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INFLUENCE OF ASPECTS OF CHANGE MANAGEMENT ON THE PERFORMANCE OF ENTERPRISES IN THE WOOD PROCESSING INDUSTRY

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ABSTRACT

The ability to change and the agility of the enterprise are becoming competitive advantages, which are currently replacing the classic ones. The aim of the article is to present a summary of scientific knowledge in the field of change management and partial results of research in enterprises in the wood processing industry. The research was focused on specific areas and types of implemented changes in enterprises in the wood processing industry (WPI), at the levels of process optimization, as well as on the reasons or impulses that led enterprises to implement change. These aspects of change management were examined in relation to the level of performance presented by the return on equity ROE and their impact was evaluated using statistical methods such as contingency tables, Chi-square test and Cramer's contingency coefficient. The results showed that WPI enterprises, which implemented several types of changes and especially a complex transformational change, which included a change in the system and management methods, achieved higher levels of performance. The impulse to implement changes in these enterprises was based on changes in customer requirements and increased pressure from competitors.

Key words: corporate performance, change management, process, wood processing industry.

INTRODUCTION

Change is an integral part of humanity. Effective change management is therefore an important and necessary precondition for the survival of enterprises in a predatory competitive environment. Active change management should thus contribute to the optimization of the processes performed, to the correct use of resources and to the correct management of the enterprise. The factor of success or failure of change is not only its management, but also the ability to involve people in the process of change, because change should become a daily part of the work of employees of the enterprise. Change is an integral part of the existence and functioning of enterprises. Capacity building and the creation of preconditions for the implementation of change are currently considered a strategic necessity. The future of an organization depends on the ability of its managers to manage change. Successful managers must understand the need to implement change and take their implementation as an integral part of their responsibilities (MIKUŠ 2010). According to the authors KUBÍČKOVÁ and RAIS (2012), the changes can be divided into three groups. The authors divide changes into incremental changes, transformational changes, and changes

based on a combination of the previous two methods. Incremental changes (incremental, gradual) are especially suitable for a stable economic environment, where only some of the specified parameters of the enterprise are "fine-tuned". Radical change (transformation, jumping), which involve a substantial interference in the enterprise. These changes are suitable for a turbulent economic environment. Factors promoting the need for change in an organisation include globalisation, uncertain economic conditions and diversity in the workforce among others (MULLINS 2013). It has been reported that 38% would leave their comfort zone and go for change (MURPHY 2016). The way of interpreting the idea of the change creates positive emotional reactions and consequently leads to desired outcomes (MURPHY 2016). However, the majority of people prefer to maintain the status quo. Firstly, employees for example, get complacent with the status quo at work when everything is good. Change would interfere with their autonomy as people feel they lose control over their territory (KANTER 2012). Change is a process that must be consistent with the organisation's goals. The basis of effective change processes is a systemic view of the organization. Change is not an event but a process; it is an ever-present feature of organizational life, both at an operational and strategic level (RICK 2013). Change requires a systematic approach from both the perspective of an organization and at individual level (PITAGORSKY 2011). Change takes place when organizations introduce new projects and initiatives. These changes impact on organizational structure, systems, processes and job roles. The success of this change is the result of individuals doing their work differently (GALANTI, NDIAYE and ST-HILAIRE 2012). The ever increasing pace of change requires organizations to develop dynamic, competitive change management strategies on an ongoing basis.

Change management can be defined as a management line consisting in ready reactions to external and internal environment and it is focused on choice of change object, its flexible preparation, realization and use. It is based on prediction of next enterprising challenge and it enables being ready to changes on time. (KOTTER 2000). Among authors dealing with this topic belong: PALÁN *(Substance of change management)*, KOTTER *(Psychological aspects of change management)*, HAMMER and CHAMPY *(Reengineering changes)*. The general philosophy for process of change has been specified and published by DRDLA and RAIS (2001), RAIS and KUBÍČKOVÁ (2012), BOROVSKÝ (2005), SLÁVIK, (2005). The authors of this paper have been dealing with change management focused on processes in several publications during years 2015-2018. The change and change management are closely related to process and process management. The authors SVOZILOVÁ (2011), ZÁVADSKÝ and KOVAĽOVÁ (2011), PAPULOVÁ *et al*. (2014), RAJNOHA *et al.* (2013), and SUJOVÁ and ČIERNA (2018) agree that process-driven organizations are customer-centred, create higher value for the customer, focus on process management through analyses and metrics, use concepts, methods and approaches to improve processes as well as optimize and model them for to make them more radical changes and improving their performance. Corporate performance is an object of interest not only of owners (shareholders) but also of other interested subjects such as managers, employees, creditors, customers, suppliers, municipality and state. In our opinion the corporate performance can be defined as an ability to reach required effects and outputs in measurable units, to evaluate spent resources and to create a profit. Traditional way of business performance comes out from evaluation of achieved financial indicators: profit, turnover, market share. Authors VARCHOLOVÁ *et al.* (2007), BREALEY (2000), DUBOVICKÁ (2007), MAŘÍK (2003), RUČKOVÁ (2010) agree that financial indicators allow for a quick and inexpensive picture of the corporate performance. Profitability ratios is a form of expression of the resource efficiency that serves as the main criterion for capital allocation in a market economy. The Return of equity ROE is one of the most used and expresses the return on equity of an enterprise.

The authors of this article conducted several research studies in the previous period, which dealt with the influence of various factors on business performance with a focus on the impact of aspects of business process management on business performance (SUJOVÁ 2013, SUJOVÁ and MARCINEKOVÁ 2015, 2017, GEJDOŠ and SIMANOVÁ 2017, SUJOVÁ and REMEŇ 2018). The aim of this paper is to point out other factors influencing the performance of WPI enterprises, namely factors in the field of change management.

MATERIALS AND METHODS

Relevant data from the field of change management and information from enterprises of the wood processing industry in the Slovak Republic were obtained through an online research questionnaire and a direct controlled interview with managers of randomly selected wood processing enterprises.

Research sample determination:

The core sample size for the research was a database of 300 wood processing enterprises, out of which 83 respondents represent the research sample. According to the calculation of the minimum statistical research sample the research sample size of 83 respondents is a representative statistical sample with 92% confidence and 8% standard deviation. Before the compilation of the questionnaire, from the basic set created by the WPI enterprises of the Slovak Republic (according to the Statistical Office of the Slovak Republic, SLOVSTAT database 13,983 enterprises), a selection of respondents was created using a typical non-random selection. After creating a list of the most important WPI enterprises of the Slovak Republic using the information provided by the report SARIO - Forests and Wood Processing Industry, enterprises were selected according to the average number of employees, the branch of the wood processing industry and the type of production. The databases of member companies of the Association of Wood Processors of the Slovak Republic, the Association of the Pulp and Paper Industry of the Slovak Republic and the database of WPI enterprises of the Slovak Republic listed on the seznam.sk website were also used in the selection of enterprises. This way, a database of 300 enterprises was created.

If the random selection procedure of respondents were followed and, under the specified conditions, the results were generalized to the whole basic set, it would be necessary to obtain information from at least 375 enterprises. Assuming the usual feedback when responding to enterprises (20%), it would be necessary to contact at least 1875 enterprises. The calculation of the random sample size is as follows:

$$n_0 = \frac{z^2 pq}{e^2} = \frac{1.96^2 x\ 0.5\ x\ 0.5}{0.05^2} = 385\ respondents \quad (1)$$

Where:

z - confidence interval (for 95% = 1.96)

p, q - percentage of respondents who know the issues or are inclined to the variant of one (p) and ignorant issues or who are inclined to the variant of the other (q). Since these numbers have not been known, the maximum product p x q = 50% x 50% was generated.

e - specified maximum permissible error - 5%

n_0 - minimum sample size

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}} = \frac{385}{1 + \frac{385-1}{13\,983}} = 375\ respondents \quad (2)$$

Given that the base set is smaller than 20 000 enterprises, it was necessary to use another formula to calculate the sample size.
Where:
n - recalculated sample size
n_0 - minimum sample size calculated according to the previous formula
N - base file size

It was for this reason that the survey was chosen and a non-random typical selection was made so that the created database, which contained 300 companies, included companies meeting the criteria of the study. Since the selection of respondents was made using a typical non-random selection, where the obtained results could not be generalized to the whole basic set, a calculation was given with what error the results from the distributed questionnaires could be applied to the whole basic set provided the procedure of random selection of respondents was followed. The already mentioned relation was used to calculate the sample size of the respondents, while the unknown e in this case was unknown.

$$n_0 = \frac{z^2 pq}{e^2} \quad (3)$$

$$85 = \frac{1.96^2\ x\ 0.5\ .0.5}{e^2}$$

$$e = 0.106 = 10.6\%$$

It is clear from the above calculation that if the random selection procedure were followed, it would be possible to apply the results to the whole basic set with an error of 10.6%.

The questionnaire consists of 5 general, classification questions and 30 business-area management issues. General questions concerned the size of an enterprise, the main subject of the business, the ownership, the branch of business and the reached value of ROE. Next questions concerned the research core. They were divided into following parts:

- Change management (13 questions): perception of changes in a company, types, reasons, areas, goals of performed changes, the procedures by leading changes in a company.
- Quality, production and process management (5 questions): conceptions, models and methods used by improvement of quality, production and process performance.
- Financial aspects (7 questions): cost monitoring and costing, evaluation of effects after changes.
- Investment management (5 questions): evaluation of investment effectiveness, indicators for evaluation of investment effects.

The questionnaire was published online and the data collection was in the first half of year 2017. Enterprises were also interviewed directly through employees and indirectly via e-mail communication. This paper analyses partial results of the questionnaire survey of selected industry, namely the wood processing industry (WPI), which is represented by wood, furniture and cellulose industry. Mathematical - statistical methods were used to examine and evaluate the interrelationships and the effects of individual factors in the implementation of changes on the performance of enterprises. The evaluation of the questionnaire was carried out using the software program STATISTICA 12 CZ - Stat Soft. Inc.

(2013), where the imported database was created in MS Excel. In the analysis of research results, selected methods of descriptive statistics for one variable were used, such as absolute, relative and cumulative frequencies, pie and bar graphs. Subsequently, PivotTables in the statistical analysis were applied. A PivotTable is a method of organizing and analysing data by groups, categories, or classes that allows them to be compared. It combines the frequency distribution of two variables and represents an extension of a simple frequency table (RIMANČÍK, 2007). The results of the analysis of PivotTables consist of selected statistical indicators, namely Pearson's chi-square and the level of statistical significance "p". Pearson's chi-square test enabled testing the significance of the relationship between qualitative variables. The chi-square test of independence was used to test the significance of contingency coefficients. The level of significance was chosen at the level of 5%. The comparison of actually found and theoretical frequencies was the basic idea of the chi-square test of good agreement. Approaching the value of the contingency coefficient to the value of 1 was a signal of an increasing intensity of the dependence between the characters A and B. (PACÁKOVÁ *et al*. 2018).

The paper presents the partial research results in the areas of change management. The findings in the first part of the questionnaire are focused on the change management issues in relation to business performance represented by the ROE indicator. The 10-year period of carrying out the changes was determined by two reasons: the effects of the changes are visible within a longer period, and the previous research has focused on the change management more than 10 years ago. The research hypotheses were presented in order to supplement the findings of previous research studies conducted by the authors and verify the importance of the changes by improving the competitiveness and performance of companies, as claimed by authors dealing with the changes and their management in companies (RAIS and KUBÍČKOVÁ 2012, BOROVSKÝ 2005).

The following hypotheses established in the research were tested by the mentioned methods:

- *Ha: There is a statistically significant relationship between the areas of changes implemented over the last 10 years and the level of return on equity of ROEs in WPI enterprises.*
- *Hb: There is a statistically significant relationship between the types of changes implemented over the last 10 years and the level of return on equity in ROPs.*
- *Hc: There is a statistically significant relationship between the level of process optimization and the level of return on equity of ROEs in WPI enterprises.*
- *Hd: There is a statistically significant dependence between the impulses or reasons of the WPI enterprises that led to the change and the level of return on equity of the WPI enterprises.*

RESULTS AND DISCUSSION

The article presents partial research results that show which aspects of change management affect the performance of WPI enterprises. Research in the wood processing industry was carried out in 83 WPI enterprises. Their percentage distribution into the woodworking, furniture and pulp and paper sector can be seen in Figure 1.

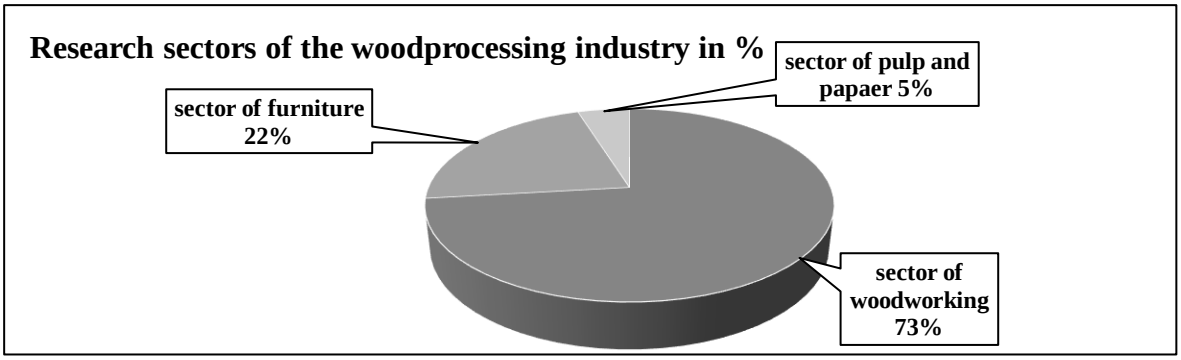

Fig. 1 Researched sectors of the wood processing industry.

The examined sample of WPI enterprises showed that 45.12% of respondents employ from 0 to 10 employees, 25.61% of respondents stated that they employ from 11 to 20 employees and from 51 to 250 employees only employ 7.3% of respondents. It follows that most respondents from WPI enterprises are concentrated in the category of small and medium-sized enterprises. Of the 83 surveyed WPI enterprises, 86.59% are mainly focused on production activities and 79.27% have net own domestic capital. The comparison of the achieved ROE values in surveyed woodworking, furniture and pulp and paper enterprises according to the individual categories of ROE values is shown in the graph in Figure 2.

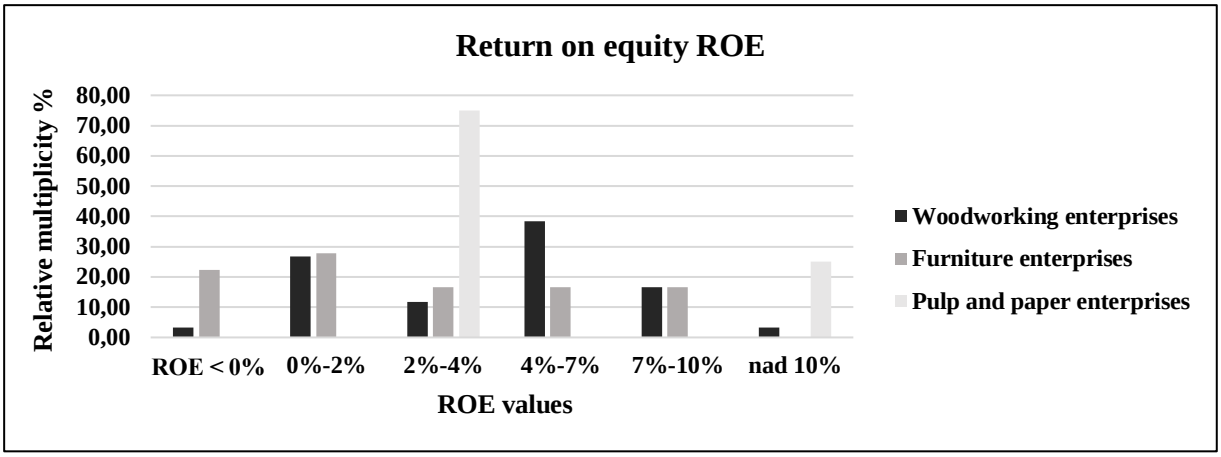

Fig. 2 Return on equity of the surveyed companies.

In determining the amount of return on equity ROE of surveyed WPI enterprises, we can state that 7.23% of respondents of WPI enterprises were included in the group with ROE below 0%, in the group with ROE values from 0% to 2% were included 19.28% of respondents from woodworking enterprises and 6 .02% of furniture enterprises. The ROE value from 2% - 4% was achieved by 8.43% of respondents of woodworking enterprises, 3.61% of furniture enterprises and 3.61% of pulp and paper enterprises. A positive ROE value from 4% to 7% was recorded in 27.71% of respondents of woodworking enterprises and in 3.61% of furniture enterprises. ROE from 7% to 10% was achieved by 12.05% of respondents of woodworking enterprises and 3.61% furniture enterprises. ROEs above 10% were reported by 2.41% of respondents of woodworking and 1.20% of pulp and paper enterprises. From the above results we can conclude that most surveyed enterprises of the wood processing industry reached the ROE value in the range from 4% to 7%, namely 31.33% of the surveyed enterprises, which we can evaluate positively.

In the category of enterprises in the wood processing industry, dependencies were examined as areas of changes in the last 10 years, types of changes in the last 10 years, level of process optimization and impulses that led to change in relation to business performance defined by the level of return on equity ROE. Analysis by the Chi-square test and the calculated p-value made it necessary to establish two opposing hypotheses for each area, which would confirm or refute the existence of dependencies.

To test the Ha hypothesis, which examined the dependence of the areas of changes in the last 10 years and the level of return on equity ROE in WPI enterprises, the following hypotheses were tested:

- *H0: There is no statistically significant relationship between the areas of changes implemented over the last 10 years and the level of return on equity ROE in WPI enterprises.*
- *H1: There is a statistically significant relationship between the areas of changes implemented over the last 10 years and the level of return on equity ROE in WPI enterprises.*

Table 1 analyses and evaluates the dependence of the areas of implemented changes in relation to the return on equity (ROE) in surveyed WPI enterprises in the wood processing industry. Regardless of the level of ROE achieved, most respondents of WPI enterprises implemented changes in three areas: the production program, production technologies and organizational structure. The least of these were changes in business processes.

Tab. 1 Dependence of areas of implemented changes and ROE.

Expected frequencies	**p = 0.5 Chi-square test: 0.93235**							
Areas of changes	**ROE values**							
	< 0%	**0% - 2%**	**2% - 4%**	**4% - 7%**	**7% - 10%**	**> 10%**	**SUM**	**RF***
Organizational structure	3.60	6.82	5.31	13.45	5.31	1.52	**36**	18.95%
Production program	5.30	10.04	7.81	19.81	7.81	2.23	**53**	27.89%
Production technologies	4.80	9.09	7.07	17.94	7.07	2.02	**48**	25.26%
System and methods management	1.70	3.22	2.51	6.35	2.51	0.72	**17**	8.95%
Business processes	1.40	2.65	2.06	5.23	2.06	0.59	**14**	7.37%
Information system	2.20	4.17	3.24	8.22	3.24	0.93	**22**	11.58%
SUM	**19**	**36**	**28**	**71**	**28**	**8**	**190**	
Relative frequencies*	10%	19%	15%	37%	15%	4%		100%
Expected value is lower than actual				**Expected value is higher than actual**				

Based on the data in Table 1, the p = 0.93235 value was calculated using the Chi-square test. This value is higher than 0.05, so in this case we can accept hypothesis H0 based on the results of the analysis: There is no statistically significant relationship between the achieved profitability of ROE and areas of change for the last 10 years and the results can be marked as statistically insignificant. In the next step, more detailed tests, the test for each area of change, were made. The results of more detailed tests show that for the dependencies between the issues of return on equity ROE and the area where changes have been made over the last 10 years, statistically significant dependence ($\alpha = 5\%$) was confirmed in only one of six areas in the system and methods management.

As it can be seen from Table 2, the critical value of the tested criterion p = 0.01988 is less than 0.05. For this reason, we can state that the observed dependence was statistically confirmed. Among the observed features, we state a moderately strong dependence based on the value of the Cramer V parameter, which ranges between 0.3 - 0.8.

Tab. 2 Results Chi-square test for the relationship between the achieved ROE and the area of implementation of change in the system and methods management.

	Chi-square	Degree of freedom	p value
Pearson Chi-square	13.40368	df = 5	**0.01988**
Contingency coefficient	0.3748257		
Cramer V	0.4043012		

The second research hypothesis Hb focused on the dependence of the types of implemented changes and the level of return on equity ROE in WPI enterprises was tested by the following hypotheses:

• *H0: There is no statistically significant relationship between the types of changes made and the level of return on equity ROE in WPI enterprises.*

• *H1: There is a statistically significant relationship between the types of changes implemented and the level of return on equity ROE in WPI enterprises.*

The Table 3 analyses the types of changes implemented over the last 10 years in WPI enterprises in relation to the level of return on equity ROE. Most enterprises with higher performance, with ROE levels above 4% implement gradual optimization changes and unplanned changes incrementally.

Tab. 3 Dependence between types of implemented changes and ROE.

Expected frequencies	**p = 0.5 Chi-square test: 0.18034**							
Types of implemented changes	**ROE values**							
	< 0%	**0% - 2%**	**2% - 4%**	**4% - 7%**	**7% - 10%**	**> 10%**	**SUM**	**RF***
Financial restructuring	1.26	3.08	2.52	5.47	2.10	0.56	15	14.02%
Transformational change restructuring	0.59	1.44	1.18	2.55	0.98	0.26	7	6.54%
Radical reengineering change	0.34	0.82	0.67	1.46	0.56	0.15	4	3.74%
Gradual optimization changes	3.95	9.66	7.91	17.13	6.59	1.76	47	43.93%
Unplanned but necessary changes - incremental	1.43	3.50	2.86	6.20	2.38	0.64	17	15.89%
No changes were made	1.43	3.50	2.86	6.20	2.38	0.64	17	15.89%
SUM	**9**	**22**	**18**	**39**	**15**	**4**	**107**	
Relative frequencies*	8%	21%	17%	36%	14%	4%		**100%**
Expected value is lower than actual			**Expected value is higher than actual**					

Based on the data obtained, the p = 0.18034 value was calculated using the Chi-square test. This value is greater than 0.05. Based on the analysis, we can accept hypothesis H0 from the above results: There is no statistically significant dependence between the type of change in the enterprise over the last 10 years and the achieved profitability of ROE and the results can be marked as statistically insignificant. The tests further confirmed, as shown in Table 4, that when examining the dependencies between the types of changes made over the last 10 years and the return on equity ROE, a statistically significant dependence (α = 5%) on the transformational restructuring change was confirmed. Based on the calculations in the table, we can conclude that the individual categories of enterprises differ significantly in this type of change.

Tab. 4 Results of the Chi-square test between the transformational restructuring change and the achieved ROE in the last 10 years.

	Chi-square	Degree of freedom	p value
Pearson Chi-square	12.21490	df = 5	**0.03196**
Contingency coefficient	0.3600685		
Cramer V	0.3859561		

The critical value of the tested criterion p = 0.03196 is less than 0.05 and therefore we can confirm that the dependence was confirmed. Based on Cramer's V 0.3859561, the observed statistical features showed a strong dependence ranging from 0.3 to 0.8.

The dependence of the level of process optimization (improvement) and the level of ROE in WPI companies was investigated by testing the third hypothesis Hc with the following hypotheses:

- *H0: There is no statistically significant relationship between the level of process optimization and the level of return on equity ROE in WPI enterprises.*
- *H1: There is a statistically significant relationship between the level of process optimization and the level of return on equity ROE in WPI enterprises.*

The Table 5 analyses the relationship between the level of process optimization (improvement) and the achieved level of ROE in WPI enterprises. The aim of this analysis was to determine whether the level of optimization and improvement of processes in enterprises of wood processing industry affects the achieved ROE value of the surveyed enterprises.

Tab. 5 Dependence between types of the level of process optimization and ROE.

Expected frequencies	**p = 0.5 Chi-square test: 0.32751**							
	ROE values							
Level of process optimization	**< 0%**	**0% - 2%**	**2% - 4%**	**4% - 7%**	**7% - 10%**	**> 10%**	**SUM**	**RF***
Identification of optimization options	3.29	11.52	7.13	14.27	7.13	1.65	45	54.88%
Established mathematical model for quantification of total costs	0.07	0.26	0.16	0.32	0.16	0.04	1	1.22%
Employees have modern technology at their disposal for efficient processes	0.59	2.05	1.27	2.54	1.27	0.29	8	9.76%
Business standards and processes are linked to business success factors and customer requirements	0.66	2.30	1.43	2.85	1.43	0.33	9	10.98%
Created a change management program, ensuring employee loyalty	0.66	2.30	1.43	2.85	1.43	0.33	9	10.98%
None of the above applies	0.73	2.56	1.59	3.17	1.59	0.37	10	12.20%
SUM	**6**	**21**	**13**	**26**	**13**	**3**	**82**	
Relative frequencies*	7%	26%	16%	32%	16%	4%		100%
Expected value is lower than actual			**Expected value is higher than actual**					

The results in Table 5 show that most enterprises do not optimize real processes and do not pay attention to process improvement, they only have identified optimization options. This may be the reason why the chi-square test result did not confirm the dependence of the ROE height on the process optimization level.

When examining the dependence between the impulses of WPI enterprises that led to the implementation of the change and the level of ROE, the hypothesis Hd was determined and the hypotheses tested:

- *H0: There is no statistically significant dependence between pulses resp. the reasons for the WPI enterprises that led to the change and the level of return on equity of the ROE.*
- *H1: There is a statistically significant relationship between the reasons or impulses of the WPI enterprises that led to the change and the level of return on equity ROE.*

The Table 6 presents the reasons and impulses of the WPI enterprises that led to the change and the level of return on equity. The results in Table 6 show that enterprises with a ROE level above 4% implemented changes mainly due to changes in customer requirements and increased competitive pressure, but also due to financial problems.

Tab. 6 Dependence between reasons or impulses to implement change and ROE.

Expected frequencies	**p=0.05**		**Chi-square test: 0.20347**					
	ROE values							
Reasons or impulses to implement change	**< 0%**	**0% - 2%**	**2% - 4%**	**4% - 7%**	**7% - 10%**	**> 10%**	**SUM**	**RF**
Financial problems	1.87	3.64	2.75	5.90	3.05	0.79	18	9.84%
Low efficiency and quality of production	1.97	3.84	2.91	6.23	3.22	0.83	19	10.38%
Defective processes	0.83	1.62	1.22	2.62	1.36	0.35	8	4.37%
Customer dissatisfaction	1.25	2.43	1.84	3.93	2.03	0.52	12	6.56%
Legislative changes	1.04	2.02	1.53	3.28	1.69	0.44	10	5.46%
Competitive pressure	4.46	8.69	6.58	14.10	7.28	1.88	43	23.50%
Changing needs and requirements of customers	4.98	9.70	7.34	15.74	8.13	2.10	48	26.23%
Existence of market opportunities	2.60	5.05	3.83	8.20	4.23	1.09	25	13.66%
SUM	**19**	**37**	**28**	**60**	**31**	**8**	**183**	
Relative frequencies*	10%	20%	15%	33%	17%	4%		100%
Expected value is lower than actual				**Expected value is higher than actual**				

From the data obtained, the value of p = 0.2034 calculated by the Chi-square test was higher than 0.5. Based on the results of the above analysis, we can accept hypothesis H0: There is no statistically significant relationship between the reasons or impulses of WPI enterprises that led to the change and the level of return on equity ROE WPI enterprises, so the results can be described as statistically insignificant.

The results of other more detailed tests than those in Table 7 show that for the dependencies between the reasons or impulses that led to the change and return on equity (ROE), a statistically significant dependence ($\alpha = 5\%$) was confirmed for only one of the nine reasons. That was the legislative changes. The critical value of the tested criterion p = 0.00059, was less than 0.05, and therefore we can state that the observed dependence was statistically confirmed in this particular case. Among the observed statistical features, we state a moderately strong dependence on the value of the parameter Cramer V 0.5149228, which ranged from 0.3 to 0.8.

Tab. 7 The results of Chi-square test, the reason for legislative changes and achieved ROE.

	Chi-square	Degree of freedom	p value
Pearson Chi-square	21.74193	df = 5	**0.00059**
Contingency coefficient	0.4577959		
Cramer V	0.5149228		

The first part of the research was focused on finding out the number of WPI enterprises in the examined sample, and on finding the basic data and characteristics about these enterprises. We found that woodworking enterprises had a share of 73% in the sample examined. These were mainly enterprises with a small number of employees, which are considered to be small and medium-sized enterprises. 86.59% of the surveyed WPI enterprises mentioned the production as the main subject of their activity. The ownership of the surveyed WPI enterprises consisted mainly of net domestic capital, which was stated by up to 79.27% of respondents. A positive finding was that most surveyed enterprises achieved a positive ROE value, which is a key criterion for business owners to evaluate the success of their investment. In comparison with the results of the conducted research from 2011 and 2013, it can be stated that the performance of WPI enterprises has significantly increased from the level of 0–2% to the level of 4–7%. The increase was mainly due to changes in customer requirements, increased pressure from competition, the use of new approaches to managing the improvement of business process performance, the willingness of enterprises to cope with change management and efforts to implement new methods. These performance factors correspond to the theoretical results of STANĚK (2003), WAGNER (2009), KADÁR and KADÁROVÁ (2010), FERENCOVÁ and BAŠISTOVÁ (2011), PAPULOVÁ *et al*. (2014), and with the research results of TUČEK and ZÁMEČNÍK (2007) and RAJNOHA *et al.* (2013).

In the general question category, there was a positive finding that 90.24% of the WPI enterprises in the sample examined stressed the high importance to change management and also considered change to be an important factor in performance improvement.

The relationship between the change management aspects and the performance of the WPI enterprises in the sample examined was only confirmed in three cases. In the specified areas of changes, the management systems and methods used had an impact on the amount of ROE, in the types of change it was a restructuring change, and in the case of impulses or reasons for the implementation of the change, it was legislative changes. The dependence between the level of process optimization and the level of return on equity ROE in the examined WPI enterprises was not confirmed due to the fact that surveyed WPI enterprises do not really optimize processes. We consider this finding for surveyed WPI enterprises to be a significant shortcoming in the management of business processes, which should be constantly improved and optimized.

The fact that WPI enterprises in the Slovak Republic have the maturity of processes and the level of their management at the lowest level was also stated in the results of previous research carried out by the authors of this paper. Since 2010, the results of research have shown that the level of business process management in WPI enterprises and failure to pay attention to process optimization significantly affects their performance. Greater efforts to manage and continually improve business processes would bring WPI enterprises a significant increase in their performance.

CONCLUSION

Change is an integral and fundamental part of every enterprises and corporate governance and can be activated by many factors, whether from the external or internal environment. It is necessary to realize the importance of change, eliminate and reduce resistance to change and initiate, manage and successfully implement changes. Therefore, the ability of enterprises to adapt is an important role, because without a change in the current environment, companies will not survive. Change management is thus one of the basic elements of successful business management and effective change management becomes a tool for increasing competitiveness.

The benefits of the presented results of the research of change management in enterprises in the wood processing industry lie in finding out the current state of change management in WPI enterprises and in identifying the factors that affect their performance. The results of the primary quantitative research carried out in the form of questionnaires were analysed and, based on statistical methods, the existing dependencies in relation to the return on equity ROE performance indicator were verified and evaluated.

The achieved results show that the performance of WPI enterprises is directly affected by changes in management systems and methods, the implementation of extensive transformational changes.

Direct dependence was also found in the implementation of changes due to changes in legislation, which may indicate the fact that legislative changes in the Slovak Republic contribute to increasing the performance of WPI enterprises. It can also be stated that enterprises with a high level of performance have decided to implement changes based on changes in customer requirements and in the activities of competitors. This means that the reason for making changes in the enterprise was the effort to improve competitiveness.

The importance of monitoring and managing change in increasing the competitiveness of enterprises also stems from the characteristics of theoretical aspects of change management and from the identified effects of successfully implemented change. Based on the achieved results presented in the article, we can state that the management of business change based on a process approach is a way to improve competitiveness.

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