and organizational behaviour. We tried to adopt the predominant agreements. There are two main start points of this work, for there is evidently a significant degree of consistency among many published researches so far. The first one is that intellectual capital consists of three components: organizational capital, human capital and that of the clients. The second one is that organizational capital consists of organizational structure, organizational behaviour and organizational culture. The research presented in this paper focuses on some of the predominant forms of organizational behaviour of employees who who participate in in intellectual capital. There are seven forms of of organizational behaviour included in this research: job satisfaction, job preoccupation, job kompetitivity, loyalty to the organization, creativity, responsibility, and readiness to risk. At the same time, these were the observed independent variables at the beginning of this reseatch.

The aim of this paper is to prove that these forms are very important component of organizational, and there fore also of the intellectual capital. The hypothesis was set: organizational behaviour is an essential component of the intellectual capital of small hotels in the tourist market. The research was focused towards the Dalmatian (Croatia) tourist market, that is towards the small hotels in this tourist market. This research included hotels of up to ten full time employees which operate round the year or seasonally (during the summer tourist season). Also, we included all four Dalmatian cantons where there are about 320 small hotels. The reesearch was conducted during the year 2015 by means of a direct direct poll in which the hotels employees took part. Employees selection was made on the basis of a quota selection in accordance with the alphabet list of employees. The sample consisted of of 100 employees (n=100) and was made in accordance with the model of the quota representative sample. It is believed that the representativeness of the sample was achieved, since almost every third hotel was covered by this research. The defined goal of the research wa: to decide what forms of the employees behaviour in small hotells might be presented as organizational behaviour in

small hotels. From that point the basic hypothesis was defined: organizational behaviour in small hotels can be identified through seven selected behavioural variables of the employees. As it has been pointed out in the title of this paper, a regression analyses was used in this research.

The regression equation of organizational behaviour in the observed small hotels was calculated and presented. The significance of the determination coefficient was confirmed by introducing the F-test. The obtained values of the f-test were next to zero which means that they indicated that coefficients of regression were similar, which further gives way to arguments to accepting the set hypothesis. At the same time it means that, applying regression analysis, a significant portion of variations among the independent variables taken to interpret organizational behaviour in small hotels were applied. These research results can efficiently be applied in positioning the quantitive characteristics of organizational behaviour, and thus of organizational capital in the structure and structional relationships of the intellectual capital in small hotels as well. The value of the results obtained is that they, in a certain way, promote the intellectual capital as a primary and predominant capital over the physical capital of the small hotels in creation and growth of their competitive positions on the tourist market.

Key words: regression analysis, small hotels, organizational behaviour, tourism market

JEL: C22; O34; Z32

1. INTRODUCTION

Intellectual capital is higher than human capital, and lower than the social and spiritual ones, which means that it is the highest level of capital an organization can achieve. Intellectual capital, as a higher form of building and evolution of human capital, develops as a rule and develops in conditions and on the basis of the developed organizational culture and its immanent forms of organizational behavior. These are all the facts which have already been confirmed, and have been available in a number of public researches so far. Small hotels in the tourist market of Central Dalmatia, which are the focus of this research, are those organizations where, in the previous informal examination, the concept of human capital management was not implemented, so that it can be assumed that there was no formed intellectual capital, or at least not such as described in modern theory and practice of management. This very knowledge encourages thinking and seeks a more serious approach. It will be interesting to look into the basic performance of organizational behavior in these hotels and to point out, on the basis of these findings, the possible directions and contents of the implementation of human and then intellectual capital. The value of this research is primarily to point to the significance of human and intellectual capital in managing small hotels in time, space and conditions where the capital's insufficiency is apparent. By doing so, the knowledge they

intend to come to can be a valuable incentive for the development of human resource management, and then of intellectual resources in small hotels under the conditions of a transition economy.

2. THE PRINCIPAL ASPECT OF INTELLECTUAL CAPITAL AND ORGANIZATIONAL BEHAVIOUR

Relatively little material has been published on the topic of this paper, especially in the area and content of organizational behavior in small private hotels. They can be said to be almost at least in a form that could constructively contribute to the role of the form of this behavior in the emergence of intellectual capital. According to the organizational behavioral variables set out in this research, they are not to be found in the existing published literature. Existing researches were largely partial, and most often involved motivation, employee satisfaction, loyalty to the organization, inventiveness and creativity, responsibility. There is no published research that incorporates the dominant and key forms of organizational behavior involved in the small hotels.

Abeysekera presented the results of a relatively more extensive study of human and intellectual capital in private small hotels in Australia (Abeysekera, I., 2006: 586-601). It emphasizes the research of human capital and the state of that capital in small hotels in the context of the implementation of intellectual capital. The results of this study have shown that human capital management is primarily conducted with the aim of assessing and valorising its value, but not with the goal of creating value through human capital. There are several possible causes of this condition identified. Employers tend to focus on managing human resources through salaries, but not through other motivational incentives for employees. Most of the managers in this research have claimed that people are their most important asset, which is understandable, but in practice it looks completely different. This may be, as Abeysekere says, the result of rapid changes in the environment where demand in the labor market is rising. With this tendency, management expects employees to increase their own responsibility for their work without significant incentives other than wages. Employees need to be constantly taught, including training, but this is not due to the need and the tendency to create human capital, but to keep the security of their employment through that knowledge and skills. The problem is, says Abeysekere, that employers do not understand the true meaning or constant learning of employees in small hotels, nor of human capital in long-term sustainable development. Same as it is and what is still dominated by physical capital in the primary occupation of small hotel management.

Similar discoveries came from other researchers. So Macve claims that the creation of profits in small hotels is based almost exclusively on labor exploitation, not through productive exchange and investment in human resources (Macve, R., 1999: 591-693). Carrington and Tayles have come up with similar results in one study at Caribbean hotels (Carrington, D., Tayles, M., 2012: 244-257). Formal knowledge of human and intel-

lectual capital was present in the sample of investigated managers, but no formal implementation of intellectual capital was observed. The only component of relational capital (clients' capital) was established as a component of intellectual capital. Zegalat and Zigan are among the first to explore and publish the state of the hotels in the Arab world, and the survey was conducted in Jordan (Zegalat, D., Zigan, K., 2014, 83-100). Data was collected on a large sample that included 116 hotel managers. The results that came out show that the two dimensions of intellectual capital were significantly represented by human capital and relational capital. Here, however, the dimensions of organizational or structural capital have not been implemented.

Based on these findings, it can be concluded that intellectual capital is recognized in the management of small hotels, but it is most often not implemented in all three dimensions. This can be said about the efforts to implement this capital. Its effects on application, patterns and application, benefits, experiences and difficulties will be able to be analyzed over the time that is coming.

3. THE OBJECT OF INVESTIGATION

Based on the research subject set up, the purpose of the research is defined as follows: to determine which forms of behavior of small-scale employees are dominant and, as such, may be the organizational behavior of small hotels? It starts from the preliminary information obtained in the previous procedure that small hotels in the area where the sample was organized have no concept implemented for either human or intellectual capital. Based on this understanding, it is important to find out how realistic the basis for building a human capital management concept would be, which would provide the basis for the emergence of intelligent organizations and intellectual capital.

4. HYPOTHESIS

A basic hypothesis is defined from the objective set for the research: Organizational behavior in small hotels can be identified through seven selected behavioral variables. These variables are summed up in the methodological part of this paper.

5. METHODOLOGY

The research was conducted using a specially constructed questionnaire created for this purpose. It contained 30 statements that included seven forms of organizational behavior. The respondents responded by affirming one of the five levels of agreement with the relevant statement, from "I disagree" (label 1) to "completely agree" (5). The questionnaire had the shape of the Likert scale. Given that each of the forms of organizational behavior involved in this research realistically makes a separate whole, they have started to reduce their width. The questions are focused on the most basic elements that make up

the appropriate form of behavior. Numerous existing, published cognitions were used in the construction of survey questions. For motivational testing, the two-factor motivation model of Herzberg was used for the model presented by Ghanbahadur.

Employee satisfaction was explored using the Minnesota satisfaction questionnaire-short form; work preoccupation with a questionnaire constructed by Morgeson, F.P., Humphrey; loyalty to the organization through a questionnaire designed by Hayday. Innovation and creativity, in turn, were investigated using a shorter version of the questionnaire used by Morris. In order to establish the relationship between the respondents according to the learning in the organization, statements were constructed separately for Davenport and Prusak. Responsibility was established with Belbin's questionnaire. Morgan's questionnaire was used for risk-based approach. The survey was conducted by a direct survey in the period July-September 2015 by means of + a structured survey questionnaire. The contact with the respondents was out of their working hours, most often before the start of working hours, in order to be moody and resting to engage in the survey.

Eight forms of organizational behavior are involved in the research. These forms were also the variables that they operationalized in the regression analysis. These are: job satisfaction (*X1*), occupation (*X2*), competition in work (*X3*), loyalty to organization (*X4*), creativity (*X5*), responsibility (*X6*), permanent learning (*X7*) and willingness to enter into risk (*X8*). Of course, not all forms of organizational behavior are exhausted. Only the most intensive ones are supposed to be representative of the typical behavioral model of small hotels. These were also observable independent variables in the research settings. The research is focused on the tourist market of Dalmatia (Croatia) or small hotels on this tourist market. There are hotels that count up to twenty permanent employees and which do their business all year round or seasonally (during the summer tourist season). All four Dalmatian cantons are covered with about 320 small hotels. Employee selection was made on the basis of a quota selection by alphabetical list of employees. The sample covered 100 participants (n = 100), and was made up of a quota representative sample. It is believed that the representativeness of the sample is achieved since each and every third hotel is covered by this research.

As highlighted in the title of the paper, regression analysis was used as the only and basic method in this research. The prediction set consisted of eight independent variables and one criterion variable (organizational behavior). As noted above, the dependent variables depend not only on the eight variables included in this study, but also on other variables that were not known to us or were available at the time and according to the given criteria and according to the set objective of the research. Therefore we included a certain error (ε) in the equation of regression. The regression model of the model is represented by the equation (Kmenta, J., 1997: 393):

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8 + \varepsilon$$

Where β_1 is a partial derivation E(Y) for *X1*, and so on by the order. The coefficient of determination is calculated from the form (Kmenta, J., 1997: 240):

$$R^2 = \frac{\sum(Y_i^k - \bar{Y})^2}{\sum Y_i - \bar{Y})^2}$$

The significance of the determination coefficients was determined by the F-test or by the expression (Kmenta, J, 1997: 412):

$$F_{k-1, N-k} = \frac{R^2}{1 - R^2} \frac{N - k}{k - 1}$$

Testing of individual regression coefficients was done by means of expression (Kmenta, J., 1997: 413):

$$t_{N-k} \approx \frac{\beta_1 - 0}{S_{bj}}$$

And autocorrelation of variables using the Durbin-Watson test (Kmenta, J., 1997: 763):

$$W = \frac{\sum_{t=2}^{T}(\varepsilon_t - \varepsilon_{t-1})^2}{\sum_{t=1}^{T}\varepsilon_t^2}$$

The application of regression analysis for the purposes of exploring the forms and content of organizational behavior has been widespread. Thus, Liu, Wang, Shen and Wong explore organizational forms of behavior at one college in China and use multiple regression analysis (Liu, C., Wang, S., Shen, X., Wang, L.M., 2015). Vondey uses hierarchical regressive analysis in the analysis of the behavior of head of state offices and relations of state employees to citizens (Vondey, M., 2010). Mueller, Mone, and Barker in a strategic analysis of organizational behaviors in a large sample use multipile regression analysis (Mueller, G.C., Mone, M.A., Barker, V.L., 2007).

There were several limitations in this research. Two of them should be pointed out. There are no individual variations of the personality of the respondent (level of intelligence, character trait, life and work experience, social status of the respondent), and the status and other characteristics of the employee in the organization (job scheduling, management function, qualification. etc.) which could be of significant nfluence for the identification of targeted forms of organizational behavior. Also, one of the limitations is that in Croatia there are no known results of any similar research that could allow a more constructive discussion of the results obtained. It is believed that these limitations will not significantly affect the value valorisation of the results of this research.

6. RESEARCH RESULTS

Based on the applied methodology described above, using the statistical data processing program, the following regression equation of organizational behavior was noticed in the observed small hotels.

$$Y = 7,32 + 0,4026\ x_1 + 0,2217\ x_2 - 0,0152\ x_3 + 0,0738\ x_4 + 0,3069\ x_5 + 0,1510\ x_6 -$$

$$0,2144\ x_7 + 0,0385\ x_8 + \varepsilon$$

t	2,47	5,03	3,75	8,19	4,02	7,54	5,33

7,48   3,91

$R^2 = 0,82$ $F = 54,03$ $DW = 1,37$

This regression equation has the following characteristics:

a. The coefficient of determination, and the coefficient of correlation derived from it, indicates that there is a very strong connection (0.91) between dependent and independent variables.

b. The high coefficient of determination indicates that 82% variance of the dependent variables or organizational behavior is interpreted with eight selected variables.

c. The regression coefficients determined are: ($ß_1 = 0,4026$; P<0,001); ($ß_2 = 0,2217$: P<0,001); ($ß_3 = 0,0152$; P<0,001); ($ß_4 = 0,0738$; P<0,001), ($ß_5 = 0,3069$; P<0,001), ($ß_6 = 0,1510$; P<0,001); ($ß_7 = 0,2144$; P<0,001), ($ß_8 = 0,385$; P<0,001).

d. The F value of this regression equation is also quite high and suggests that the determined coefficient of determination is significant.

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f. Calculated t-values indicated by all regression coefficients, confirm that all these coefficients are significant at 5% statistical significance.

g. The Durbin-Watson test shows that it is in the zone of relative uncertainty.

7. DISCUSSION

With eight explored forms of organizational behavior of employees, i.e. job satisfaction (*X1*), occupation (*X2*), job competition (*X3*), employees loyalty to organization (*X4*), creativity (*X5*), responsibility (*X6*), permanent learning (*X7*), and readiness to risk (*X8*). And the model of organizational behavior of employees in small hotels is very strong. Thus, these forms of organizational behavior can represent the proposed model and be essential to the implementation of the human resource management strategy. The signifi-

cance of the determination coefficient was confirmed by the F-test. The obtained F-test values were close to zero and thus showed that the coefficients of regression are mutually similar to the arguments to accept the hypothesis set. At the same time, it means that the applied regression analysis interpreted a significant part of the variation among the independent variables taken for the interpretation of organizational behavior in small hotels.

If the results of this research were compared to the one presented by Abeysekere, several similarities could be noted. He highlighted the result of rapid changes in the environment where demand in the labor market is rising and which influences the forms of behavior of employees in small hotels. With this tendency, management expects employees to increase their own responsibility for their work without significant incentives other than wages. In this research the responsibility of employees was not significantly more significant than other behavioral variables (coefficient of regression is 0.1510). Employees, according to Abeysekere, must continually learn, including trainings, but this is not due to the need and the tendency of creating human capital, but to keep the security of their employment through that knowledge and skills. The learning and the tendency of employees to learn in this research are also a highly ranked behavioral factor (regression coefficient is 0.2144).

8. CONCLUSION

These research results can be effectively applied to position the quantitative characteristics of organizational behavior, and also to the organizational capital in the structure and structural relationships of the intellectual capital of small hotels. The established regression equation gives eight basic elements of the basic quantitative data about the model of organizational behavior and the intensity of the importance of the particular elements of that behavior. It is characteristic that in the structure of these elements, permanent learning and the acquisition of new knowledge and skills is not highly correlated variable in the function of organizational behavior.

This suggests that there are no indications of the possible transition of these organizations to the status of intelligent organizations or to the emergence of intellectual capital. Of course, almost all other elements, i.e. regression coefficients, point to the real basis of the implementation of human resources management and human capital in the explored sample of small hotels. The value of the obtained results is that, in a certain way, it promotes the way of creating human capital and its implementation as the forerunner of intellectual capital. This capital is marked and prominent as the primary and dominant capital of the small capital's physical capital in the creation and growth of their competitive positions on the tourist market.

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