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**UNIVERSITATIS SELYE**  
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## THE EFFECT OF TALENT MANAGEMENT ON EMPLOYEE RETENTION: EVIDENCE FROM EMZOR PHARMACEUTICAL INDUSTRY, LAGOS, NIGERIA

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### Abstract

Managing talent in a global organization has become paramount for business growth and survival in the challenging competitive environment. Pharmaceutical business in the current century requires high trust and quality manpower in delivery of products to customers whose demand are always changing in accordance with the prescriptions of medical experts in the health sector. The objective of this paper is to examine the effect of talent management on employee retention in Pharmaceutical industry, Lagos, Nigeria. The study adopted a descriptive survey design. The population of study comprised of 750 EMZOR staff in Lagos while the sample size of 254 was determined through the Krejcie & Morgan formula. The study instrument is a questionnaire that consists of two constructs: learning & motivation and compensation. Ordinary Least Squares Regressions was used to analyze the formulated hypotheses. The result revealed that learning, motivation and compensation have a significant impact on employee retention at ( $R=0.938$ ,  $R^2=0.879$ ,  $P(0.000)<0.5$ ) this indicates that there is 88% variation in employee retention and ( $R=0.780$ ,  $R^2=0.609$ ,  $P(0.000)<0.5$ ). This implies there is 60.9% of variation in employee retention. The study concluded that learning, motivation and compensation have significant effect on employee retention in EMZOR Pharmaceutical Industry. Therefore, it is recommended that the management of Pharmaceutical industry should be adaptive and proactive with their talent hunts by ensuring that talented employees are effectively utilized, motivated, compensated and retained in the organization.

**Key words:** EMZOR, talent management, employee retention, learning, motivation and compensation

## Introduction

The achievement and stability of business organization depend largely on talent management. It is logical therefore, to state that, for organization to experience sustainable competitive advantage over its competitors, there is need to hire and retain skilled and knowledgeable human resources. Most managers recently appear to be facing the challenge of sustaining talented employees in their organizations. In the corporate world, managers often adopt the use of talent management as an avenue for retaining employees in the organization, consequently they achieve good performance and reputation.

Talent management is a process that involves moving from recruitment and selection to meeting the need of the organization. Talent management begins with the strategy that signifies the idea of acquiring talented people fitted for job in the organization. Ultimately, its aim is to develop and maintain a talent pool consisting of skilled, engaged and committed workforce (Armstrong, 2010). Talent management is the systematic attraction, identification, development, engagement/ retention and deployment of those individuals who are of particular value and contribute immensely to the performance of an organization (McCartney, 2006; Cappell, 2008). Along the line, learning, motivation, and compensation are amongst talent management components which are instrumental to the development and implementation of coordinated and mutually supportive approaches that help the organization to hire and retain the talented manpower it needs. Retaining talented employees has become one of the major priorities of organizations and the key difference for human capital management (Glen, 2006; Hitka et al., 2018). In today's dynamic business environment and highly competitive global markets, organizations worldwide are facing major decisions and challenges in the global talent management (Schuler, 2011).

The utmost goal of reputable organisation such as EMZOR Pharmaceutical Industry, Nigeria is to improve performance, deliver quality products to customer and make maximum profit. These goals can be achieved when talented employees are highly committed and retained in the organisation. The retention of skilled and talented employees depends on how well they are motivated. In fact, to achieve better performance in the organization, the manager needs to ascertain which skills are in short supply or lacking and how soon the human resource department can fill the skills gap. Therefore, one major task of managers in organization is to discover talented employee and provide enabling environment for them to be efficient in their performance and service delivery.

Most importantly, workers who enjoy high pay, autonomy, opportunities for skills advancement, opportunities for skills acquisition and skills development and who have high interest in the task itself will have high level of satisfaction, productivity and low labour turnover intention. (Porter, Steers & Mowday., 2005; Bodla & Naeem, 2009; Mészáros, 2018; Mura et al., 2017). Talented employees who feel that their contributions to the organizations are of great importance will be motivated and satisfied with the organization and may stay with the organization for a longer period. Obviously, many literatures are available on the impact of talent management on employee retention in services industry but little attention has been



focused on manufacturing industry in Nigeria. Therefore, the main objective of this study is to examine the effect of talent management on employee retention in EMZOR pharmaceutical industry, Lagos, Nigeria.

### **The Concept of Talent Management**

Armstrong (2006) defines talent management as a systematic process designed to ensure that an organization attracts, develops, motivates and retains talented people needed now and in the future. The purpose is to ensure that organization is secured with talented employees when needs arise. Kehinde (2012) states that Talent management is the implementation of integrated strategies or systems designed to increase workplace productivity by developing improved processes for attracting, developing, retaining and utilizing talented people to fill organizational needs. Salih & Alnaji (2014) defined talent management as the presence of talent in each department of the organization in order to meet the standards in competitive environment and to maximize the returns and productivity and for the improvement of the organizational performance. Talent management is concerned with the anticipation of required human capital for an organization and the planning to meet those needs. Any activity done to recruit, retain, develop, reward and make people perform their work effectively and efficiently forms part of talent management as well as strategic workforce resourcing.

### **The Concept of Employee Retention**

Employee retention refers to activities engaged by the organization to retain employee.

Employee retention (ER) is a process in which the employees are encouraged to remain with the organization for a longer period of time (Sandhya and Kumar, 2011). Though, employee retention seems to be a very challenging task, effective employee retention is beneficial to both the organization and employee in the long run.

Employee retention is a process of creating enabling environment that motivate employee to remain in the organization. A stimulating work environment that enable effective use of people's skills and knowledge make them to enjoy a degree of autonomy on the job, provides them with the opportunity to contribute their ideas and appreciate how their contribution can lead to the realization of organization's goals. According to Gberevbie (2008), employee retention strategies are the plans and means, and a set of decision-making behavior formulated by the organizations to retain their competent workforce. Hytter (2007) found that personal premises of loyalty, trust, commitment, and identification and attachment with the organization have significant impact on employee retention.

Hiring and keeping competent employee should be the focus of corporate manager in organization in order to achieve higher performance. Employee retention is a major challenge facing employer of labour in today's business environment because they realize the consequence of losing competent employees on organization's productivity and service delivery.

Gberevbie (2008) contended that an organization's inability to formulate and implement strategies capable of recruiting competent employees and retaining them to achieve organizational goals is one of the main problem faced by business organizations.

## Talent Management and Employee Retention

One of the major benefits of a talent management is that it enhances recruitment and retention of valuable employees. (Isfahani and Boustani; 2014). Hughes & Rog (2008) state that the benefits of an effectively implemented talent management strategy include improved employee recruitment and staffs retention rates, and enhanced staffs engagement. The retention war starts at the hiring stage, with companies recruiting employees whose talents and interests fit both the short- and long-term needs of the organization (Ross, 2005).

Attracting, selecting, engaging, developing and retaining employees are the five main domain of talent management (Towers, 2003). The forgoing domain has a positive impact on sourcing, acquiring, and maintaining the talented employees. In order for companies to gain a competitive advantage, the demand for human capital will continue to drive talent management (Towers, 2003). Retention of talented employees can be an instrument for achieving competitive advantage in an organization. Although, pay and benefits initially attract employees, top-tier leadership organizations focus on retaining and developing talent (Lockwood, 2006). The talent management process is used to develop the competencies of employees thereby assist them to be able to cope with challenges in the workplace.

Talent management process involves recruitment, career development, succession planning, performance management and training, and development of employees to provide them with the competencies they need to carry out their jobs. Companies are now faced with the dilemma of how to address talent management and formulate strategies especially in today's global economy where every organizational leader must continually invest in human capital to minimize the problem of talent needs. (Temkin, 2008). Concerted action is required to retain talented people, but there are limits to what any company can do. It is also necessary to encourage useful contributions from existing talents and to value them accordingly (Armstrong, 2010). Most importantly, HR leaders will have to work closely with senior management to attract, hire, develop, and retain talents. Organization leaders must achieve long term stability from their talent management strategies to remain competitive in the global economy (Temkin, 2008).

Most HR managers have realized that learning and motivation has a great impact on employee retention. Thus the acquisition of information, skills through learning process attracts increase in productivity and service delivery. Motivation is one of the important factors that can help the employer to improve employee and organizational performance (Sandhya<sup>1</sup> and Kumar, 2011). When employees notice the impact of their contributions to organization growth, they will be motivated and be ready to stay with the organization for a longer period of time. Motivation enhances employees' satisfaction, loyalty and eventually leads to retention. Motivation is a critical factor in an organisation. Nothing works better than motivation. The HR leaders and the managers must continuously motivate the employees to extract the best out of them.

Compensation acts as a tool to attract and retain talented people. Compensation refers to the total cash and non-cash payments given to employees in exchange for the work they do. Compensation goes beyond normal paid wages. It also includes many other types of wages and benefits such as incentives, perks, cash prizes, praises, promotion and so on, all these are strategies employed by management to motivate and retain their employees. Management in order to enhance motivation should ensure that employees who have performed consistently well are felicitated

in the assembly of all the staff. This will encourage others to work harder and strive to achieve similar feat for the purpose of recognition and organisational progress.

### **Theoretical Framework Resource Based View (RBV) Theory**

A resource-based view describes the firm's ability to deliver sustainable competitive advantage of its services that cannot be imitated by competitors, which ultimately creates a competitive barrier (Mahoney and Pandian 1992 & Barney 2001). The RBV explains that for firms to sustain competitive advantage, the resource must be valuable, rare, and inimitable (Kibui, Gachunga, Namusonge, 2014). Human resource competency, value and skills are unique on individual and contribute to sustained competitive advantage of organization because they are difficult to imitate. The salient point of RBV is that a unique Human resource capability of an organization can be instrumental to sustained competitive advantage through development of skills and capacities. According to (Barney et al., 2001) the core premise of the resource-based view is that resources and capabilities can vary significantly across firms, and that these differences can be stable.

### **Self-Concept Theory**

The self-concept theory of career development was developed by Super (1990). The theoretical approach suggested that career choice and development is essentially the process of developing and implementing a person's self-concept. Self-concept according to Super (1990) is a product of complex interactions among a number of factors such as personal experiences, mental growth, environment and physical growth. Individual capacities are developed and maintained through Talent management. Capacities are the basic self-concept of an organization and also of individual potential.

The self concept transforms the organization's vision into goals and aligning the competencies to achieve goals. Super (1990) believed that the degree to which a given individual career development, job performance and competency are successful depends on how the person is able to implement his or her career self-concept. He reiterated that individual's career concept is a product of interaction of the person's personality, interest, experiences, skills, values and the way in which these characteristics are integrated in various life roles.

The study adopted resource based view theory because retention of talented employee is very paramount and employee talent cannot be easily imitated as it serves as competitive advantage and capable of increasing the performance of the organization. We find RBV theory as relevant and useful for this study.

### **Empirical Framework**

Alias, Nor and Hassan (2016). Seek to determine the relationships between talent management practices (managerial support, employee career development, rewards and recognitions), employee engagement, and employee retention within IT organizations in Selangor. The quantitative and a convenience sampling technique was adopted for the study. A total of 581 respondents responded to the questionnaire and which gave an average response rate of 77 %. The findings of Pearson correlation analysis indicate that talent management practices (managerial support, employee

career development, and rewards and recognitions) have positive correlation with employee engagement. It was also revealed that there is positive correlation between employee engagement and employee retention.

Kigo and Gachunga (2016) evaluate the effect of talent management strategies on employee retention in the insurance industry of which 5 companies were sampled. The study was descriptive and the target population constituted 200 Managers. Data was analyzed with the aid of the SPSS package Version 21.0. Using correlation and regression for analysis at 5% level of significance to determine strength and direction of the relationship of the variables under study. The analysis showed that talent acquisition has the strongest positive (Pearson correlation coefficient =.877) influence on employee retention. In addition, talent development, compensation strategies, succession planning are positively correlated to employee retention (.588, .705, .0424 respectively). The study revealed that the management of organization do not plan and manage career path of employees properly. The succession plan strategy employed by the organisation has not improved the willingness of employees to be retained in the organization.

Oladapo (2014) examines the impact of talent management on retention". The research sample included HR personnel from 36 organizations out of the targeted 200 organizations in US with the majority of the respondents located in the Southeast (45.7%) and with the next two largest regions being the northeast (22.9%) and the Midwest (17.1%). The survey respondents included senior HR personnel at the targeted organizations, including HR generalists, managers and directors. Survey questionnaires were used to evaluate the talent management and retention. The findings revealed that job security, compensation, and opportunity for advancement were not found to have predictive value for employee retention rates.

## Material and Methods

This study adopted a descriptive survey design. The primary source of data collection was used with questionnaire administered on the respondents due to quantitative nature of the study.

The population for this study is 750, which comprised of all the EMZOR staff in Lagos metropolis as at October 2017. The population consists of 30 Managerial team, 200 Marketing team, 420 Production team, 40 in the Customer Relations desk and 60 in the Quality Assurance Department. The staff list was obtained from the Head of Operations of each department under strict confidentiality.

The study adopted two (2) sampling techniques which include purposive stratified sampling and simple random techniques. The first stage employed purposive method in accessing data from the Head of Operations of each department. The second stage employed stratification to ensure biasness is removed or is minimized and a fair representation is obtained. This was followed by simple random sampling technique in selecting number of respondents from each department which include Managers, Marketers, Production Staff, Customer Relations Officer and Quality Assurance team. The study was able to gather the responses from 254 employees of EMZOR in the final selection obtainable through the use of the following statistical formula adopted and adapted from Krejcie & Morgan, (1970).

( $P = 50\%$ ,  $d =$  degree of accuracy expressed as a proportion, 0.5).  $N =$  Population size = 750

$X_2 = t$  able value of chi-square at degree of freedom of 1 for 5% confidence level i.e. (0.05 = 3.84)

The Statistical formula is:

$$n = \frac{x^2 NP (1 - P)}{e^2 (N-1) + P(1-p)x^2}$$

$$\frac{3.84 \times 750 \times 0.5 (1 - 0.5)}{0.05 \times 0.05 \times 749 + 0.5 \times 0.5} \quad 3.84$$

$$\frac{720}{1.8725 + 0.96} \quad \frac{720}{2.8325}$$

$$n = 254$$

Data collected were analysed using descriptive statistical techniques that is regression with the aid of statistical package for social sciences (SPSS 23.0 version), to test the hypotheses formulated for the study. Analysis of Variance (ANOVA) was further used to test for the overall significance of the estimated regression.

**H<sub>01</sub>: Learning and Motivation has no significant effect on Employee Retention**  
**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.938 <sup>a</sup>	.880	.879	.32927

a. Predictors: (Constant), Learning, Motivation

To assess the extent of impact of Learning and Motivation on Employee Retention, the multiple linear regression analysis was carried out. The result of the regression model in the table above indicates the value of multiple correlation coefficient R= .938 and the adjusted R- square = .879 gives an idea of how well the model generalizes and ideally the sample is a fair representation of hypothetical population because its value is very close to R<sup>2</sup>. Thus, the effect of Learning and Motivation on Employee Retention is explained by the value of the R-square, which indicates that 88% variation of employee retention is clarified by the increase in Learning and Motivation internally in the workplace.

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	93.707	2	46.854	822.0	.000b
	Residual	12.793	223	.057		
	Total	106.500	225			

a. Dependent Variable: employee retention

b. Predictors: (Constant), Learning, Motivation

The significant value of P (0.000) is smaller than (0.05). This means that the independent variables (Learning & Motivation) are positively related with the dependent variable (Employee Retention). Hence, we posited that there is significant relationship between Employee Retention and Learning & Motivation at 5% level of significance.

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.463	.150		2.034	.002
	Learning	.306	.213	.231	8.179	.000
	Motivation	.632	.034	.650	19.399	.000

a. Dependent Variable:

The beta coefficient of the model in the table above indicates that the beta value of the constant is -0.463 whereas the beta values for the predictor variable (Learning & Motivation) are 0.306 and 0.632 respectively. The t-values and the p-values of .000 indicates the model is significant at  $p < 0.05$ . Therefore, the standardized beta coefficient (0.650 and 0.231) implies Learning and Motivation has a direct impact on Employee Retention. Also if Learning and Motivation were drop i.e. becomes 0, the Employee Retention will reduce by 46.3% as shown by the constant value (-0.463) in the regression table above.

#### Ho<sup>2</sup>: Compensation has no significant impact on Employee Retention in EMZOR Pharmaceutical Industry

##### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.780 <sup>a</sup>	.609	.605	.66994

b. Predictors: (Constant), compensation

To assess the level of relationship between compensation and employee retention (in the form of affective commitment), simple regression analysis was carried out. The result of the regression model in the table shows the value of the regression Coefficient R= .780, R- square = .609 and Adjusted R- square = .605. From the result, the extent of relationship between Compensation and Employee Retention is accounted specifically by the value of the R square. The R- square value denotes 60.9 % of variation in Employee Retention as explained by increase in Compensation by 1.

#### ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	82.339	1	82.339	348.894	.000b
	Residual	52.961	224	.236		
	Total	135.300	225			

a. Dependent Variable: employee retention

b. Predictors: (Constant), compensation

The analysis of variance table (ANOVA) showed regression sum of square value of (82.339) which is higher than the residual sum of square value of (52.961). This implies that the model accounted for most of the variations in the dependent variable. More so, the F calculated value of (183.454) is greater than the tabulated value of (1.96) indicating a significant relationship. In addition, the significant value of P (0.000) is smaller than (0.05) which means that the independent variable (Compensation) is positively related with the dependent variable (Employee Retention) hence, it is posited that there is significant relationship between Compensation and the Employee Retention at 5% level of significance.

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.129	.203		7.532	.000
	Compensation	.785	.051	.780	13.545	.000

a. Dependent Variable: employee retention

The beta coefficient in the table above indicates the beta value of the constant is .129 whereas, the beta value for the compensation is .785. The t- value of 13.545 and the significance level of .000 shows the model is significant at  $p < 0.05$  and therefore, null hypothesis is rejected and the alternative accepted and posited that Compensation has a significant impact on Employee Retention at 5% level of significance. Thus, the constant = -0.129 implies that as the industry failed to address the problem of no regular compensation, there is possibility of having a reduced 12.9% in employee retention.

## Results and Debate

Globalization has changed the manner of operation in most sectors such as the EMZOR Pharmaceutical Industry used in this case study. The result of the findings in hypothesis 1 indicates that Learning and Motivation are two critical elements of talent management that have direct impact on Employee Retention at 5% level of significance. Motivation and job satisfaction should not be in monetary alone but also through the adoption of other incentives mechanism in a bid to reduce labour turnover. The result of hypothesis 1 aligned with the findings of Kataike (2013) and Tiwari & Shrivastava (2013) in their studies revealed that age of employees is independent on job satisfaction but the learning (re-training) & motivation of employees do affect job satisfaction with the practices of talent management. Hypothesis 2 furthermore implies that compensation has a significant effect on employee retention at 95% confidence level. A good reward system should be embraced. Promotion should be approached with transparency and objectivity. Uniform performance evaluation should be adopted without partiality. Good performance should be rewarded and poor or non-performance should be sanctioned. The results of hypothesis 2 in this study is not in agreement with Oladapo (2014) who revealed that job security, compensation, and opportunity for advancement were not found to have predictive value on employee retention rates.

## Conclusion

This paper examines the impact of talent management on employee retention in the Pharmaceutical Industry, Lagos. Organizations hardly survive if the top performers quit. Organisation needs employees who are loyal, committed and dedicated in order to achieve the organization's objectives. It is essential on corporate leaders to work closely with senior management in organization to attract, hire, develop, and retain talented employees. The study concluded that learning, motivation and compensation have significant effect on employee retention in EMZOR Pharmaceutical Industry.

In light of the findings of the study, the following are hereby recommended:

1. That in the present era, managers should be proactive and respond to the inevitability of change. Furthermore, if organisational goals are to be achieved, there is need for learning and motivation of employees through training and developmental programmes that will enhance talent retention to meet both organizational and customers' needs.
2. A good compensation practice should be embraced. Promotion should be approached with transparency and objectivity. Uniform performance evaluation should be adopted without partiality. Compensation system should be designed to motivate the employees to show dedication and loyalty to duty. Compensation and rewards mechanism such as the "employee of the month award" amongst others will help in motivating employees towards better performance and retention in the organization.

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## TOURISM-VOLUNTEERING AND SPORT - CONNECTIONS AND IMPLICATIONS FROM A RESEARCH

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### Abstract

Volunteer tourism is the combination of leisure travel and voluntary work. It has a growing significance and the tourism motivation and spending of volunteers has an impact on the tourism sector. Our research aimed to examine the motivational background of volunteer work. It was our objective to find out how Hungarian and foreign students are proportionally represented in volunteer work and also, what areas they choose in sport for volunteering and out of what type of motivations. The sample of 371 young adults was analysed using SPSS software. Besides descriptive statistics Chi2 values were calculated. 78,4% of respondents, have already done volunteer work. 96,2% of the latter subsample have been involved in volunteer work in a sporting event. Tourism-related motivation is dominant in the motivational makeup of volunteers. Main motivations were: having fun, love of sport, teamwork, work experience.

**Keywords:** *volunteer tourism, volunteer work, sport volunteering, sporting event, motivation*

**JEL Classification:** Z220, Z290, I230

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### Introduction

Growing demand seems to prove the role and significance of mega sporting events. (Borbély – Müller 2015). The role of the Olympics, World Cup and European Championship is gaining importance in tourism too. The sporting events of an outstanding prestige add to the tourism demand of a country and this growing demand gives a boost to the whole of the country's economy.

The 2016 Rio Olympic Games was a great challenge: more than 200 nations, 10,500 Olympic athletes, 4,500 paralympic athletes, 28 Olympic sports, 22 Paralympic sports, more than 100 thousand people directly involved in the organization of the Games, more than 30 thousand media professionals and about 100 thousand volunteers (UVINA, 2018). The high level of tourism resulted in an influx of business

into Rio de Janeiro as the “434,000 foreign visitors spent about 617.24 million \$ during the Olympic Games” (Bremer, 2016).

It is not only the high number of tourists that generate increased tourism demand to be taken into account by the organising country, but also the athletes, accompanying people and volunteers.

The number of volunteers is marked at the various mega sporting events. 47,000 volunteers in Sydney, 100,000 volunteers in Beijing, half of whom were from abroad. 70,000 volunteers worked in London involved in the games, while in Rio, 100,000 volunteers participated. Interest about the new countries and culture as forms of tourism motivation is present in the motivational makeup of volunteers (Kim et al., 2018).

Volunteering has become an important part of the tourism and leisure sector as volunteers travel to the site of volunteering as a growing trend (Guttentag, 2009; Giannoulakis et al., 2009; Kim et al., 2018). Several studies deal with the tourism motivation of volunteers (Elliott, 2008) and the economic effects of their spending. 1.6 million people join and participate in various volunteer tourism projects every year spending 832 million-1.3 billion £ a year, equivalent to 1.5-2.3 billion \$ (Tourism Research & Marketing, 2008).

The role and significance of volunteering have been highlighted by surveys showing that around 92-94 million people in the EU, accounting for 22-23% (Volunteering In The European Union, 2010) of the Union's population of over fifteens, do volunteer work. Individual country surveys show a lower participation rate. There are some Member States, such as Austria, the Netherlands, Sweden or the United Kingdom, where a remarkably high proportion of the population, more than 40% of people do some form of volunteer work. High percentage, 30-39% of Danish, German, Finnish and Luxembourg adults participate in volunteering. 20 to 29% of Estonians, the French and Lithuanians, 10-19% of Belgians, Cypriots, Czechs and Irish, Maltese and Poles, Portuguese, Slovaks, Romanians, Slovenes and Spaniards volunteer. The lowest participation rate, less than 10%, can be observed in Bulgaria, Greece, Italy, Lithuania or Hungary.

High percentage of the adult population volunteering in sport can be observed in Finland (16%), Ireland (15%), the Netherlands (12-14%), Denmark (11%), Germany (10.9%) and Malta (9.2%). On the other hand, sports volunteering seems to be a less common practice in Estonia (1.1%), Greece (0.5%), Lithuania (0.1%), Latvia and Romania (less than 0.1%).

As for gender proportions, it is either a higher proportion of men (11 countries) or an equal proportion of men and women (9 countries). Male dominance in volunteering in many countries can be attributed to the fact that sport, accounting for the largest proportion of volunteers, attracts more men than women.

The concept of volunteering varies in the literature as volunteers take part in different activities and work in different organizations and areas. Historical aspects of volunteering have been evolving differently in the various cultural, social and political contexts (Burns, 2000; Costa et. al., 2006). Consequently, several different definitions of the concept of volunteering have been created (Handy et al., 2000; Merrill, 2006; Tuan, 2005).

All definitions attempt to capture the most important characteristics of volunteering. According to Liling (2001) volunteer work has the following attributes:

- personal drive, done out of free will and decision, based on individual choice;
- free from financial interest, activity done free of charge;
- it benefits those in need of support, the volunteers and the society at large.

Among its main characteristics is personal drive or motivation and its voluntary nature. Being free from financial interests means that there are no egoistic motivations. This latter, however, is only partly true as sometimes there indeed are egoistic motives such as gaining experience, learning, career-related personal motivations (Strigas et. al., 2003; Fairley et. al. 2007; Show, 2009; Benson et.al. 2013; Markos, 2016a; Bocsi et. al., 2017).

Volunteers do not constitute a homogenous group because they might considerably differ in age, area of volunteering, skills, competencies and motivations (Twynam et. al., 2002; Ki – Cuskelly, 2017). However, they all seem to the two common features of “giving their time” and working without being paid and forced (Liling, 2001).

As the tourism sector keeps growing (Darabos, 2015, Čulková and Weiss, 2016; Chreneková, 2016; Kajzar, 2018; Mura and Ključnikov, 2018), along with the growth in travel motivation and the number of tourist arrivals, travel motivations can be observed among the motivation of volunteers. Traveling to sporting events, getting to know new cultures and landscapes are also attractive motives for many volunteers (Jarvis and Blanc, 2011; Fairley et. al., 2007).

The social and economic benefits of volunteering are undisputable. As voluntary work creates an opportunity for active social participation, people taking part in it develop positive competencies such as ability to initiate and carry out action, interpersonal flexibility. These are core values of community development projects. In the course of voluntary work positive personality traits such as responsibility, civic commitment, trust, helping others, reciprocity, and solidarity. Experience gained from volunteering can be a positive asset on the labour market as it can improve individual competitiveness (Albert, 2003).

Besides its social benefits volunteer work is a greatly significant economic resource. An English study published in 2003 calls attention to the economic role of sport volunteering (Sport England, 2003). Sport volunteers are extremely important resources of sport in England. The study reports that there were 5,821,400 registered volunteers which is 15% of the adult population. They spent 1,2 billion hours doing volunteer work in sport which equals 720 thousand paid full time employees. Worth of work done by sport volunteers was estimated to add up to as much as 14 billion pounds. These people participated in the running and maintenance of 106,400 sports clubs in England. 26% mentioned sport as their main area of interest.

Volunteer work's contribution to the GDP is estimated to be 5% but considered to be much higher (14%) by those involved in the Hungarian survey (N=1000) (Géczi et. al., 2014).

## Material and Methods

The main focus of our research was the examination of the motivational background of volunteer work among young adults. It was our objective to find out how Hungarian and foreign (English, Russian, Slovakian) students are proportionally represented in volunteer work and also, what areas they choose in sport for volunteering and out of what type of motivations. Both open and closed questions were used in the questionnaire.

The questionnaire was created in Hungarian, English and Russian. We compiled the questionnaire to obtain answers for the 4 W-s (What, Where, Why, Who) as it was explained in Bussell-Forbes (2002). The target audience (Who) was the

international sample of university students completing the questionnaire. Questions were designed to gather information about the students' motivations, the areas of sport volunteering and the specific tasks they were entrusted with. Questionnaires were completed by Hungarian, Slovakian, English and Russian university students. The sample of 371 young adults was analysed using SPSS statistical software. Besides descriptive statistics (mean, median, modus, standard deviation) Chi square values were calculated.

### Introducing the sample

The questionnaire was completed by 371 students. 31.3% of respondents (116 persons) were men, 68.7% (255 persons) were women, respectively. The average age of respondents was 23.93 years ( $Sd = 9.4$ ). 3.8% of respondents (14 persons) had graduated from primary school, 61.7% (229 persons) from secondary school and 34.5% (128) had university or college degrees. 68.7% of the respondents were female (255 persons) and 31.3% were male (116 persons). 50.4% of respondents (187 people) were from Hungary, 49.6% (184 people) from abroad (America, England, Slovakia, Russia). 20.5% (76) lived in a village, 73% (271 persons) in a town and 6.4% (24 persons) in the capital.

13.7% of respondents (51 persons) do sport occasionally, 65% (241 persons) regularly, while 21.3% (79 people) did not sport at all. The proportion of students doing sport in the sample was high, as 68% of respondents said that they occasionally or regularly did sport, which ensured an overall positive attitude to sport in the sample.

## Results and Debate

### Results of descriptive statistics

78.4% of respondents (291 persons) said they had already worked as a volunteer before. Respondents spend an average of 5.35 hours a month doing voluntary work. This result in support of earlier findings of Géczi and his colleagues (2014) because in their representative sample volunteers spent less than 5 hours a month doing volunteer work.

Of the respondents doing voluntary work, 96.2% (280 persons) have already done voluntary work at a sporting event.

We gathered information about areas of sport volunteering. Response options were organizing a sporting event, organizational tasks in a sports club or participating in coaching tasks. Respondents were allowed to mark more than one category.

Table 1 Areas of sport volunteering

In what area do you do sport volunteering?	%	Persons
Organizing sporting event	79,3	222
Organizational tasks in a sports club	21,7	61
Coaching tasks in a sports club	16,0	45

Sources: Own research, 2018

79,3% of the sample (222 persons) participated in organizing a sporting event, 21,7% was involved in organizational tasks at sports clubs and 16% (45 persons) participated in coaching tasks at clubs. We found that because of the sporty lifestyle and positive attitude to sport volunteers participated in tasks in several different areas of sport volunteering. Most respondents have had experience in organizing sporting events.

We wanted to find out in what sports the volunteers has gained this experience. Again, they were given multiple choice options.

Table 2 Voluntary work at sporting events by sport categories

Sport categories	Participated (%)	Participated (person)
Water sports	44,2	124
Athletics	23,2	65
Winter sports	22,5	63
Ball games	21,8	61
Other sporting events	7,5	21
Combat sports	2,8	8
Gymnastics	2,5	7
Dance-music-fitness training	0,7	2

Sources: Own research, 2018

44.2% of the sample gained experience in water sports, 23.2% in athletics, 22.5% in winter sports, 21.8% in ball games, 2.8% in combat sports, 2.5% in gymnastics, 0.5% of them in the field of dance-music-fitness training and 7.5% in other sporting events.

We also asked about the areas in which they would like to do voluntary work. The results are shown in Table 3. below. Most of the respondents, 67.7% of the respondents marked competitive sport. In the second place, recreational sports were chosen by 48.5% of respondents. School sports were quite popular with 42% of respondents marking them. This result is probably due to the young age of the respondents.

Table 3 Willingness to do sport volunteering in different areas

In which area would you be willing to do volunteering?	%	Person
Competitive sport	67,6	251
Leisure sport	48,5	180
School sports	55,7	156
University/college sports	42	113
Sport for the disabled	15,6	58
Sport for the elderly	13,5	50
Other	2,4	9

Sources: Own research, 2018

In order to obtain more comprehensive results students doing and not doing voluntary work were both asked in which area they would be willing to do volunteering.

As anticipated, competitive sport proved to be the most popular (67,6%, 251 persons), probably owing to its massive publicity and popularity. Sponsorship is also focused on competitive sports because it can generate more publicity for both the sponsor and the sport (Nagyová, 2016). Due to its wide fan base, it is not surprising that the second most popular area was “leisure sport”, as this area is also popular among volunteers (Holmes et al., 2010). In Géczi et al.’s (2014) willingness survey leisure sport was mentioned most (85%) followed by school sports (64%). The popularity of “school sports” and “university/college sports” in our research can be explained by the fact that our questionnaire was mostly completed by young adults. In the research of Markos (2016b), which examined the popular volunteering work area among secondary school students of Nyíregyháza it was found that the majority of students selected the leisure sport (63.6%) organized for different target groups. Sport for the disabled or the elderly received much fewer mentions, which can be explained by the fact that these areas in sports broadcasts appear significantly less compared to the hours of broadcast time of sporting events for normal athletes.

Table 4 Areas of voluntary work at sporting events

Areas	%	Person
Organization and Marketing	63,2	177
Communication	52,5	147
Assistant	51,4	144
Media	25,4	71
International Relations and Diplomacy	18,9	53
Informatics and Web Design	7,9	22
Finance	7,1	20

Sources: Own research, 2018

75.41% of the 371 people who completed the questionnaire (280 persons) have already worked as volunteers at a sporting event. Of them than half (63.2%, 177 persons) carried out tasks in the field of “Organization and Marketing”. The “Communication” and “Assistant” positions also proved to be popular. The former was marked by 52.4%, the latter by 51.4% of the respondents.

However, there is a considerable drop in numbers in the field of “Media”. Only 25.4% of respondents (71 persons) worked in the Media. It is most probable due to the specificity of the sector. Proper completion of the tasks of the area require skilled professionals. The same can be said about the categories of “International Relations and Diplomacy” and “Finance”. “Informatics and Web Design” was chosen by only 22 students out of the 280 volunteers. Here, too, the need for expertise exists, and another reason for the “unpopularity” of the category is that it is relatively young and developing.



Table 5 Motivations of voluntary work (On a 7-point scale, 1= not typical, 7= most typical)

	Mean	Standard deviation	Median	Mode
Good atmosphere	5,79	1,49	6,00	7,00
"I love sport"	5,74	1,71	6,00	7,00
Teamwork	5,57	1,58	6,00	7,00
Tourism	5,56	1,69	6,00	7,00
Work experience	5,54	1,72	6,00	7,00
Building connections	5,49	1,68	6,00	7,00
Learning, gaining experience	5,48	1,69	6,00	7,00
Trying out different jobs	5,21	1,72	6,00	7,00
Specialized knowledge	5,13	1,87	6,00	7,00
Professional experience	5,09	1,88	6,00	7,00
Charity, public roles	4,88	1,85	5,00	7,00
Community work	4,86	1,91	5,00	6,00
Career perspective	4,81	1,94	5,00	7,00
Language learning	4,61	2,08	5,00	6,00

Sources: Own research, 2018

To examine the motivational background of sport volunteering we designed a 7-point Likert type scale where 1 meant a motivation least typical and 7 the most typical of the person. table 5. shows mean values, standard deviation, median and modus of the different categories.

We created 13 statements covering areas creating value for the volunteer (language learning, gaining experience etc.), areas creating value for market presence (specialized knowledge, professional experience, building connections etc.) and motivations creating value for society (charity, public roles, community work etc.).

Keys to successful volunteer management are attracting prospective volunteers, winning their loyalty to make them return to us. All that said, it came as no surprise that the motivation receiving the highest mean value was good atmosphere, which proves how important it is for volunteers to work in pleasant circumstances.

The second highest value (5,74) was given to the statement "I like sport". This result reflects how much a positive relationship with sport impacts volunteers' willingness to do volunteering in the area of sport.

We found that tourism-related motivation was quite significant (M=5,56) among volunteering youth. Our findings are supported by earlier research highlighting that a considerable part of volunteers, besides the desire to help, getting to know new cultures is in a central position in their motivational makeup. They also generate significant demand in the tourism sector. (Kim et. al. 2018).

It is somewhat surprising that while egoistic motivations (work experience, building connections, developing professional knowledge etc.) were scored the highest values, charity, public roles, community work received lower scores.

## Results of correlation tests

We compared data from Hungarian respondents with that of responses from of students from other countries. Our questions focused on volunteering especially aspects of sport volunteering. From the data collected we aimed to examine preferences and characteristics of Hungarian and international volunteers.

From the 371 questionnaires received, we found that 78.6% (147 persons) of respondents living in Hungary and 78.3% (144 persons) living abroad have already worked as volunteers. The two groups showed no statistically significant difference. On average 5,3598 hours a month were spent volunteering (Sd= 12.539).

Table 6 *Sporting habits of volunteers*

Do you do sports regularly?	Foreign % (person)	Hungarians % (person)	Total % (person)
Yes, I do.	67,9 (125)	62 (116)	65 (241)
Yes, occasionally.	1,6 (3)	25,7 (48)	13,7 (51)
No, I don't.	30,4 (56)	12,3 (23)	21,3 (79)

Sources: Own research, 2018

The sporting habits were described in the following way by respondents completing the questionnaires. 65% said they did sports regularly. Out of them 48.1% were Hungarians and 51.8% foreign. However, differences can be observed in the proportions of the following two responses. Most of those who said they occasionally do sport are Hungarians (94.1%). 70.1% of those who do not do sport at all are foreigners. Sport volunteering compared to volunteering in general showed a moderately significant difference ( $p=0,040$ ). 80,2 % of respondents living in Hungary and 70,7 % of those living abroad reported to have done sport volunteering. Contrary to the European Union survey finding very few volunteers (Volunteering In The European Union, 2010), our results show a really high value (80,2%). It can be attributed to the fact that the respondents are young adults who had been obliged, after the introduction of a new law, to do 50 hours of community work as a pre-condition of being allowed to take the final exam.

We also examined sport volunteering by sport categories taking into account the nationality of respondents.

Table 7 *Sport volunteering by sport categories and nationalities*

Sport categories	Foreign % (person)	Hungarians % (person)	P	%	Total (person)
Water sports	30,4 (56)	36,4 (68)	0,271	44,2	124
Athletics	20,7 (38)	14,4 (27)	0,133	23,2	65
Winter sports	34,2 (63)	0 (0)	0,000	22,5	63
Ball games	4,3 (8)	28,3 (53)	0,000	21,8	61
Others	3,8 (7)	7,5 (14)	0,177	7,5	21
Combat sports	0,5 (1)	3,7 (7)	0,067	2,8	8
Gymnastics	1,1 (2)	2,7 (5)	0,449	2,5	7
Dance, fitness	0 (0)	1,1 (2)	0,449	0,7	2

Sources: Own research, 2018

Comparing the answers of Hungarian and foreign students, that is, results of work experience in different sport categories, the Chi square test resulted in significant differences ( $p=0,05$ ) between the sport categories of winter sports and ball games. While in Hungary, Water sports (36.4%), Ball games (28.3%) and Athletics (14.4%) were found to be the 3 most popular sports, among foreigners Winter sports (34.2%), Water sports (30.4%) and Athletics (20.7%) were in the top 3.

Although, in aggregate "Winter sports" received the third most votes, the fact that all 63 students are foreigners, is statistically significant. The obvious reason for this is that owing to the country's geographical make-up winter sport services are scarce in Hungary and we cannot organize international winter sporting events. (Borbély – Müller, 2015)

The category of Ball games also shows significant differences as it was found to be the second most popular among Hungarians whereas among foreigners there were 8 students (4,3%) who did volunteering in this area. High volunteering participation in Ball games in Hungary can be explained by the sports' popularity, the fact that a lot of people pursue them and also that the six spectacular team sports (handball, football, basketball, volleyball, water polo, ice hockey) have, through the TAO system, extra governmental support (András, 2014; Bács – Bácsné, 2014).

Table 8 Areas of volunteering by nationality

Areas	Foreign % (person)	Hungarians % (person)	p	%	Total
Organizing sporting event	55,4 (102)	64,2 (120)	0,091	79,3	222
Organizational tasks in sports clubs	21,2 (39)	11,8 (22)	0,017	21,7	61
Coaching tasks in a sports club	13,6 (25)	10,7 (20)	0,429	16	45

Sources: Own research, 2018

Out of the three sport volunteering areas significant difference was found in the area of Organizational tasks in sports clubs. In this area 27,8% more foreign students (17 persons) did volunteering than Hungarian students at a significance level of  $p=0,05$ .

Table 9 Willingness to work in different areas of sport volunteering by nationality

Sport categories	Foreign % (person)	Hungarians % (person)	p	%	Total % (person)
Competitive sport	53,3 (98)	81,8 (153)	0,000	67,7	251
Leisure sport	44 (81)	52,9 (99)	0,097	48,5	180
School sports	46,2 (85)	38 (71)	0,116	42	156
University/college sports	26,1 (48)	34,8 (65)	0,072	30,5	113
Sport for disabled	16,8 (31)	14,4 (27)	0,569	15,6	58
Sport for elderly	13,6 (25)	13,4 (25)	1,000	13,5	50
Other	3,8 (7)	1,1 (2)	0,103	2,4	9

Sources: Own research, 2018

Examining sport volunteering in different areas the only significant difference between Hungarian and foreign students was found in the area of competitive sport ( $p=0,05$ ). While 81,8% of Hungarians were willing to do volunteering in this area among foreign students it was only 53,3%. Differences in other areas weren't statistically significant.

*Table 10 Areas of volunteering in a sporting event by nationality*

	Foreign % (person)	Hungarians % (person)	p	%	Total
Organization and Marketing	34,2 (63)	61 (114)	0,000	63,2	177
Communication	45,7 (84)	33,7 (63)	0,020	52,5	147
Assistant	36,4 (67)	41,2 (77)	0,394	51,4	144
Media	22,8 (42)	15,5 (29)	0,086	25,3	71
International Relations and Diplomacy	15,8 (29)	12,8 (24)	0,460	18,9	53
Informatics and Web Design	6,5 (12)	5,3 (10)	0,666	7,9	22
Finance	6,5 (12)	4,3 (8)	0,367	7,1	20

*Sources: Own research, 2018*

The different areas volunteers worked in were also examined. Most Hungarian and foreign respondents indicated that they were involved in either Organization, Marketing, Assistant tasks and Communication.

There is a marked difference in the areas of organizing and marketing between Hungarians and students of other countries ( $p=0,05$ ) as twice as much Hungarians worked in these areas as foreign students. However, in the area of communication significantly ( $p=0,05$ ) more foreign students worked than Hungarians.

No significant difference was found between Hungarians and foreign students in the areas of Media, International relations and diplomacy, IT and web design.

## Conclusion

The percentage of young people who have already participated in voluntary work and have experience in this area is very high. 78.4% of respondents have already worked as volunteers. This figure is higher than those in the EU survey (Volunteering In The European Union, 2010). In many cases, as in Hungary, secondary school students are required to do voluntary work as a prerequisite for graduation exams and it has also become part of some university degree programs, even carrying credits.

96.2% of the sample (280 persons) have already volunteered at a sporting event, which shows that sport is a high priority area for volunteering. 67.5% of the respondents expressed willingness to work in competitive sport, while 48.5% indicated leisure sport as the area where they would be willing to volunteer.

In the motivational background of young volunteer workers, good atmosphere, love of sport, teamwork, work experience and career perspective were the most dominant motivations. It is not surprising, as volunteering and the experience

gained by it contribute to the development of the civil society, helps young people to remain sensitive to social problems and teaches them how they can defend their interests and values. As a result of practical experience, they can deepen their factual knowledge, establish new relationships with people of different cultural backgrounds, acquire professional knowledge and thus develop a sense of civic responsibility. The experience gained by volunteering can help the new entrants to the labour market and also those already in the market to improve their competitiveness. Voluntary work enhances personal development, it assists in the development of skills and practical experience and helps to build and improve social responsibility. Volunteering is an asset both for the individual and the society because in addition to encouraging solidarity and a helpful attitude, its economic benefits are not negligible either.

Volunteer tourism has a growing significance as supported by seconder research and our empirical findings where tourism motivation appears to be dominant in the motivational makeup of young volunteers.

### Acknowledgement

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## EXAMINATION OF ADVENTURE PARK CONSUMERS IN TERMS OF MOTIVATIONS AND AMOUNT OF LEISURE TIME

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### Abstract

In our cell phone-ruled world characterised by sitting lifestyle, a compulsion for performance and many times the unfulfilled desire for leisure time, high quality leisure is gaining growing significance. Typical notions associated with leisure today are experience and nature. Adventure and theme parks that are able to satisfy such recreational needs of the modern customer worldwide report a growing number of tourists and turnover. In our primary research quantitative methods of using questionnaires was chosen for data collection (N=408). To the centre of our research we set the motivation of the adventure park visit and the amount of leisure and leisure time available.

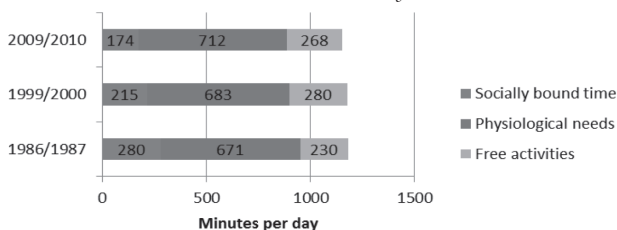
**Key words:** recreation, adventure park, quality leisure, consumer behaviour, active tourism

**JEL Classification:** Z20, Z39, Z300

### Introduction

Time-scale surveys focusing on leisure time content show that in 2009/2010 the 15-74 age group spent approximately half of its leisure time satisfying physiological needs, one third of it meeting social commitments and only one fifth was dedicated to free leisure time activities (Chart 1.). (KSH 2013)

Chart 1 Average daily time use of 15-74 aged population in Hungary according to three time-scale surveys



Source: Based on KSH 2013, 3. o. own editing

A recently done time-scale survey has also revealed that an adult has a daily average of four and a half hours of leisure time, the biggest part of which is spent watching Tv. Less than 16% do sport or some form of physical exercise. Time spent doing sport and exercise has decreased from 19 minutes per day in 1999/2000 to 15 minutes in 2009/2010. (Statistikai Tükör 2011)

In a survey published in 2014 Hungarians aged 16 or above rated the available leisure time 6,33 on a 0-10 scale. 33,5% of them, mainly students and retired people, was perfectly satisfied with leisure time available for them. (KSH 2014)

Among the leisure time activities being close to nature and having experiences related to nature are increasingly significant. Nature values time spent close to and in nature is gaining growing importance in almost all areas of life. There are research findings that provide evidence for the role of natural values and the medically beneficial aspects of nature in health care. (Müller et. al. 2011, Müller et. al. 2018a, 2018b, 2018c, Müller et. al. 2018d)

Some researchers identify the importance of greenery in bath facilities in health tourism as a factor influencing tourists' motivation. (Könyves et. al. 2005, Barta et. al. 2011; Mura & Ključnikov, 2018) Also, the concept of wellness incorporates the utilization of natural values, besides built one, in the overall experience. (Müller et. al. 2005, Kerényi et. al. 2009) In physical education we can see a growing significance of nature sports. (Herpainé et. al. 2017a, Müller 2017, Dobay 2014, Czeglédi 2018) Theme parks and adventure parks also focus on supply elements based on natural values. (Boda et. al. 2018)

### **Trends in leisure time spending behaviour of adventure park visitors**

As our sample of adventure park visitors dominantly consists of young adults, before examining their motivations let us analyse some earlier research findings focusing on leisure motivations and leisure time spending.

Murányi examined leisure time activities of university students (N=1570). (2010) He found that students prefer individual and passive activities such as using the internet, listening to music, watching Tv or videos.

Szabó had the same results with university students in Budapest as their leisure preferences included listening to music, reading the news and watching Tv as in the case of university students in Debrecen. (2006)

The survey done among university students in Budapest report that using the computer, doing sports or participating in a sporting event are more dominant activities in the leisure preferences system of male students, while female students tend to opt for cultural activities such as going to classical music concerts, going to the cinema or the theatre. In terms of sporting motivation Szabó found that respondents do sport to relax and have fun (76,6%), to stay healthy (75%), to keep fit (71,8%), to enjoy the activity (70,9%) and to build a nice-looking body (67,5%). (2006)

Fitness, health, having fun and creation of a nice-looking body were typical motivations among women while men were motivated to do sport for relaxation, health and having fun and being together with friends.

Surveys carried out among students of research universities show that the main motivation for regular exercise is the desire to stay healthy with female students emphasizing keeping in shape and relaxation and male students letting off stress. (Pfau 2014, 2015, 2016)

Czabai et al. examined factors motivating for sport in their research done in connection with students' health status, lifestyle and sporting habits. (2007) They found

that 53% do sport out of self-motivation, 10% is motivated by friends, 4% by the coach, 3-3% by parents or PE teacher, 1 % by siblings and 0-0% is motivated by teachers and doctors. The 53% doing sport out of self-motivation can be viewed as positive result as they are likely to keep this habit all through their lives.

Examining travel motivations is important because it helps to understand tourist behaviour and trends in tourism demand and also to make predictions about purchasing decisions. (Huang – Hsu 2009)

Hsu and Huang broke socio-psychological motivation into 7 elements: escape from everydayness, relaxation, search for real self/self-discovery, prestige, emphasis on relatives, social interaction and regression. Cultural motivation is further separated into new experience and education related factors. (2008) Another approach to electoral motivation was studied by Kim et al (2006) who called this push and pull motivation. The tourist area its unique character, in itself, has a stimulating effect on tourism demand: this is pull-type motivation while the push-type motivation is when the guest staying on the area and looking for the attraction due to his own internal needs.

Several studies examine the income conditions of households and conclude that discretionary income has an impact on travelling in general and on demand for theme parks specifically. (SCP 2004, Garin-Munos 2007, Schubert et. al. 2011)

### Research on tourism services

Destination choice of tourists, including theme parks, is strongly influenced by relative price (ratio of price and services) of tourism services. (Kusnia et. al. 2013, Saayman – Saayman 2008, Braun – Soskin 2003, Kemperman 2000, Price 2003, Swarbrooke 2002) Song et al. examined the impact of the crisis on the tourism of Hong-Kong. (2010)

They highlighted that besides the level of discretionary income and relative price, the relative price level of competing destinations is also important. Darabos calls attention to the fact that in addition to price, income levels and economic outlook, it is increasingly the quality and not the quantity that is important to tourists. (2015) They also underline the importance of correct and detailed information provided in connection with tourism products.

There are researches that emphasize the role of marketing in increasing turnover. (Price 2003, Clave' 2007, Cornelis 2010, Bácsné 2014a, 2014b)

Within marketing research several studies emphasize the importance of branding and creating a unique image, which can be a key factor to the success of theme parks too. (Li – Zhu 2003, Huang 2009, Sun – Wang 2010)

Darabos and Könyves emphasize the role of technology. (2015) On the one hand, the internet is essential in organizing supply of tourism products and it is the primary source of travel information. On the other hand, air travel plays a major role in the development of the global economy and greatly contributes to the growth of international tourism.

Other studies point out that weather conditions (Kemperman 2000, NRIT 2005) or even weekends, long weekends, public holidays and periods of relaxation (Corning – Levy 2002, Goulding 2003) also have an impact on the turnover of theme parks.

Customer satisfaction impacts the number of visitors through WMO marketing and the willingness to return. WMO marketing is the primary source of information for other tourists. (Liang 2009, Zhang et. al 2012, Ráthonyi 2013, Ráthonyi et. al. 2016)

Satisfaction level of tourists is affected by the experienced quality which can increase the number of returning guests. (Lees-Miller et. al. 2009, Bácsné et. al. 2018)

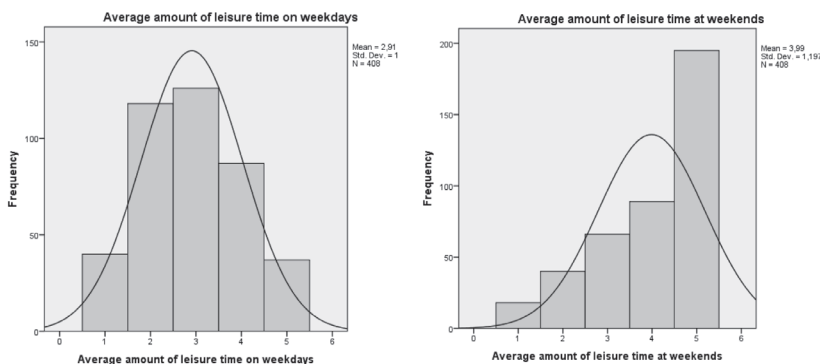
## Material and Methods

In our primary research quantitative methods of using questionnaires was chosen for data collection. The survey was conducted between September and December 2017. During this time 408 assessable questionnaires were returned. While doing the compilation of the questionnaire, we sought to obtain a broad and complex picture of the consumers' behaviour and leisure time habits. Data was analysed using SPSS 22.0. The analysis involved descriptive statistics and in the cross-table analysis we aimed to find significant differences with the Chi<sup>2</sup> test. In the case of thematic and adventure parks, it is a very important why the consumer visits the facility, that is, what motivates the choice of programs. In the center of our survey, we set the motivation for an adventure park visit and the amount of weekday-leisure and leisure time available at weekends. Our main goal is to find a relationship between the amount of available leisure time and the motivation to visit. Whether as a supplement or as an independent program, visiting an adventure park in most cases involves travelling around, as adventure parks cannot be found in each settlement at national level. Consequently, we assumed that those who have more time at the weekend will have a preference for these products.

## Results and Debate

In our sample of 408 respondents there were 190 (46.6%) men and 218 (53.4%) women, with 83.8% of respondents aged 30 or under. 30.9% of respondents have 2-3 hours of free time on weekdays, which goes up to 4-5 hours at the weekend for the majority of respondents. (2-3. charts)

*Chart 2 and 3 Average amount of leisure time on weekdays and at weekends*



Source: own research

More than half of the respondents (51%, 208 people) visit adventure parks less frequently than once a year, 21.6% (88 respondents) make yearly visits, while 14.2% (58) have been in an adventure park only once before. For the majority the visit itself was a secondary program (59.1%, 241 persons) supplementing the main goal of the journey, while 40.9% (167 people) visited the destination exclusively to use the services of the adventure park. Most of them travelled with their families (43.4%, 177 people) and most of them made a visit in the summer and at the weekend (70.6%, 288). More than 35% of the respondents in the sample, according to their reasons, tend to spend their leisure time in an active way, and describe their leisure time as youthful, modern, active, innovative and involving athletic qualities. The entertainment quality of the services was chosen as the most common motivation for visiting the adventure park for the majority of the respondents (44.4%, 181 persons).

In our questionnaire, we identified six types of motivational factors corresponding to the range of services offered by the adventure parks. The fun-feature motivates the most adventure park visitors accounting for by 44.4% of respondents. This result supports leisure, sports, fitness, wellness and tourism trends that confirm or predict the importance of entertainment. (Müller 2009, Szabó 2006, Bodnár 2008, Müller et. al. 2013, Milman et. al 2012, Müller et. al. 2017, Herpainé Lakó et. al. 2017b) The most adventure park-specific statement was "Visit for challenge and extremity", which was the second most popular motivation among respondents (31.6% of the sample, that is, 129 respondents), while the most popular response of visiting for the fun-features of the activity was given by 181 people, representing 44.4% of the sample. 20.1% of the visits were motivated by the proximity of nature. The rising importance of natural values in tourism has been proved by several studies. (Könyves – Müller 2001, Várhelyi et. al. 2009, Bíró 2017) In Table 1. we marked in bold the motivations that showed a significant difference in terms of the main focus of the study.

Table 1 Motivation of adventure park visitors

Motivation level/ Motivation	Not typical (marked by 1) person and %	Slightly typical (marked by 2) person and %	Somewhat typical (marked by 3) person and %	Typical (marked by 4) person and %	Very typical (marked by 5) person and %
<b>Considers it a trendy, new type of entertainment</b>	<b>61 people; 15%</b>	<b>28 people; 6,9%</b>	<b>115 people; 28,2%</b>	<b>109 people; 26,7%</b>	<b>95 people; 23,3%</b>
For challenges and extremity	44 people; 10,8%	38 people; 9,3%	80 people; 19,6%	117 people; 28,7%	129 people; 31,6%
<b>For closeness of nature</b>	<b>56 people; 13,7%</b>	<b>50 people; 12,3%</b>	<b>109 people; 26,7%</b>	<b>111 people; 27,2%</b>	<b>82 people; 20,1%</b>
For team building	81 people; 19,9%	53 people; 13%	88 people; 21,6%	106 people; 26%	80 people; 19,6%
<b>Out of curiosity</b>	<b>34 people; 8,3%</b>	<b>29 people; 7,1%</b>	<b>90 people; 22,1%</b>	<b>138 people; 33,8%</b>	<b>117 people; 28,7%</b>
<b>For its entertainment value</b>	<b>72 people; 17,6%</b>	<b>7 people; 1,7%</b>	<b>48 people; 11,8%</b>	<b>100 people; 24,5%</b>	<b>181 people; 44,4%</b>

Source: own research

Our first motivation was “Considers it a trendy, new type of entertainment”. Tourists are typically looking for a place for their destination where something new is waiting for them, it is the “we’ve never been here before”-feeling. (Mohamad - Mohd 2012) Only a small part of the sample (95 people, 23,3%) thought it was typical for them, however, we found a significant difference in weekday and weekend figure. Newness and trends as motivations were characteristic of those respondents with at least 2-3 hours leisure time per day,  $\chi^2$  (30,464<sup>a</sup>),  $p=0.016$ . (Table 2.)

Table 2 Crossable of the motivation for “New and trendy form of entertainment” and the average weekday leisure time

Chosen because it is a trendy, new type of entertainment	Average amount of leisure time on weekdays					Total person
	Almost none, less than 1 hour	1-2 hours	2-3 hours	3-4 hours	4-5 hours	
Not typical (marked by 1) person	14	19	16	8	4	61
Slightly typical (marked by 2) person	1	12	10	4	1	28
Somewhat typical (marked by 3) person	12	27	34	29	13	115
Typical (marked by 4) person	6	28	32	31	12	109
Very typical (marked by 5) person	7	32	34	15	7	95
<b>Total</b>	<b>40</b>	<b>118</b>	<b>126</b>	<b>87</b>	<b>37</b>	<b>408</b>

Source: own research

In terms of average leisure time at weekends, consumers who reported to have 4-5 hours of leisure, felt this kind of motivation was somewhat typical (3) or typical (4) for them. We have already mentioned that visiting an adventure park most often involves a process of travelling, which explains that its respondents with 4-5 hours leisure time available at an average weekend. The result of the  $\chi^2$  test showed very strong significance (59,466<sup>a</sup>,  $p = 0,000$ ). (Table 3.)

Table 3 Crossable of the motivation for “New and trendy form of entertainment” and the average weekend leisure time

Chosen because it is a trendy, new type of entertainment	Average amount of leisure time at weekends					Total person
	Almost none, less than 1 hour	1-2 hours	2-3 hours	3-4 hours	4-5 hours	
Not typical (marked by 1) person	12	9	10	8	22	61

<b>Slightly typical (marked by 2) person</b>	0	7	6	4	11	28
<b>Somewhat typical (marked by 3) person</b>	5	8	17	26	59	115
<b>Typical (marked by 4) person</b>	0	6	18	27	58	109
<b>Very typical (marked by 5) person</b>	1	10	15	24	45	95
<b>Total</b>	18	40	66	89	195	408

Source: own research

Closeness of nature is a very important motivational factor in connection with adventure parks. In our survey one fifth of respondents marked it as a motivational factor at some level (82 people, 20,1%). Significant differences were found for weekend leisure time. Those who have 4-5 hours of leisure time dominantly marked this motivation by the value of 4. The Chi<sup>2</sup> test (29,229<sup>a</sup>), a p=0.022.

Slightly more than one fourth of the sample (117 people, 28,7%) felt that curiosity was a relevant motivational factor. This form of motivation showed significant difference with the amount of leisure time at weekends. Those with 4-5 hours of leisure time dominantly marked this motivation. The Chi<sup>2</sup> test (27,733<sup>a</sup>), a p=0.034.

The entertainment value of the activity was the most frequently chosen motivational factor with almost half of the sample marking it at some level (181 people, 44,4%). This form of motivation was marked dominantly by those with 1-2 hours of leisure time on weekdays. The Chi<sup>2</sup> test results showed a very strong significance (42,448<sup>a</sup>), p=0.000. (Table 4.)

Table 4 Crossable of the motivation for " Entertainment value of the activity " and the average weekday leisure time

<b>Chosen for the entertainment value of the activity</b>	<b>Average amount of leisure time on weekdays</b>					<b>Total person</b>
	<b>Almost none, less than 1 hour</b>	<b>1-2 hours</b>	<b>2-3 hours</b>	<b>3-4 hours</b>	<b>4-5 hours</b>	
<b>Slightly typical (marked by 2) person</b>	1	1	2	2	1	7
<b>Somewhat typical (marked by 3) person</b>	6	13	12	9	8	48
<b>Typical (marked by 4) person</b>	4	17	39	33	7	100
<b>Very typical (marked by 5) person</b>	15	57	55	38	16	181
<b>Total</b>	40	118	126	87	37	408

Source: own research

In terms of average leisure time at weekends, consumers who reported to have 4-5 hours of leisure, felt this kind of motivation was very typical (5) for them. The result of the Chi<sup>2</sup> test showed very strong significance  $p = 0,000$ . (Table 5.)

*Table 5 Crossable of the motivation for " Entertainment value of the activity " and the average weekend leisure time*

Chosen for the entertainment value of the activity	Average amount of leisure time at weekends					Total person
	Almost none, less than 1 hour	1-2 hours	2-3 hours	3-4 hours	4-5 hours	
Not typical (marked by 1) person	15	23	15	4	15	72
Slightly typical (marked by 2) person	1	0	1	2	3	7
Somewhat typical (marked by 3) person	0	2	9	11	26	48
Typical (marked by 4) person	0	4	10	26	60	100
Very typical (marked by 5) person	2	11	31	46	91	181
<b>Total</b>	<b>40</b>	<b>118</b>	<b>126</b>	<b>87</b>	<b>37</b>	<b>408</b>

*Source: own research*

The table below summarizes the significant differences between the amount of leisure time and the various motivational factors. It is apparent that out of the examined six motivational factors the Chi<sup>2</sup>-test resulted in significant differences at weekends for four motivations. (Table 6.)

*Table 6 Summary of significant differences based on amount of leisure time and motivational factors*

Examined motivations	Chi <sup>2</sup> value	df	p
Motivation: Considered as New and trendy form of entertainment vs. average weekday leisure time	30,464 <sup>a</sup>	16	.016
Motivation: Considered as New and trendy form of entertainment vs. average weekend leisure time	59,466 <sup>a</sup>	16	.000
Motivation: Chosen for Closeness of nature vs. average weekend leisure time	29,229 <sup>a</sup>	16	.022
Motivation: Chosen for Curiosity vs. average weekend leisure time	27,733 <sup>a</sup>	16	.034
Motivation: Chosen for Entertainment value of the activity vs. average weekday leisure time	42,448 <sup>a</sup>	16	.000
Motivation: Chosen for Entertainment value of the activity vs. average weekend leisure time	129,973 <sup>a</sup>	16	.000

*Source: own research*



The services of adventure parks offer active relaxation opportunities to the consumer; hence it may be interesting to analyse the questions concerning the quality of leisure time. Based on this, we asked the respondents how they spent their leisure time (typically actively, typically passively, typically cultural activities, typically activities related to tourism), and how they would describe the characteristics of their leisure habits (e.g. active, sporty or consolidated, classical, preferring home activities and passive rest). Compared to the available amount of leisure time the results are summarized in the table below (Table 7.).

Table 7 Summary table

Examined leisure habits	Chi <sup>2</sup> value	df	p
Leisure typically spent actively vs. average weekday leisure time	26,467 <sup>a</sup>	16	.048
Leisure typically spent actively vs. average weekend leisure time	31,063 <sup>a</sup>	16	.013
Leisure time spent described as consolidated, classical, intellectual, cultural vs. average weekend leisure time	32,259 <sup>a</sup>	16	.009
Home activities, leisure typically spent passively vs. average weekend leisure time	37,671 <sup>a</sup>	16	.002

Source: own research

## Conclusion

Our hypothesis that the motivation of visiting the adventure park is affected by the consumer's leisure time, and people with more leisure time at the weekend will prefer it, appears to be justified. In the case of 4 motivations there were significant differences, and in the case of 2 motivations there was significant connection with both weekdays and weekends leisure time. Most of those respondents who have an average of 1-2 or 2-3 hours of leisure time on weekdays marked the motivations of the adventure park visit by at least 3 (moderate), but most of them by 4 and 5, for. At weekends this amount of leisure time showed a significant connection for those having 4-5 hours of leisure time.

Based on the results it can be stated that it is not enough to keep track of new leisure trends. (Müller et. al. 2017) When analysing services it is advisable to examine issues related to leisure time as there might be interesting connections between factors motivating choice and the culture of spending leisure time. Müller et al.'s (2018d) recent research efforts identifying motivating factors of choice for BMX and other extreme sports (N=237) found that trying out new sports, challenge and the entertainment value dominantly appear as motivations for those pursuing an extreme sport. It calls attention to similarity between the motivational background of adventure park visitors and pursuers of extreme sports who, in this way, can be a potential target audience of adventure parks. In the marketing communication relevant messages can be sent to them. Closeness to nature, time spent in nature as leisure time motivational factors also appear in several studies (Dobay – Bendíková 2014, Bendíková 2014, Müller et. al. 2007, Müller et. al. 2008), supporting the assumption that young adults are a segment that can be targeted.

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## TESTING THE PUBLIC SERVICE MOTIVATION AND CALLING IN HUNGARY

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### Abstract

The motivation of public servants has become crucial in the shaping of ways and methods of the public sector reform. The goal of this study is to test a novel PSM (Public Service Motivation) model of the Hungarian public sector by adapting the New Public Passion research framework. The novel model tests the predictive relationship between PSM and Calling. By using an archive database of the ISSP 2015, four hypotheses were tested, and verified one of them. Results demonstrate that a PSM model could in fact be adapted to the Hungarian public sector. Comparing the public sector and private sector employees, significant difference was found between the effect of organizational commitment on work satisfaction. In the public sector employee model, Calling had direct and indirect effects on work satisfaction.

**Key words:** *public sector reform, work satisfaction, public service motivation, organizational commitment, perceived social impact.*

**JEL Classification:** J24, J28, J29

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### Introduction

UNDP's study (2017) discriminates three major factors of motivation in public service: extrinsic motivation, intrinsic motivation and PSM (Public Service Motivation). Perry and Wise (1990), the original authors of the PSM concept, constructed the following definition that became the basis for academic inquiry in the coming decades: PSM "may be understood as an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations" (Perry and Wise 1990 pp. 368). PSM motives can be:

1. Rational: Whilst public servants behave in an altruistic way, they also want to increase their utility.
2. Norm-based: The main norm in public sphere is to serve the interest of society.
3. Affective: Public administration must provide safety to citizens based on basic human laws, thus applying the affective norm of patriotism of benevolence.

Mihalcioiu (2011) points out that the PSM concept focuses on both the specific motivation as a feature of public servants and the specific environment of public sector. As contrasted to the original concept, rooted in the 1990's when public managers started to apply the reforms based on the New Public Management to rationalize the operation of the public sector, the new approach attempts to favor the power, the budget and reputation of the public sector. PSM, originating from Anglo-Saxon culture has spread over Europe. The "PSM is the motivational force that induces individuals to perform meaningful" (Brewer and Seleden 1998, pp. 417).

Bullock, Stritch and Rainey (2015), in their study, testing the PSM model in cross-cultural settings, describe in detail how PSM became an independent area of academic inquiry in numerous countries. Their study, analyzing a number of constructs, variables and concepts across 30 countries, concluded the following universal results:

1. PSM is the inner force of public servants to serve the society and work in organizations with strong community oriented mission.
2. Perception of social impact refers to how the workers perceive the effect of their work on other people and on society.
3. High-Income Motives refer to the attitude of the workers to maximize their financial income.
4. Organizational commitment strengthens the loyalty of workers to the organization.

It ensues from the above conclusions demonstrate that public sector workers are less motivated by financial motivators than the employees in the private sector. In most of the countries (22 countries) the public servants are more committed to their organization than private sector workers. One of the most important aspects of public servants' work is that they can actively contribute to both the wellbeing of people and to public interest. This can be also a reward for the public workers and it complies with the pro-social behavior, motivational source of public workers. The results of this international study could be informative to the public managers because it identified the motivators of public servants, independently from national context.

In the last decade, several studies have searched for relationship between PSM and Work Satisfaction, for example Giauque, Ritz, Varone and Anderfuhren (2012); Homberg, McCarthy and Tabvuma (2015); Cseh Papp et al., 2018; Westover and Taylor 2010). The definition of work satisfaction is diverse and depends on the authors' research approach and objectives. According to Giauque, Ritz, Varone and Anderfuhren (2012) or Mészáros (2018), work satisfaction can be identified as a positive mental status originating from the work situation. Work satisfaction can be a variable predicting PSM (Homberg, McCarthy and Tabvuma 2015); PSM and work satisfaction can both increase when opportunities are provided to the employees to serve the public (and public interest) as an integral part of their work. Therefore, the public organizations can provide ideal jobs to people with high levels of PSM.

The next concept in our model is Calling. As Dik and Duffy's definition (2009) asserts, Calling is "a transcendent summons, experienced as originating beyond the self, to approach a particular life role in a manner oriented toward demonstrating or deriving a sense of purpose or meaningfulness and that holds other-



oriented values and goals as primary sources of motivation” (Dik and Duffy pp. 427). Sometimes Calling refers to sense that one is committed to his / her job, sometimes Calling refers to being talented or passionate (Horváth, 2016; 2017a; 2017b; 2017c). Thompson and Christensen (2018), when comparing PSM and Calling, managed to identify the following distinctive features:

1. Calling concentrates on individual uniqueness without analyzing whether a given employee is working in public or private sector. PSM just focuses on the public administration and the public sector.
2. Since PSM is multi-dimensional construct, Calling, as a constituent of it, cannot be called complete unless Calling itself is made of several dimensions.
3. PSM is a communal concept and it focuses on how public workers with high PSM can serve their organization, the public sector and society at large. Calling, on the other hand, concentrates on individuals’ attitudes and traits and attempts to single out differences between them.
4. While PSM is a stable individual feature, Calling is situational as it can change based on actual work conditions.
5. PSM is not specified because one can identify with commitment to public sector in numerous ways. In contrast, Calling is specified based on the individual differences of professions and competences.
6. While PSM highlights the socialization through public organizations, Calling highlights the individual differences of competences, so that an employee can realize his / her work suitability via his / her cognitive function.

In Hungary, there is a scarcity of academic inquiry on PSM: only three relevant studies have been published up to date. One of them is a theoretical study investigating the adaption opportunities of PSM in Hungary (Hollósy and Szabó 2016). The second one investigates the relationship between PSM and job satisfaction in case of Hungarian local public service (Hollósy 2018). The third one is also an empirical study (Horváth and Hollósy, is under publication).

## The Goals and Hypotheses of this Study

No previous Hungarian studies have investigated the relationship between PSM, work satisfaction, perception of social impact, organizational commitment, and Calling. Therefore, the goal of this study is to unify the above mentioned variables in one PSM concept and to test it in Hungarian sample applying path analyze method. We use the model of Bullock, Stritch and Rainey (2015), barring the variable of high-income motives and adding the variable of Calling. High-income motives seemed to be redundant as they have less effect on work motivation of public servants than on work motivation of private employees. Based on the conceptual underpinnings, the following hypotheses have been developed:

1. **Hypothesis 1:** It is justified to develop a PSM model adapted to Hungarian public servants, using the method of path analysis.
2. **Hypothesis 2:** There are significant differences between public and private sector workers when comparing the indirect effects of above mentioned constructs.
3. **Hypothesis 3:** Calling exerts both indirect and direct effect on the model’s constructs in public sector workers sample.
4. **Hypothesis 4:** Calling exerts both indirect and direct effect on the model’s constructs in the private sector workers sample.

## Material and Methods

The Work Orientations 2015 module of the representative database of ISSP (International Social Survey Programme) has been used as the basis of analysis, with the delimitation of current employment. Therefore, Hungarian workers currently in employment have been selected for further analysis ( $n=564$ ). The distribution of the gender of respondents is ( $n=250$ ) (44.3%) men and ( $n=314$ ) (55.7%) women. The youngest person is 27 years old, the oldest is 75 years old. The average age of the respondents is ( $m= 50.42$ ;  $SD=10.837$ ). One respondent has not finished the elementary school. 19 respondents have university degree. Table 1 presents the educational level of the total employee cohort. ( $n=141$ ) ( $n=25\%$ ) of active workers are employed in public sector.

Table 1 Educational level of the employees

Educational level	Number of respondents	Percentage
Not finished the elementary school	1	.2%
Elementary school	47	8.3%
Vocational school, professional training without graduation	167	29.6%
Vocational high school with graduation	91	16.1%
High school graduation	113	20%
Professional training not accredited for higher form	26	4.6%
Professional training accredited for higher form	19	3.4%
Collage	81	14.4%
University	19	3.4%
Total	564	100%

Source: own calculations

PLS -SEM (Partial Least Squares – Structural Equation Modeling) method has been used to analyze the data. Path analysis is a series of regression analyses making it a predictive statistical method (Kovács and Bodnár 2016). Kazár (2014) distinguishes two types of the structural equation models, the first one is covariance-based structural equation model, the second one is the variance-based structural equation model. PLS-SEM is a variance-based structural equation model (Mitev and Kelemen 2017). Kovács and Bodnár (2016) mention that the correlation coefficient presents the relationships between the variables in the model. This coefficient includes the direct and indirect effects. Insignificant relationships between the variables are automatically ignored. The PLS-SEM method is specifically adapted to detect and investigate indirect effect between constructs and variables, making it a popular method is a number of disciplines (Kazár 2014). Kovács and Bodnár (2016) mention that PLS-SEM can run the factor analysis and the regression analysis in same time. PLS-SEM does not require normal distribution and it is applicable for a sample with

low number of respondents. Exogenous variables are the explanatory variables in the model. Endogenous variables can be explanatory variables and also target variables in the model. Regarding to the relationship between indicators and indirect variables we can distinguish reflective and formative models. In reflective models the indirect variable can be the reason and the effect of indicator. In formative model the indicator is the reason of indirect variable. PLS-SEM can test the reflective and formative models. PLS-SEM method can prove to be useful when theoretical concepts cannot be measured directly so the models based on them cannot be tested (Kovács 2015). PLS-SEM model includes two parts, the first one is the measurement the second one is structural. The measurement part examines the indirect variables via direct variables. In order to assess the structural validity of the model, several in-build modules have been included in the software. SRMR (Square Root Mean Square Residual) examines how theoretical concept fits to the empirical data (Mitev and Kelemen 2017). The coefficient of SRMR is between 0 and 1. The Cronbach-alfa represents the validity of convergence. AVE (Average variance extracted) testes the value of convergence. Both Cronbach-alfa's and AVE's coefficient can be between 0 and 1. The coefficient of Cronbach-alfa must be over .7 to accept the validity of the test. The coefficient of AVE must be over .5 to accept the validity of the test. Fornell and Larcker test is able to test the validity of discriminant. According to this test AVE must be over than the squares of correlations between the constructions.

Results of the path analysis are represented in the form of a diagram with arrows pointing from indirect variables show to the other indirect dependent variables. Arrows can point from indirect variable to direct variables, or from indirect explanatory variables to indirect target variables. Indirect variables are marked with circles and direct variables with squares.

## Results and Debate

In order to distinguish between the characteristics of the employee cohorts, three models have been created, and data pertaining to them analyzed accordingly.

1. Aggregate model (Model 1)
2. Model of private sector workers (Model 2)
3. Model of public sector workers (Model 3)

Path analyses have been created for all three models, and structural validity examined, presented in Table 2. SRMR values of models score between .157 and .225.

Table 2 Convergence, discriminant validity and AVE values of three models

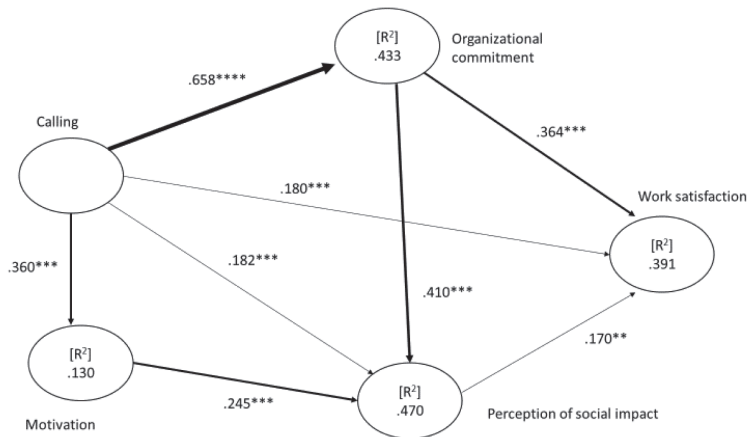
	Cronbach $\alpha$ Model 1	Cronbach $\alpha$ Model 2	Cronbach $\alpha$ Model 3	Composite Reliability Model 1	Composite Reliability Model 2	Composite Reliability Model 3	AVE Model 1	AVE Model 2	AVE Model 3
Calling	.906	.905	.902	.929	.905	.854	.895	.888	.854
Motivation	.613	.713	.572	.661	.857	.816	.512	.752	.695

<b>Organizational commitment</b>	.744	.758	.740	.766	.892	.880	.627	.805	.787
<b>Perception of social impact</b>	.628	.813	.572	.639	.915	.823	.474	.843	.698
<b>Work satisfaction</b>	.904	.905	.903	.930	.907	.915	.909	.865	.907

Source: own calculations

The first model analyzes the whole sample (Diagram 1). The second analyzes the private sector workers (Diagram 2), the third analyzes the public sector workers (Diagram 3). The breadth of lines presents the strength of paths.

Diagram 1 The path analysis of the whole sample (n=564)

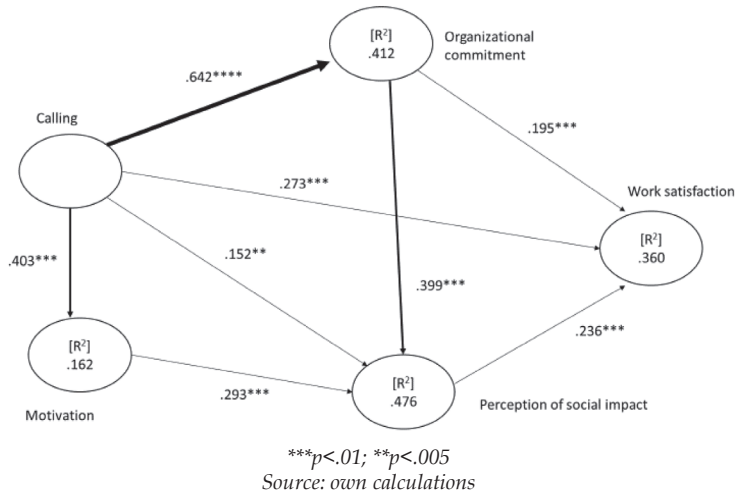


\*\*\* $p < .01$ ; \*\* $p < .005$

Source: own calculations

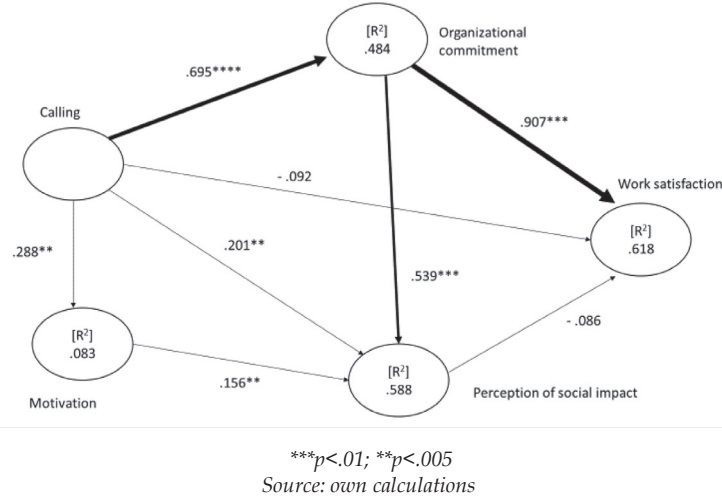
Calling strongly correlates to organizational commitment. The path analysis yielded a moderately strong correlation between perception of social impact and organizational commitment. Calling collates moderately strongly to motivation. Organizational commitment correlates moderately strong to work satisfaction. Perception of social impact has the strongest R2 value that is 47% (Diagram 1). Calling correlates moderately strongly to organizational commitment in all three models. This basically can be interpreted in the following way: Calling can influence the organizational commitment independently from the sectors. In this model Calling correlates weakly to the other variables.

Diagram 2 The path analysis of private sector workers (n=423)



In the second path model which encompasses the private sector workers, a mediation analysis revealed that Calling has moderately weakly direct effect (.211) and moderately strongly indirect effect (0.405) on perception of social impact (Table 4). (Table 4 presents the results of the bootstrapping analysis. We demonstrate the method of bootstrapping analysis in the second part of this chapter.) Calling correlates moderately strongly ( $r=.642$ ) to organizational commitment (Diagram 2). Calling correlates moderately strongly ( $r=.403$ ) to motivation (Diagram 2).

Diagram 3 The path analysis of public sector workers (n=141)



In the third model relating to the cohort of public sector workers, mediation analysis revealed that Calling has moderate indirect (0,407) effect via other variables and direct (0,486) effect on work satisfaction (Table 4). Calling correlates strongly ( $r=.695$ ) to organizational commitment (Diagram 3). Organizational commitment also strongly correlates ( $r=.907$ ) to work satisfaction (Diagram 3). Organizational commitment correlates strongly ( $r=.539$ ) to perception of social impact (Diagram 3).

In case of private sector workers Calling has neither direct nor indirect effect on work satisfaction (Table 4), raising the question if Calling is sector-independent or not. In case of private sector workers Calling has direct and indirect effects on perception of social impact Table 4). In case of public sector workers Calling does not have direct and indirect effects on perception of social impact (Table 4). It is therefore concluded that Calling is a variable that is independent from sectors.

In the next step, significant differences between public and private sector workers in case of indirect variables were sought. PLS-MGA is the method chosen for the demonstration of the differences. Table 3 presents the results of the investigation. Results reveal that significant differences can be detected between public and private sector works in case of the relationship between organizational commitment and work satisfaction.

Table 3 Differences between public sector workers (Model 3) and private sector workers (Model 2) applying PLS-MGA method

Relationships between indirect variables	Differences of Path Coefficient	p value
Calling -> Motivation	.013	.539
Calling -> Organizational commitment	.026	.386
Calling -> Perception of social impact	.104	.133
Calling -> Work satisfaction	.260	.989
Motivation -> Perception of social impact	.017	.428
Organizational commitment -> Perception of social impact	.069	.251
Organizational commitment -> Work satisfaction	.382	.000***
Perception of social impact -> Work satisfaction	.070	.733

\*\*\* $p<.01$ , Source: own calculations

The next step involved mediation analysis revealing the underlying indirect effects between variables. The indirect effects analysis was conducted on all possible paths. Bootstrapping method was used to identify the differences between public and private sector worker cohorts in case of the indirect effects of variables. Bootstrapping analysis estimates variances, confidence intervals and other statistical attributes based on random samples extracted from an existing previous sample (Füstös 2009). Table 4 presents the result of the bootstrapping analysis.

Table 4 The indirect effects of Model 2 and model 3

Test of couple of factors	Modell 2		Modell 3	
	Original sample	T statistics	Original sample	T statistics
Calling -> Perception of social impact	.211	4,565***	.263	4,565***
Calling -> Work satisfaction	.182	5,603***	.407	5,603***
Motivation -> Work satisfaction	.028	.743	.017	.743
Organizational commitment -> Work satisfaction	.043	.906	.030	.906
Mediation (R2) Indirect effect / total effect	.211 / .405 52 % partial mediation		.407 / .486 83 % total mediation	

\*\*\*p<.01; \*\*p.005, Source: own calculations

Considering the indirect effects/total effects ratio and bootstrapping results, two distinct types of mediations were detected, one manifest in Modell 2 and the other in Modell 3. In case of the private sector model, it has been revealed that the construct of Calling has an indirect impact on the construct of the perception of social impact via the partial mediation (52%) by the construct of motivation. On the other hand, a different type of mediation has been detected in the case of the public sector model, where the construct of Calling effects directly on work satisfaction via total mediation (83%) of organizational commitment. 83% is perceived as an especially high score in the social sciences, therefore the reasons must be explored (Füstös 2009).

There are three distinct reasons that can be seized for explaining the total mediation of work satisfaction by organizational commitment in the case of the public sector employee cohort:

1. It is possible that conceptually, Calling is a dimension of work satisfaction, raising the question if these variables can be distinguished or not.
2. Calling may be the basis of motivation in public sector. This presumption is supported by our result showing that Calling can impact work satisfaction in both ways: directly and indirectly. By perceiving their work as their Calling, public sector workers can significantly raise their aptitude to attain high levels of work satisfaction.
3. In the case of the private sector cohort, the Calling - work satisfaction path is affected by the partial mediation effects (52%) of on so it's effect is less strong than in case of public sector. 52 % indicates that Calling is an important element of work satisfaction because it can increase and decrease the work satisfaction in private sector.

## Conclusion

While earlier international studies have not discussed the relationship between PSM and Calling, academic inquiry and results show that Calling is in fact part of motivation (Dik and Duffy 2009). There is a gap in studies investigating the PSM concept and framework in Hungary. The novelty of this study is the integration of the construct of Calling into an overall model and testing it on a Hungarian sample. It is also a novelty that the research design distinguishes between the private sector and the public sector employee cohort, in order to demonstrate significant differences between the two models, the overarching objective being the segmentation of the sectors and pointing out differences in how the workforce could be motivated. The results could inform both practitioners and policy-makers of the public sector searching for novel solutions and innovations to design and deliver an efficient and efficacious public sector reform.

The main question defining the research design was whether or not path analyses can be applied to test PSM model on a Hungarian sample. Our results suggest that PSM concept can be adapted to Hungarian sample which verify out first hypothesis. The second hypothesis is partly verified because in case of indirect variables we found only difference in only one variable between the two sectors. The correlation between organizational commitment and work satisfaction is stronger in case of public sector workers than in case of private sector workers. The correlation between above mentioned variables is over .90 which is especially significant. This is in line with the findings of Hollósy (2018): public servants with high organizational commitment are also satisfied with their work. In case of public sector workers our model verifies 60 % of coefficient determination of work satisfaction. Public servants with life goals, high motivation, perception the social impact of their work, committed to their organization will be satisfied with their work.

We partly verified hypothesis 3 because Calling has direct and indirect effect just on work satisfaction. Moreover, Calling correlates strongly to the other variables in case of public sector workers. We partly verified hypothesis 4: Calling has direct and indirect effect just on the perception of social impact - Calling correlates to the other variables in case of private sector workers. There are no differences between public and private sector workers in case of the indirect effect of Calling and other indirect variables. This partly proves the results of previous studies (Thompson and Christensen 2018) suggesting that Calling is not dependent on sectorial circumstances. Contrarily to previous studies, our results demonstrate that Calling's direct and indirect effect on work satisfaction and on perception of social impact differs between public and private sector workers. Bullock, Stritch and Rainey (2015) mention that public sector workers' perception of their social impact is part of their motivation. Our results suggest that perception of their social impact is important to the private sector workers. It is highly recommended to initiate further studies in order to get a deeper insight and understanding of the matter.

Finally, a few notes on the generational aspect and implications of the findings: private sector has a tendency to push employees into the public sector who the private does not employ (Hazafi 2015). The members of Y and Z generations can change jobs and spheres easy if the other sphere provides them more advantageous conditions (Szakács 2013). The application of our PSM model can partly help to solve these problems as we identified factors explaining part of the work satisfaction in Hungarian public sector. These are: organizational commitment, perception of social impact, motivation and Calling. If Hungarian public sector can find ways of improving



the above mentioned factors (such as employment, organizational climate, promotion, career guidance, etc.) then work satisfaction will likely increase, entailing the engagement and commitment of the employees, committed to stay in their organization for extended periods of time.

We believe it could be useful to implement a PSM concept into Hungarian public administration based on the model of this study and to design test conditions such as changes in organizational commitment. For example, in the course of the candidate selection and screening, it would be useful to test the candidates' PSM, Calling and their perception of the potential social impact of their work. In this way public administration can screen candidates who are not only motivated by the special work environment and conditions of public administration, but whose intentions are the augmented social impact of their work already at the onset. These perceptions can later be further developed by specialized on-the-job training programs.

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## DEMAND FOR DAIRY PRODUCTS IN SLOVAK HOUSEHOLDS: A DOUBLE-HURDLE APPROACH

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### Abstract

The dairy production has a longstanding tradition in Slovakia. Despite the fact that situation has changed significantly in recent years and the share of milk production in the total agriculture production tends to decline, milk and milk products still represent a significant part of the food components of Slovak households. The study presents the data on dairy sector balances, market structure and the econometric modelling techniques were used to estimate price elasticities of demand for cheese, skimmed and whole milk. Due to the nature of data obtained from the Household Budget Survey, we applied the Cragg's double hurdle model, for the time period 2006 - 2012. The findings indicated that demand for whole milk is price elastic, for skimmed milk and cheese is price inelastic. The number of household members, mainly children, teenagers and retirees affect the consumption of milk positively and consumption of cheese negatively.

**Keywords:** price elasticity, income elasticity, dairy sector, double-hurdle model

**JEL Classification:** C01, E21, Q11

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### Introduction

Milk belongs to the staple food products and it is also a crucial commodity among the European Union states. The dairy industry contributes to sustainable agriculture in the countries and active production cycle together with sufficient consumption have a significant position in the development of the economies. The other words, it has an impact on the welfare of the economy as a whole and affects both ends of the food supply chain, i.e. producers and consumers (households). The effect on consumers also depends on price volatility and the extent to which retail prices react to producer prices (Gilbert and Morgan, 2010). Garcia-German (2014) states that higher volatility in retail prices has a greater influence on the consumers who spend a larger scale of their income on food. Milk is produced in every single EU country and generally, the dairy sector contributes to 12.2% of the total agricultural output, right after vegetables and horticultural plants (13.2%) (Eurostat, 2017).

The agriculture economists have started to focus their attention on the analysis of the pricing market structure, consumption of households and examination

of demand elasticities for a variety of products like meat (Brooker et al., 1994, Lazaridis, 2003, Piggott and Marsh, 2004), wine (Torrisi et al., 2006), seafood (Singh et al., 2012), water (Dalhuisen et al., 2003), for alcohol products (Manning et al., 1995, Gruenewald et al., 2006), food (Liu et al., 2009) and also for dairy industry (Gould, 1990; Glaser and Thompson, 2000; Stockton, 2005; Bai, 2008, Bouamra- Mechemache et al., 2008). Schmit and Kaiser (2006) use a partial equilibrium model of the US domestic dairy sector to forecast the retail demand for milk and cheese. Their results indicate that the decline of retail demand for milk will persist but at a reduced rate compared with past years. Dong et. al. (2004) examine fluid milk purchasing behaviour with panel data from New York households, using a Double-hurdle approach. From the empirical testing is found that the prices are inelastic and generic dairy advertising increases the probability of market participation and simultaneously purchase quantity and incidence. Davis et. al. (2009) examine demand elasticities for fluid milk products in the United States, using a censored translog demand system and the results show that price and income are the main determinants of the demand for dairy products. Andreyeva et al. (2014) examine how price changes affect the demand for various food products including cheese and dairy products by analysing of time series and households' studies on price elasticity. Tiriyaki and Akbay (2009) use the multinomial logit procedure to study selected socioeconomic and demographic aspects of consumers that determine households' fluid milk consumption. The results conclude that as the earnings grow then households tend more to consume processed milk rather than buying unprocessed milk. The effect of income is found as the highest on the probability of consuming processed milk. The study of Huang et al. (2007) focuses on the price elasticities for cheese sold at the retail proved that the lower-income consumers tend to be more price sensitive.

Much of the literature on dairy products shows that consumer's demographic and socio-economic factors like the age and gender of the consumers, household size, the composition of household members, level of monthly income, health problems effect, urbanization, ethnicity, the region of residence, seasonality etc., represent a significant position in consumption and in purchasing behaviour (e.g. Heien and Wessells 1988, Gould, 1996, Hatirli 2004; Valli and Traill, 2005; Goktolga et. al. 2006, De Alwis, et.al., 2011; Denver and Jensen, 2014). Identifying factors influencing consumer sensitivity is crucial for profitable production and sales.

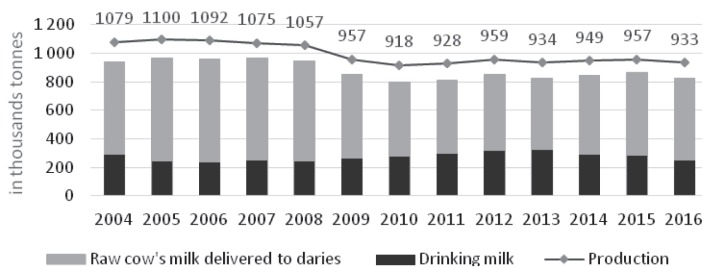
The issue of demand has an importance to the growth of the dairy industry. Milk, together with cheese, has a dominant position in consumption over the past years in Slovakia and therefore this research focuses on the estimation of price and income elasticities of demand for these commodities in the time period 2006-2012. The paper is organized in the following parts- the next section describes the Slovak dairy sector, its current changes in the market structure, productivity, consumption and trade in Slovakia. The second part provides a description of the theoretical model used to estimate the elasticity of demand, and summaries the data and variables used in the econometric analyses. In the third part, the estimations of tests are presented and the final part summarizes the results and conclusions.

## Dairy market structure

During the last years, the global dairy industry has been expanding mainly due to growing demand. Between the years 2013 - 2017, the average EU milk production increased by 7%, reaching the value of 170 million tonnes in 2017. Compared to EU countries, Slovakia is just a small dairy producer because the production accounted for 0.5% of the EU share and reached 923.4 thousand tonnes of raw milk in 2017.

Slovak agriculture has differed strongly from the other European Union countries, largely within its farm structure (Swinnen, et al., 2006), however, dairy sector has undergone rapid structural changes in the past decade. The number of farms plummeted by more than 35%, mainly due to the low purchase prices. It was one of the reasons for milk crisis in 2008-2009, 2012, and in 2015-16. Just during the last 3 years, the number has dropped from 483 registered dairy farms in 2015 to only 424 in the September 2018 (12% reduction). The majority of Slovak milk is produced on the farms. They are run as cooperatives or private enterprises (limited company or trading companies) and most of the milk is used for processing by buyers. Forty dairy companies and organizations operate with direct milk collection from the agricultural holdings but just 10 of them operate with own-milk processing. During the observed period, delivery on production was on average about 89% (see Graph 1). In 2016, 822.7 thousand tonnes of the cow's raw milk available in the dairy sector was processed into a lot of fresh and manufactured products. 30.5% of processed milk was used as a drinking milk including raw milk, whole milk, semi-skimmed and skimmed milk without any additives and relates only to milk directly intended for consumption. The rest of the milk was used for the proceeding of other dairy products (Eurostat, 2017).

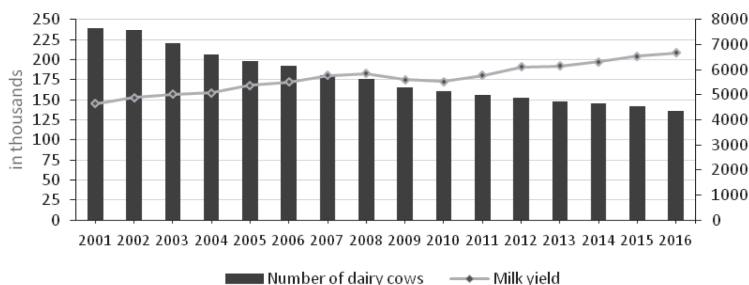
Graph 1 Cow's milk production, milk deliveries, drinking milk



Source: Eurostat

Graph 2 shows the number of dairy cows and milk yields between the years 2001-2016. Since 2006, the average number of dairy cows in the farms decreased by almost 42% (from 192.5 thousand to 135.9 thousand) and compared to 2001, by more than three quarters. Unlike the sharp decrease in dairy cows, an average milk yield rose by 21% since 2006 and compared to the year 2001 by 43.3%.

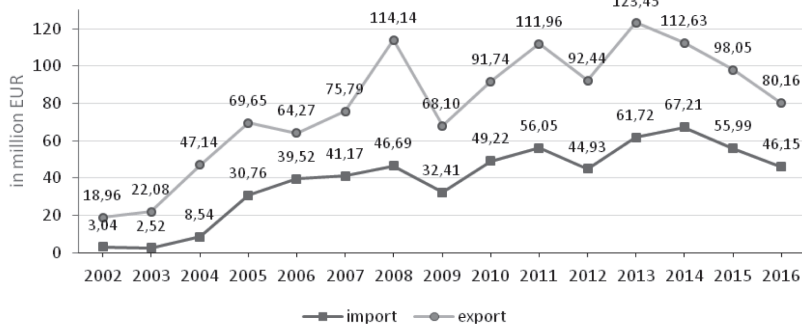
Graph 2 Number of dairy cows (left axis) , milk yield (right axis)



Source: Research Institute of Agriculture and Food Economics

A lot of consumers have been changing their purchasing habits in accordance with the nascent 'healthy trends'. This is also one of the factors affecting milk consumption. According to the dairy report of Euromonitor (2017), the main consequences of these trends are increased shares of product innovations based for instance on full-fat fresh milk and other milk alternatives such as soy drinks, goat milk, lactose-free drinking milk products or organic brands. In 2016 the annual consumption of cow's milk amounted to 173.6 kg per capita and compared to 2006 it increased by 15.5%. However, this amount still represents nearly 80% of the recommended level (220 kg per year).

Graph 3 Foreign trade of milk



Source: Research Institute of Agriculture and Food Economics

In 2017, Slovak export of milk and milk products accounted for just 0.7% of EU dairy export. A significant increase in exports and imports has stemmed since Slovakia joined the EU in 2004. Since then a substantially larger part of the raw milk and milk products has been bought directly by foreign companies. Dairy products, converted into milk equivalent, were exported abroad in amount 58.1% (the year 2016) and 63.5% (the year 2017) from the milk deliveries. In 2007-2008, the export sales grew rapidly and reached more than 114 million EUR. In 2016, Slovakia exported milk

and milk products amounting to 80.1 million EUR (Graph 3). Bulk and packed milk represented 187 thousand tonnes and 99% of this amount went to the other European Union countries (intra-trade). The main business partners for export of bulk milk were Germany and Italy, for packed milk Hungary and for other dairy products the Czech Republic (cheese, whey, cream) or Spain (yoghurt and buttermilk). In the same year, milk products were imported to Slovakia amounting to 46 million EUR, which constituted 234.3 thousand tonnes of dairy products. The main importers were the Czech Republic (packed and bulk milk, cream, yoghurt, buttermilk), Poland (cheese), Romania (whey) and Germany (butter, skimmed milk powder).

## Material and Methods

The aim of this paper is to estimate price elasticities of demand for three dairy products - skimmed milk, whole milk and cheese in Slovakia. We used data from the Household Budget Survey of Slovakia for period 2006 - 2012 and due to the nature of the dataset, the Cragg's double hurdle model was applied to measure the elasticities.

The month consumption of whole/skimmed milk and cheese per household was used as the main dependent variable entering the model. To estimate the price elasticity was essential to determine prices of these products because the dataset did not contain this information. By following Sousa (2014), the prices were derived from expenditures and quantities of consumed milk/cheese and simultaneously showed differences of each household. For households with zero consumption, we calculated the average prices of 8 regions by years and quarters, and missing prices were substituted with new derived prices which were also used as the main explanatory variables. Besides the whole milk, skimmed milk and cheese prices, the prices of dried milk, yoghurt, cheese, and other dairy products were also included in the model.

Table 1 Variables entering models

Dependent variables (Yj)	Definition
ln_c_milk_whole ln_c_milk_skim ln_c_cheese	log monthly consumption per household in l log monthly consumption per household in l log monthly consumption per household in kg
Explanatory variables (Xi)	Definition
ln_p_milk_whole ln_p_milk_skim ln_p_cheese ln_p_milk_dried ln_p_yogurt ln_p_other_dairy ln_income age_hh male_hh employed_hh n_members sp_household n_retirees n_teenagers n_children region year	log price of whole milk per l log price of skimmed milk per l log price of cheese per kg log price of dry milk per kg log price of yogurt per kg log price of other dairy products per kg log monthly income per household in EUR age of head of household dummy variable, gender of head of household, 1 - man, 0 - woman dummy variable for work status of head of household, 1 - employed, 0 - unemployed or economically inactive person number of members of household dummy variable, 1 - single person household, otherwise 0 number of retirees in household number of teenagers in household (age 13 - 18) number of children in household (age < 12) dummy variables for 8 regions of Slovakia time trend for period 2006 - 2012

Instruments (Zj)	Instruments (Zj)
ln_income ln_p_milk_whole ln_p_milk_skim ln_p_cheese	ln_p_milk_dried ln_p_yogurt ln_p_other_dairy

Source: HBS, own processing

The problem of the censoring shows particularly in the studies using microeconomic data. The database used in this study contains a significant number of households with zero expenditures on milk or cheese. It might be caused by several reasons: the period of research is short; households never buy milk or households never buy milk/cheese at the given prices or income.

Estimation of demand by OLS at these circumstances would lead to biased and inconsistent results (Amemiya, 1984). Studies analysing the demand for food, e.g. Gao et al. (1995), Burton et al. (1996), Yen and Jones (1997), Sharpe et al. (2001), Newman et al. (2003), Mabiso et al. (2005), Mutlu and Gracia (2006), Zhang et al. (2008), Wan and Hu (2012) Eakins, 2016 or Cupak et al. (2016), often use the Cragg's double hurdle model (Cragg, 1971).

The double-hurdle model is appropriate to use if consumers make decisions in two steps – hurdles: participation and consumption decision. The first hurdle is estimated by Probit model and the second one with a truncated Tobit model. The participation step is described by equations

$$d_j^* = z_j \gamma_j + u_j \quad u_j \sim N(0,1) \quad (1)$$

$$d_j = \begin{cases} 1 & \text{if } d_j^* > 0 \\ 0 & \text{if } d_j^* \leq 0 \end{cases} \quad (2)$$

where  $d_j^*$  represents unobserved latent variable and  $d_j$  is observed binary variable. The second step – how much household consume is described by equations

$$y_j^* = x_j \beta + v_j \quad v_j \sim N(0, \sigma^2) \quad (3)$$

$$y_j = \begin{cases} y_j^* & \text{if } d_j = 1 \text{ and } y_j^* > 0 \\ 0 & \text{else} \end{cases} \quad (2)$$

where  $y_j^*$  is unobserved latent variable and  $y_j$  is actual expenditure on milk which is equal to  $y_j^*$  only in the case that this latent variable takes positive values and participation step is equal to 1. Explanatory variables that determine participation and expenditure hurdles are label as  $z_j$  and  $x_j$ . Estimation of coefficients is made by maximum likelihood function.

The means, standard deviations, min and max values of regression variables for the sample are presented in Table 2. Typical Slovak household has 2.82 members from which 0.34 consists of retirees, 0.21 teenagers (13 - 18 years old) and 0.35 children younger than 13 years. The biggest household has 10 members. Average monthly income is 1 098 EUR, average consumption is 1.61 litres of whole milk with an average price of 0.70 EUR per litre and 11.92 litres of skimmed milk with an average price of 0.58 EUR per litre and 1.68 kg of cheese for 5.70 EUR. Maximum consumption of whole (skimmed) milk is 126 l (120 l) per month and more than 20 kg of cheese.



Table 2 Summary statistics

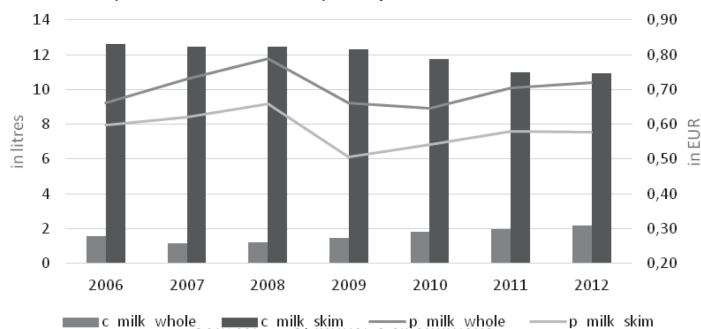
Variable	Mean	Std. Dev.	Min	Max
c_milk_whole	1.61	5.61	0	126
c_milk_skim	11.92	10.97	0	120
c_cheese	1.68	1.30	0	20.18
p_milk_whole	0.70	0.11	0.19	3.65
p_milk_skim	0.58	0.10	0.24	2.25
p_cheese	5.7	1.20	1.32	20
p_milk_dried	7.05	2.12	0.63	36.75
p_yogurt	2.53	0.63	0.90	20.93
p_other_dairy	2.47	0.97	0.54	19.61
income	1098	743.27	0	43466
age_hh	51.83	14.61	18	101
male_hh	0.68	0.47	0	1
employed_hh	0.64	0.48	0	1
n_members	2.82	1.43	1	10
sp_household	0.22	0.41	0	1
n_retirees	0.34	0.61	0	4
n_teenagers	0.21	0.51	0	5
n_children	0.35	0.69	0	6

Source: HBS, authors' calculations

## Results and Debate

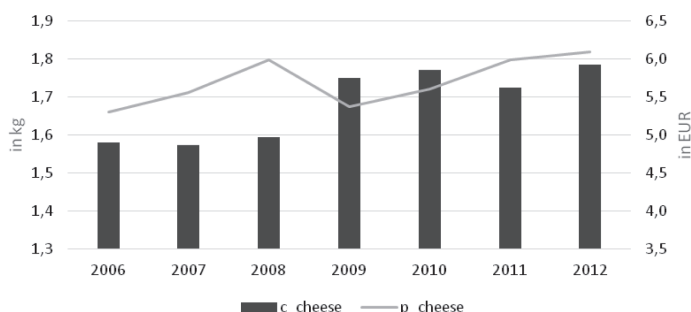
From 2006, consumption of skimmed milk shows a declining trend (Graph 4). In 2006, the average consumption of skimmed milk per household constituted 12.6 litres and six years later decreased by almost 2 litres. The consumption of whole milk increased by 36 % during the observed period and from 2007 had a stable rising trend. Consumer prices both kinds of milk show a similar volatile pattern. After the reaching maximum in 2008, prices declined sharply and from 2009 till 2012 gradually increased.

Graph 4 Price and consumption of whole and skimmed milk



The consumption of cheese kept at the stable level during the years 2006 – 2008 and in 2009 increased by 10 % in comparison with the previous year. Since then the trend in consumption has been more or less at the same level. The average price of cheese showed a similar pattern than the price of milk and in 2008 reached its maximum. After a sharp decline in the second half of 2008, this price gradually increased in the next 4 years (see Graph 5).

Graph 5 Price and consumption of cheese



Source: HBS, author's calculations

Table 3 represents the estimated double-hurdle model for whole and skimmed milk and for cheese. Whole milk is own price elastic, it follows that 1 % increase in the price can cause 1.38 % decrease in consumption, in comparison with skimmed milk (0.52 % decrease in consumption caused by 1 % increase in price) that is price inelastic. Demand for cheese is considered as inelastic with coefficient -0.45. The cross-price elasticities indicate that whole and skimmed milk are substitutes. An increase in whole milk prices causes an increase in the consumption of skimmed milk by 0.32 % and increasing the price of skimmed milk causes a 0.39 % increase in whole milk consumption. The price influence of cheese, dried milk, yoghurt, and other dairy products is mainly either insignificant (whole milk) or very low (skimmed milk). Cross-price effect of these dairy products on the consumption of cheese is insignificant, except dried milk.

The coefficient of income elasticity is significant for skimmed milk and cheese, but not for whole milk. Its values 0.12 and 0.34 (cheese) indicate that both are normal goods, therefore an increase of income leads to a small increase in the consumption of skimmed milk and cheese. With the rising number of household members obviously rises consumption of milk and cheese and a higher number of children, teenagers, and retirees increase the consumption of milk. In the case of cheese, we observe the opposite effect (excluding teenagers).

Table 3 Estimation of DH model for whole milk, skimmed milk and cheese

Variable	Milk whole		Milk skimmed		Cheese	
	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.
ln_p_milk_skim	0.382***	0.085	-0.521***	0.025	-0.026	0.028
ln_p_milk_whole	-1.383***	0.060	0.318***	0.033	0.009	0.034
ln_p_cheese	0.062	0.063	-0.093***	0.021	-0.450***	0.025
ln_p_milk_dried	-0.025	0.042	-0.048***	0.015	-0.043***	0.015
ln_p_yogurt	0.140**	0.062	0.061***	0.020	-0.003	0.023
ln_p_other_dairy	0.071**	0.035	-0.012	0.012	-0.021	0.013
ln_income	0.004	0.033	0.124***	0.011	0.335***	0.012
age_hh	0.004***	0.001	0.003***	0.000	0.003***	0.001
male_hh	0.083**	0.032	0.028***	0.010	0.013	0.012
employed_hh	0.045	0.039	-0.070***	0.013	0.011	0.015
n_members	0.124***	0.016	0.159***	0.006	0.075***	0.006
sp_household	-0.125**	0.050	-0.197***	0.015	-0.125***	0.021
n_retirees	0.068***	0.026	0.041***	0.009	-0.001	0.010
n_teenagers	0.003	0.029	0.043***	0.010	0.038***	0.009
n_children	0.098***	0.024	0.112***	0.008	-0.048***	0.008
TT	0.025	0.058	0.137***	0.017	-0.202***	0.019
TN	0.127**	0.050	0.064***	0.017	-0.077***	0.018
NR	0.003	0.054	0.095***	0.016	-0.107***	0.018
ZA	0.088*	0.049	0.007	0.017	0.027	0.017
BB	0.034	0.053	0.065***	0.017	-0.117***	0.019
PO	0.170***	0.055	0.079***	0.018	-0.217***	0.020
KE	0.054	0.055	-0.020	0.017	-0.115***	0.018
year	-0.015**	0.007	-0.030***	0.002	0.016***	0.003
_cons	31.648**	13.807	61.946***	4.536	-33.445***	5.015
selection_ll						
ln_income	0.202***	0.014	0.143***	0.014	0.897***	0.013
ln_p_milk_skim	0.279***	0.053	-0.412***	0.056	-0.082*	0.045
ln_p_milk_whole	-1.322***	0.056	0.924***	0.060	0.143***	0.053
ln_p_milk_dried	0.140***	0.030	-0.158***	0.031	-0.047*	0.026
ln_p_yogurt	0.129***	0.043	-0.095**	0.044	0.017	0.037
ln_p_cheese	0.228***	0.043	-0.451***	0.043	-0.974***	0.037
ln_p_other_dairy	0.095***	0.024	-0.088***	0.024	-0.069***	0.021
_cons	-3.647***	0.136	1.533***	0.135	-3.872***	0.115

Source: HBS, author's calculations

\*, \*\*, \*\*\* denote significance at the 10%, 5% and 1% significance levels

The latest part of Table 3 contains the effect of income and prices of all dairy products on entering milk and cheese market. Most of the parameters are statistically highly significant. Income positively influences the decision to consume milk and cheese. Higher prices of dairy products (excluding own price) have a positive effect on the decision to consume whole milk. The decision to consume skimmed milk positively influence the prices of whole milk and negatively prices of other dairy products. In the case of cheese, these effects are mostly negative.

## Conclusion

The study employed the econometric techniques to analyse the price and income elasticity for whole milk, skimmed milk and cheese in Slovakia. The Household Budget Survey data were used in order to build the Cragg's double hurdle model for the time period from 2006 to 2012. To estimate the price elasticity, prices were derived from expenditures and quantities of consumed milk and cheese per household. Demand for skimmed milk and cheese was shown as inelastic and for whole milk as elastic. Findings implied that whole and skimmed milk are substitutes because an increase of whole milk prices leads to the increase in the consumption of skimmed milk and vice versa. The income factor significantly affects the consumption, i.e. with an increase in income by 10%, the consumption of skimmed milk can rise by 1.2 % and of cheese by 3.4 %. The number of household members and the number of children, teenagers and retirees affect the consumption of milk positively and consumption of cheese negatively (except teenagers).

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## THE PERFORMANCE OF V4 COUNTRIES ACCORDING TO EASE OF DOING BUSINESS INDEX

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### Abstract

Competitiveness of the country is very important factor. This factor enables the country to be successful in the world market. To gain the strong competitiveness, the country must have strong and attractive business environment. To measure the quality of the business environment, we used various indexes. One of them is the Ease of doing business, published by World Bank. The aim of the paper is to analyse the performance of the V4 countries in Ease of Doing Business Index. According to their performance, we identified the best business environment.

**Key words:** *Ease of doing business, V4 countries, Competitiveness*

**JEL Classification:** *O40, M13, F64*

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### Introduction

Competitiveness is an important indicator for the countries. A market economy is a competitive economy, and therefore, competition is considered as an important part of economic activity. (Kravčáková-Vozárová et al., 2015)

We can say, that the competitiveness is the ability of a country to facilitate an environment in which enterprises can generate sustainable value. Because of its relative value, the competitiveness must be constantly compared with other economies and regions (Margan, 2012) Countries can create competitive advantages by improving their position through taxation (Válek and Kušnířová, 2018; Mazák 2018), innovative and inventive potential. These are dynamic competitive advantages based on human capital, an educated workforce and a high level of active scientific research potential (Kollár, 2013). Very important conclusions can be found in the study Mura et al (2017), where correlations between the economic freedom and economic growth were analysed. Specific countries reach better results in certain fields, because their inner conditions are more favourable, more dynamic and prospective. (Rutkauskas, 2008)

The Golden Rules of Competitiveness set by Garelli (2002) are as follows:

1. Create a stable and predictable legislative environment.
2. Work on a flexible and resilient economic structure.
3. Invest in traditional and technological infrastructure.

4. Promote private savings and domestic investment.
5. Develop aggressiveness on the international markets (exports) as well as attractiveness for foreign direct investment.
6. Focus on quality, speed and transparency in government and administration.
7. Maintain a relationship between wage levels, productivity and taxation.
8. Preserve the social fabric by reducing wage disparity and strengthening the middle class.
9. Invest heavily in education, especially at the secondary level, and in the life-long training of the labour force.
10. Balance the economies of proximity and globalise to ensure substantial wealth creation, while preserving the value systems that citizens desire.

Competitiveness is a multidimensional feature of an economic entity that operates in a market economy describing its economic performance. (Reiljan et al., 2000) It is also a multi-dimensional concept having relevance across levels. (Momaya, 2001)

Internalization offers new opportunities for the enterprise and countries. On one hand, it enables an increase of their income, due to the increasing volume products and services, on the other hand, it enables a decrease of the costs, searching for possibilities in world markets and the possibilities of the resource optimization in enterprises. (Dubravská et al., 2015) Regions and countries compete against each other for mobile production factors in factor markets, while firms compete for market shares (Huovari et al., 2001, p. 1455).

Among the first authors to express the competitiveness of the nation are Freeman, Lundvall and Porter, who have defined national competitiveness as the output of national ability to innovate and gain a competitive advantage (Cooke, 2002). The developed region is an accelerator for the growth of the country's economy, thus affecting its competitive position. (Štefko et al., 2010)

Competitiveness can be defined both in a more narrow and in a broader sense:

- in a narrow approach competitiveness is explored in conditions where entities' interests are contradictory (achievement of the aim by one entity would make it impossible for another entity to execute its interests);
- a broader approach to the concept encompasses also the indirect and potential competition between entities, analysing the areas where entities' direct interests are not contrary. (Reiljan et al., 2000)
- General definition of competitiveness concept involves also defining its range, which can be reviewed in three major groups:
- local (regional) competition - range of suppliers of a product or a service is limited to the closest surroundings (often characteristic to the market of services);
- internal (national) competition - domestic companies supply a product or a service (characteristic to the internal market protected by foreign trade restrictions);
- international (global) competition - suppliers of a product or a service might come from all over the world. The term "international competitiveness" refers to the fact that in reality the stage of competitiveness is tested only on the world market. (Garelli, 2002)

Evaluation of competitiveness involves various traditional elements of economic analysis. It can cause the misinterpretation of terminology as well as mistakes in the usage of traditional analyses and methods. The position that



“competitiveness is a meaningless word when applied to national economies and therefore its practical usage is not justified” is recognised by many researchers. (Reiljan et al., 2000)

There are many approaches, how to measure the competitiveness of the country. Many institutions, such as World Economic Forum, World Bank, International Institute for Management Development in Lausanne etc. published the competitiveness ranking among countries. One of them is World Bank with their Ease of Doing Business index.

The ease of doing business index measures the quality of the business environment and the impact of national government policymaking on the cost of doing business throughout the lifecycle of small- and medium-sized firms. (Kozovska, 2014)

The first ease of doing business index was published by the World Bank in 2003. Five topics are taken into account in the early age of index Today, eleven topics are created the Ease of doing business index. The index averages the country's percentile rankings on each of the eleven topics, using an equal weighting scheme for each topic. (Kozovska, 2014)

To provide different perspectives on the data, Doing Business presents data both for individual indicators and for two aggregate measures: the ease of doing business score and the ease of doing business ranking. The ease of doing business score aids in assessing the absolute level of regulatory performance and how it improves over time. (Corcoran and Gillanders, 2015) The best regulatory performance is set at the highest possible value for indicators calculated as scores, such as the strength of legal rights index or the quality of land administration index. (Annual report DB, 2019)

In Figure 1, we can see eleven indicators, which established the Ease of doing business index since 2011. Procedures, time, costs and minimum capital to start a company are a part of first indicator - “Starting a business”. Other indicators are dedicated to construction permits, getting electricity, getting credit, registering property, protected minority investors, trading across borders and resolving insolvency. Payment, time and total tax are a part of next indicator - “Paying taxes”. “Enforcing contract” contain time, cost and efforts to resolve commercial dispute. And the last indicator - “Labour market regulation” was created by flexibility in employment regulation and job quality.

Figure 1 What is measured in Doing Business ?



Source: Annual report of DB 2019

## Material and Methods

There are many organisations, that evaluate the competitiveness of the countries. We have chosen the Ease of doing business index for analyses, because the Ease of Doing Business Index measures the quality of the business environment. Good business environment is the first step for good performance of economy, so the country can improve also its competitiveness.

The aim of the paper is to analyse the performance of the countries in Ease of Doing Business Index, and to choose which country is the best for entrepreneurship. For analyses, we have chosen V4 countries. They are: the Czech Republic, Hungary, Poland and the Slovak Republic.

The set period was 10 years. According to Doing Business Report, we have analysed the annual reports Doing Business 2004 - 2019.

We have focused on overall performance of the countries and have analysed the score gained in the mention index. The achieved score was in the range 0-100 points, where 100 points is the best. For better results, we have analysed the data and made an output in programme STATISTICA 12.

## Results and Debate

### Development of the Ease of Doing Business Index in V4 countries

The Ease Of Doing Business Index was formed for the years. First, the World Bank in the beginnings analysed 5 indicators, next year they have added next indicator and in the year 2006, there were analysed 10 indicators. From the year 2011, almost 11 indicators have been evaluated to create the whole Ease Of Doing Business Index (DBI). We can see the development of number of indicators in the Table 1.

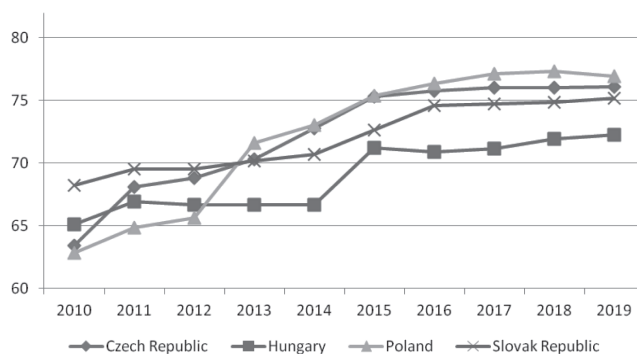
Table 1 Topics and economics covered by each Doing Business report

	DB 2004	DB 2005	DB 2006	DB 2007	DB 2008	DB 2009	DB 2010	DB 2011	DB 2012	DB 2013	DB 2014	DB 2015	DB 2016	DB 2017	DB 2018	DB 2019
No of topics	5	6	10	10	10	10	10	11	11	11	11	11	11	11	11	11
No of economies	133	145	155	175	178	181	183	183	183	185	189	189	189	190	190	190

Source: own processing according to Annual report of DB 2019

The number of analysed countries was varied during the examined period. The number grew up from 133 countries in 2004 to 190 countries in 2019. World bank has evaluated different countries from the world, not only European countries via this index.

Graph 1 Development of V4 countries score in Ease of Doing Business Index

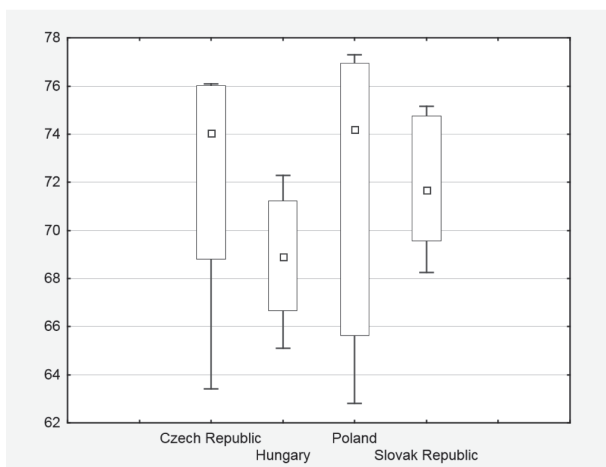


Source: own processing

In all analysed countries, we can see an increase in scores over the 10-year period, from Figure 1. The sharpest increase was seen in Poland. The score grew from the original 62.82 points to 76.95 points in the last published DBI. Another country with the most significant growth, was the Czech Republic. In case of Slovakia and Hungary, the increase in score was recorded, but it was more moderate. Thus, we can say, that the business environment has improved in the analysed countries from year to year creating a suitable environment for running business in these countries.

We used the descriptive statistics methods to evaluate the score in the V4 countries. Using STATISTICA 12, we have produced a scheme of score using the boxplot graph, which is projected in the Graph 2.

Graph 2 Boxplot graph of V4 countries score in Ease of Doing Business Index



Source: own processing

The biggest move in the score was in Poland. From the lowest score in 2010, this country reached the highest score in 2019 among the V4 countries. This fact can also be seen on the boxplot graph of Poland. The modest change of score was seen in Hungary and Slovakia. The size of both boxplot charts was similar. In Slovakia, the obtained score was significantly higher than in Hungary.

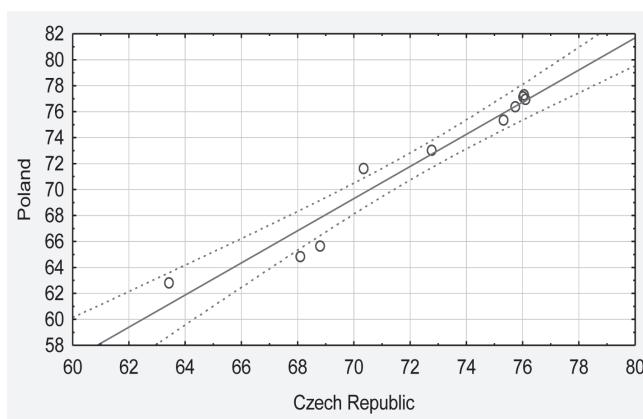
As we can see from the Figure 2 and Graph 3, the biggest positive correlation among V4 countries is between the Czech Republic and Poland. In this case, the Pearson's  $r$  was 0.971042 at the significant level  $\epsilon=0.05$ .

Figure 2 Correlation between V4 countries

Proměnná	Czech Republic	Hungary	Poland	Slovak Republic
Czech Republic	1,000000	0,909062	0,971042	0,932642
Hungary	0,909062	1,000000	0,876720	0,965016
Poland	0,971042	0,876720	1,000000	0,926414
Slovak Republic	0,932642	0,965016	0,926414	1,000000

Source: own processing

Graph 3 Correlation between Czech Republic and Poland



Source: own processing

#### The performance of DBI 2019 in V4 countries

When analysing the DBI 2019 via subindexes, we can identify the strengths and weaknesses of the country. In case of the **Czech Republic**, the strongest indicators were "Trading across border" and "Getting electricity". In these indicators score more than 95 points was obtained. The weakest indicators were "Dealing with construction permits" and "Enforcing contracts". But in both mentioned cases, there were still obtained favourable scores in more than 50 points. The country was overall ranked at the 35th place in DBI 2019.

The strongest indicator in **Hungary** was “Trading across border”. On the other hand, the weakest indicator was “Protecting minority investors” with the score of 50 points. The country was overall ranked at the 53rd place in DBI 2019 from 190 countries.

In case of **Poland** as the best country from V4 group for doing business, the strongest indicator was “Trading across border”. The lowest score was in indicator named “Protecting minority investors”, the obtained value in this weakest indicator was over 60 points. Poland’s overall position was the 33rd place.

In case of the **Slovak Republic**, the strongest indicators were “Trading across border” and “Registering property”. These strengths are stable in the Slovak Republic for years and are mentioned by Xhala and Nemec (2016), too. In these indicators the score of more than 90 points was achieved. The lowest score was in indicator named “Protecting minority investors” with the score of over 53 points. Overall position of the country was the 42nd place.

## Conclusion

The business environment in the country is a key factor, that enables the country to be competitive. Across the Ease of doing business index, we can compare the business environment in different countries.

The strongest indicator in DBI 2019 was “Trading across border” in case of all V4 countries. The weakest indicator was “Protecting minority investors” in Hungary, Poland and in the Slovak Republic. Only the Czech Republic has the biggest problems in other indicators.

When we look at all indicators in detail, we can find some area for improvement. In the Czech Republic, the biggest problems are with construction permits (246 days) and with time for enforcing contract (678 days). But getting electricity is in this country very simple. Only 3 procedures are needed and it takes about 60 days. Hungarian biggest problems are in the field of getting electricity, because this procedure lasts 257 days. This last very long compared with other countries (Czech 60 days, Poland 122 days, Slovakia 89 days). But on the other hand, Hungary is the best country according to number of days needed for starting a business. Opening own business and getting all 7 permissions last only 7 days. This is absolutely the lowest number of this indicator in V4 countries. Poland has problems with starting a business, which lasts 37 days. It is the highest number of days in this indicator among V4 countries. Polish entrepreneurs needed to do 5 procedures to open their own businesses. In the Slovak Republic, the biggest problems are same as in the Czech Republic. Time dealing with construction permission (300 days and 14 procedures are needed) and time for enforcing contracts (775 days). Mentioned processes are very time-consuming and needed to be changed.

The demographic structure is roughly the same in all V4 countries. Countries have difficulties in the unemployment of young people and graduates. A good business environment is needed for young people to set up their own businesses. Young people have good, mostly unconventional ideas, and their business can be successful if they master the essential business requirements. Even from the development of DBI, we can see the continuous improvement of the business environment in the V4 countries. But even so, not all barriers are removed.

Among the most important business problems there is primarily interest in doing business. Hungary has the most problems in this area and the least problematic is Poland. But the analysis of factors influencing people’s attitudes towards entrepreneurship could be the subject of further exploration.

All V4 countries obtained the increasing score during the decade. The business environment of all V4 countries was similar with the rank of DBI 2019 from the 33rd to the 53rd position. But only one country can become a leader of the group.

According to performance of DBI, we can see, which country from V4 group has the most suitable business environment. From the performed analyses, Poland has the most attractive business environment from the V4 countries. Its score of DBI was the highest for the years.

### Acknowledgement

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## EVALUATION OF MACROECONOMIC POSITION OF CHOSEN EU COUNTRIES

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### Abstract

Many macroeconomic variables contribute to the economic growth of the country. Especially during economic crisis and the recovery period there is necessary to study macroeconomic variables. Presented contribution searches macroeconomic position in chosen EU countries and creates clusters of EU countries by cluster analysis through chosen macroeconomic indexes. Individual results of clusters and average values of indexes in clusters express situation in individual states, reaction to crisis and geopolitical situation in single Europe. In spite of different development some countries located during all analysed years still into the same cluster, which means they recorded very similar economic growth.

**Key words:** *macroeconomic indexes, economic growth, gross domestic product, unemployment, inflation.*

**JEL Classification:** *E24, E31, F15*

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### Introduction

Anuradha & Rajendran (2012) studied macroeconomic determinants during the recent economic crisis and the recovery period. Economic growth has strong relations also to technology, innovation, and knowledge, as well as quality of life at the macro-economic level (Rasic et.al, 2017). In connection of macro-economic indexes Agarwal et.al (2017) attempted to understand the relationship between foreign institutional investments (FII and macro-economic variables, such as index of industrial production, exchange rate, and wholesale price index were considered. Rose & Krausmann (2013) propose a framework for choosing appropriate short-run indicators toward the goal of developing an effective economic resilience index at micro, meso- and macro-economic levels.

Gil Cordero et.al (2016) and Mazák (2018) analyzed the impact and evolution of some of the most important macroeconomic indices on market share and value of



private labels in European countries. The results of the study show the percentage of female unemployment negatively affects the volume and value of private label, unlike male unemployment, which affects them positively. The GDP influences positively and slightly both the volume and the value of store brands. In addition, percentage of urban population has a positive influence on the value of private brands.

Comparing countries' institutional features is a highly judgmental exercise, prone to number of methodological flaws. But in spite of the difficulties, rating and ranking of countries and institutions gained high level of popularity (Cangiano, 2017). Macroeconomic indexes cannot be fully estimated by using the parameters which are traditionally observed (Shinkevich et.al, 2016). At the macro level there is small number of indicators according which we can conclude stability of economic systems development. Besides GDP index a new approach has become a milestone for the efforts that try to integrate social indicators to the studies that were previously tracing traditional macro-economic indicators like GDP, inflation and unemployment (Cseh Papp et al. 2018; Mészáros, 2018). Due to the mentioned Tektas et.al (2016) stimulated a research to establish new multi-dimensional indexes, considering non-economic regional indicators.

States variables such as the lagged production growth rate, the default premium, the term premium, the short-term interest rate and the market dividend-price ratio are shown to be indicators of recent and future economic growth (Chen, 1991). Achrol (2012) analyzes in detail trends in key macroeconomic variables to see if they are more consistent with underlying market efficiency versus market power efficiency. Efficient market explanations do not fare well in the analyses in comparison with market power explanations for all studied variables.

## Material and Methods

During the research we selected present 28 EU member states. Data from all chosen indexes had been obtained from EUROSTAT database (Eurostat, 2017) and data from World Bank ([www.data.worldbank.org](http://www.data.worldbank.org)). The last available data were in 2015. Comparing and development of similarity of the countries in time is made by analysis in chosen two other specific years, mainly 2004, when latest biggest EU extension took place, and 2010 when national economies gradually recovered and revived their economies after global crisis in 2007-2009 (OECD ILibrary, 2015).

Analysis had been done by following indexes in R-program, defined as follows:

1. Gross domestic product (GDPg – GDP growth in %, GDPgpc – GDP growth per citizen in %)
2. Gross consolidated public debt (DEBTgdp – rate in % GDP)
3. Inflation (HICP – inflation measure in %)
4. Measure of unemployment of young people to 25 years (UNEless – in % from total active population).
5. Measure of employment (EMP – total measure of employment in % from total active population)
6. Gross value added (GVA – rate in % GDP)
7. Growth of nominal working costs (LCOSTnp – cost increase per person in %)
8. Growth of real work productivity (LPRODp – growth per person in %)

Cluster analysis had been used in space of EU28 countries according economic indexes, connected with economic growth and working power in three different periods, as mentioned ([www.ec.europa.eu](http://www.ec.europa.eu)). EU member states are officially marked by codes in Table 1.

*Table 1 Official codes of the countries*

Country	Official code
Belgium	BE
Bulgaria	BG
Czech Republic	CZ
Denmark	DK
Germany	DE
Estonia	EE
Ireland	IE
Greece	EL
Spain	ES
France	FR
Croatia	HR
Italy	IT
Cyprus	CY
Latvia	LV
Lithuania	LT
Luxemburg	LU
Hungary	HU
Malta	MT
Netherland	NL
Austria	AT
Poland	PL
Portugal	PT
Romania	RO
Slovenia	SI
Slovakia	SK
Finland	FI
Sweden	SE
Great Britain	UK

*Source: own processing according [www.indprop.gov.sk](http://www.indprop.gov.sk)*

Due to the cluster analysis we used Ward method, which is most often used as hierarchic method of cluster analysis due to the determination of optimal number of clusters, which means proper dendrogram - tree, which presents graphical output

of cluster analysis (Havierníková et al., 2017). Since objects in individual clusters are mutually similar, due to the expression of similarity of objects there is existing several measures – distance measure, association and correlation coefficient and probable measures of similarity (Stankovičová, 2007). Distance measure, so-called measure of dissimilarity (which means the higher are values of distance measure, the bigger is their difference according distance measure – creation of clusters, when the countries are the most similar and cluster, where the countries are mostly different) is most often used in all statistical programs. Euclidean distance had been used for determination of similarity measure.

Process during individual partial analysis was as follows:

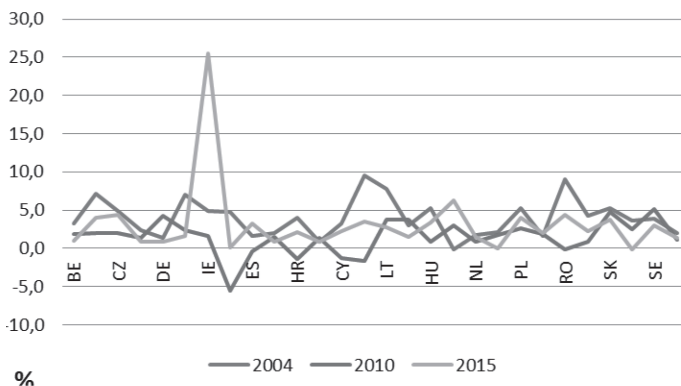
1. Determination of Pearson correlation coefficient according creation of correlation matrix.
2. Removing of mutual indexes correlation by PCA - principal component analysis - analysis of main components and their individual characteristics.
3. Selection of main components number.
4. Cluster analysis according selected number of components.
5. Selection of clusters number.
6. Illustration of countries, placed in the clusters.
7. Determination of characteristics for chosen number of clusters.

Similar process had been used during the data analysis in 2015, 2010 and 2004. After first analysis in 2015 chosen number of clusters was used also in other two years. All calculations and results had been made in R-program.

## Results and Debate

GDP is one of the indexes for evaluation and measurement of economic performance of the country. Annual change in GDP, calculated per one inhabitant of the country can help to identify economic growth of given country. Following Figure 1 illustrates annual percentage GDP changes per inhabitant in market prices in EU28 countries in three analyzed years 2004, 2010, 2015.

Graph 1 GDP per inhabitants (percentage annual change)



Source: own processing according data from EUROSTAT

Majority of countries recorded considerable GDP growth per inhabitant in 2004, GDP recorded annual growth per inhabitant also in 2010, but more moderate than in 2004, in some countries there was annual decrease in GDP. Last analyzed year 2015 recorded repeated speeding of GDP growth per inhabitant. Chosen V4 group achieved various values of annual growth. Czech Republic had in 2004 annual GDP growth per inhabitant 4,9%, in 2010 its growth had been mitigated to 2,0%, but in 2015 it increased again, but to the lower level in comparing with the year of EU entrance, concretely it was by 4,4% growth. Similarly other V4 countries recorded similar values. Slovakia, Poland and Hungary in 2004 achieved 5,2% annual growth of GDP per inhabitant, which is higher in comparing with Czech Republic. In 2010 there was recorded most moderate GDP growth in Hungary – only 0,9, in Poland 2,6% and the highest growth was recorded in Slovakia that achieved yet 4,8% annual growth of GDP per inhabitant also in time of global economic crisis crunching. Slovakia recorded in 2015 annual growth of GDP per inhabitant 3,8%, Poland 4,0% and Hungary 3,4% (as illustrated by Figure 1).

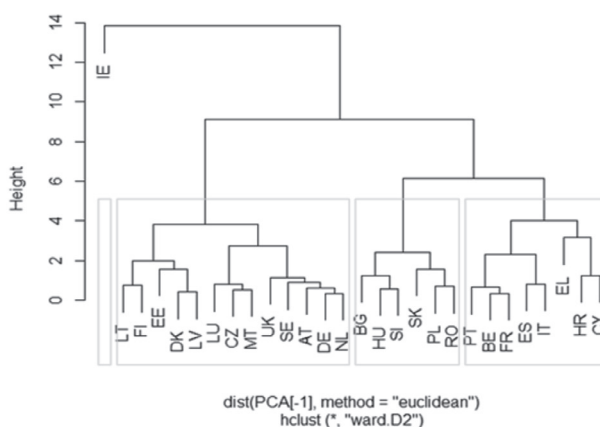
### Cluster analysis in 2015

Since main assumption for cluster analysis is that variables do not correlate, first step of the analysis is finding of correlation existence between chosen variables. Such correlation had been found among various variables and method of main components had been used for its removing. The method creates components, including all variables and it removes their mutual correlation. Since we work with nine variables, also number of components is nine, but first of the components expresses biggest volume of variability of original variables (44,03 %) and every other component expresses contribution with still smaller volume of variability, till final ninth component expresses the least (only 0,077 %). 70% of total data dispersion presents regularly proper limit for determination of clusters number and in this case it present three components (components explained together yet 80,28% of total variables variability). Therefore main components do not provided basic variables and do not correlate with observing of original variables variability. They characterize chosen countries by the way of chosen indexes.

Next step presents creation of single cluster analysis and obtaining of graphical results – hierarchic tree, dendogram. Countries can be divided to considerable number of clusters, but due to the optimal determination of clusters number there is possible to use heuristic approach that results from subjective opinion of analysis investigator and it is used many times (Stankovičová, 2007). Due to the confirmation of the cluster number choice there is possible to use also graphical result as Screen plot that presents graph of internal cluster sum of squares and number of cluster, as well as determination of optimal clusters number is given by curve decline (place of the biggest curve decline had been recorded at four clusters). Similar process was used also at all three following years. Optimal number of clusters – four – is visible at the following Figure 2 that divides EU 28 to four groups according their biggest similarity.

Multiplicity of countries in clusters was 8 countries for first cluster (PT, BE, FR, ES, IT, EL, HR, CY), 6 countries for second cluster (BG, HU, SI, SK, PL, RO), 13 countries for third cluster (LT, FI, EE, DK, LV, LU, CZ, MT, UK, SE, AT, DE, NL) and only one country for fourth cluster, mainly IE.

Graph 2 Dendrogram with 4 clusters in 2015



Source: own processing in R-program according data from EUROSTAT

Single Ireland recorded in last period considerably higher values of indexes in comparing with other states; therefore it was separated to single cluster. In last three clusters the highest average values of economic growth was recorded in second cluster, namely average annual growth of GDP is 3,2%, which included countries from eastern part in EU, including Slovakia, Poland and Hungary. The lowest average values of debt (average value in cluster is 51,86% GDP), unemployment of young people (14,15%) and highest employment (yet 75,74%), but also high working costs (annual change per person is 1,75%) – recorded in states in third cluster, where strongest European economies are placing, including Czech Republic.

## Cluster analysis in 2010 and 2004

Similar process had been done also in 2010 and 2004. Correlation among variables had been recorded also in 2010, therefore PCA had been done and consequently by numeric values of explained variability three main components had been chosen. After cluster analysis and Screen plot four clusters was selected due to the confirmation of heuristic selection of clusters number. Resulting division of countries to four clusters in 2010 is given by Figure 3.

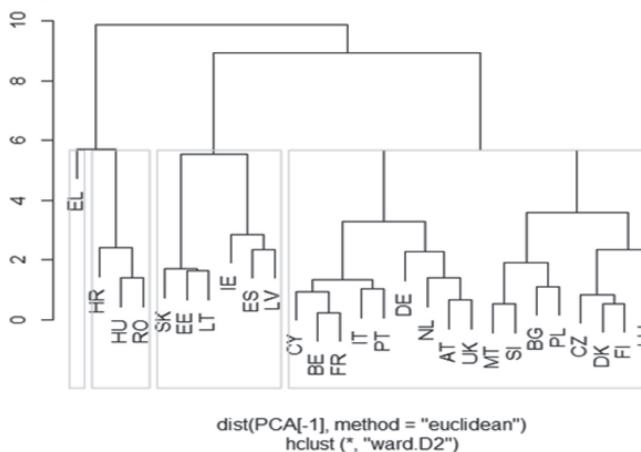
Location of the countries in individual clusters in 2010 is as follows: first cluster consisted of 18 countries (CY, BE, FR, IT, PT, DE, NL, AT, UK, MT, SI, BG, PL, CZ, DK, FI, LU, SE), in second cluster 6 countries appeared (SK, EE, LT, IE, ES, LV), third cluster was created only by one country (EL) and in last, fourth cluster three countries appeared (HR, HU, RO).

According graphical results we can see that location of the countries in clusters were in post crisis year 2010 different against present time. In spite of mentioned in this results there is visible different results achieved only one single country, mainly Greece that achieved debt in given year yet 146% of GDP, decrease of work productivity per person had been recorded, the highest growth of working costs

per person and the highest annual decrease of GDP (-5,5 %) against average values of other clusters. Such negative position of the country connected with financial crisis in the period. In this year we cannot clearly determine the cluster that had the most positive results in all chosen indexes. Most abundant first cluster had the highest GDP growth (2,56%) and the lowest unemployment of young people (18,67 %).

In this cluster mostly economically strong EU countries appeared, as for example Great Britain, Belgium, Finland, and Sweden, but also countries from south EU, as Cyprus, Italy, Portugal and Bulgaria. Also Poland and Czech Republic succeeded to enter this cluster. This can be contributed to the effects of global crisis that influenced not only economically weaker countries, but had influence also to the drivers of European economy, which draw them to long term weak countries from the view of chosen indexes. But this cluster recorded relatively higher indebtedness of countries (61,59% GDP). The best, which means the lowest average indebtedness, was recorded in second cluster, where average value is 46% GDP that as the only one met the Maastricht convergence criteria for EU membership. In this cluster Slovakia had been located together with the Baltic States that entered EU together. But this cluster has the highest average measure of unemployment of young people (34,63 %). Hungary had been located in fourth cluster that had averagely good values of analyzed indicators.

Graph 3 Dendrogram with 4 clusters in 2010



Source: own processing in R-program according data from EUROSTAT

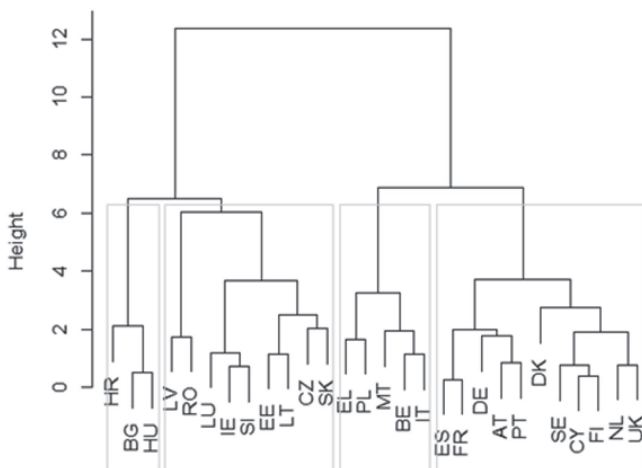
After analysis of last followed year according higher mentioned process division of countries to four clusters is as follows (Figure 4).

Multiplicity of clusters in 2014 had been following (see Table 4): first cluster - 5 countries (EL, PL, MT, BE, IT), second cluster - 3 countries (HR, BG, HU), third cluster - nine countries (LV, RO, LU, IE, SI, EE, LT, CZ, SK) and final fourth cluster - 11 countries (ES, FR, DE, AT, PT, DK, SE, CY, FI, NL, UK).

In spite in given year Croatia, Bulgaria and Romania were not yet EU members, Eurostat database mention values also from these countries. Therefore they were not excluded from the analysis, since in that time they had fill convergence criteria.

Results of indexes in the year show all V4 countries entered EU included Slovakia and Czech Republic when only in this year during the analysis countries belonged to one common cluster. Together with mentioned states also other incoming countries had been located – Latvia, Lithuania, Estonia and Slovenia, therefore such results could reflect the filling of convergence criteria for EU entrance and therefore also similarity of these countries according chosen indexes appeared. This third cluster had also the best average results of work productivity growth per person (5,83 %) with connected high personal costs per person (growth 3,44 %), high annual growth of total GDP (6,14 %) per person (growth 6,17 %) and the lowest average debt (20,9 % GDP). First cluster, in which Poland, as the only one from V4 had been located, achieved the highest public debt among all four clusters (83,3 % GDP) and also the highest unemployment of young people (25,48 %). Cluster, where Hungary had been located, achieved the highest measure of inflation (5 %). The lowest average unemployment of young people to 25 years (15,38 %) and also the highest employment (73,67 %) was in fourth cluster, where EU members had been located that are at the same time economically most strongest not only in EU, but also in worldwide measure, but this cluster did not concluded any V4 country.

Graph 4 Dendrogram with 4 clusters in 2004



Source: own processing in R-program according data from EUROSTAT

Analysis in three various years divided EU28 states to clusters according similarity, expressed by chosen indexes. Individual results of cluster and average values of indexes in clusters express about situation in individual states, reaction to crisis and also geopolitical situation in single Europe. But in spite of their different development some countries located in all analyzed years still into the same cluster,

which means they were very similar. In one cluster during all three years following countries had been located commonly: Belgium – Italy, Latvia – Lithuania – Estonia, and Austria – Germany – Denmark – Finland – Netherland – Sweden – Great Britain. Any V4 country located together during all three years in the same cluster. Among these three commonly similar groups of countries according chosen indexes in analyzed period the most expected similarity had been expected mainly among Western Europe states that belong to the most developed countries of the world. Big potential of economic growth is in three Baltic States that developed according the analysis very similarly and in last analyzed year they recorded almost the same situation in comparing with western EU economies, from which we can assume similarity also in the future and therefore these states can be proper candidates also in decision processes of business subjects (Kordoš, 2015).

Chosen V4 countries were only in individual years located in common clusters according results of similarity for individual chosen macro-economic indexes as follows:

2004 – Similar results were in Slovakia and Czech Republic (Poland was more similar with countries with high public debt, Hungary was similar with countries that were not already EU member states),

2010 – Poland and Czech Republic had similar results (Slovakia was more similar with Baltic states, Hungary with younger member countries),

2015 – Hungary, Poland and Slovakia had similar results (Czech Republic was more similar with economically stronger countries).

According such cluster analysis we can confirm that from the view of chosen macro-economic indexes V4 countries developed in analyzed year differently. Also entrance to EU and global economic crisis to the indexes leave visible traces of economic changes. In spite the Slovakia and Czech Republic were in time of EU entrance similar from the view of analyzed indexes, in last analyzed period in 2015 Czech Republic recorded yet better results in comparing with the rest V4 countries, which according higher similarity had been located in cluster with western EU countries. Remaining three V4 countries were more similar according analyzed indexes in last analyzed year 2015.

## Conclusion

In the frame of the research we dealt only with chosen macro-economic indexes. There is space to deal also with other indexes, as for example macro-economic variables - consumer price index, imports, exchange rate, consumer confidence index, oil price, money supply, foreign tourist arrivals, and monthly stock market return (Demir, et.al, 2017). Being permanently interdependent with other macro-economic processes and policies, also tax planning and tax policy play an important role both in ensuring and improving the financial stability and in sustaining an adequate environment for all economic activities. Although their different approaches and methods, tax planning and tax policy deal with the management of the accumulated public financial resources, i.e., the dynamics of fiscal pressure itself (Susanu, 2010). There is also space to consider macroeconomic indexes and their influence to the individual sectors. In this area Jasra et.al (2012) showed that the impact of interest rate on industry is insignificant, while it has significant effect on insurance industry. Similar study can be done also for other economic sectors.



## Acknowledgement

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## LEARNING AND DEVELOPMENT IN NIGERIAN HIGHER INSTITUTIONS: A STUDY OF EMPLOYEE ATTITUDE

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### Abstract

The study examines manpower learning and development in University of Ilorin, Nigeria. An extant literature were reviewed for better understanding of the current development of variables. Descriptive survey was adopted and the sample size of 400 was determined using Slovin's and Bowley's proportional allocation formula to determine the number of teaching employees selected from 15 faculties. The findings show correlation coefficient (R) and R-square to be 0.570 and 0.521 respectively which explains that, L&D is highly related with employees' job satisfaction/dissatisfaction. The study concludes that utilization of manpower L&D is very important because it will last through employees' work-life, as this will assist them to adapt to new skills and knowledge required to carry out a given task. It's recommends that there is need for funds/grants/scholarship/TETFund for academic staff as self-sponsored candidates find it difficult to fund postgraduate degrees program.

**Key words:** *Attitude, Dissatisfaction, Manpower Utilization, Satisfaction, Learning & Development*

**JEL Classification:** *D83, M20, O15*

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### Introduction

Organizations consider employees as the core foundation of the business and a major contributor to the firms' development to ensure the achievement of the firm's goal. In turn organization needs to create an atmosphere which enhances employees' commitment, cooperation, and readiness to learn new ideas. Manpower learning and development (L&D) are not only linked to improved organization performance, but they may also be a powerful factor in shaping employees' attitude (Rane, 2011; Lise & Timothy, 2004; Hitka et al., 2018). It can actually change attitude,

knowledge and skills of employees and also the way they work, it sometimes creates a motivation for increased discretion behavior and satisfaction with career development that will ultimately leads to increase job satisfaction. In most cases, employees can only learn how to use organization's resources effectively and efficiently through learning and development like seminars, conferences, workshops etc. Meanwhile, if employees are to experience flexibility and effectiveness on their job, they need to acquire and develop knowledge and skills, and if they are to believe that they are valued by the organization in which they work for, and then they need to see visible sign of management's commitment to their L&D. According to Kathman and Kathman (2000) organizations that do not provide adequate L&D opportunities for employees fail their establishments and stand the risk losing their dedicated and committed employees.

In every organization, employees' attitude plays a pivotal role in explaining the link between the organization and its employees' performance. Every employee manifests different attitudes which may tell a different story about his/her behavior at a certain time in his/her workplace. For instance, when employees have a negative perspective on their job, they are less likely to care about their job performance. Also if an individual likes his/her job, he/she would take pride in doing it correctly and he/she is more likely to communicate and participate in ways to improve the organisation as a whole. In some organisations, lower level employees are not given constant opportunity for training and development (L&D) through workshop, seminar and conferences while the top level workers are given such opportunities. Hence, the lower level workers may feel deprived of the opportunity to learn new techniques or attain a higher position in the future. Similarly, in academic environment like universities and other higher institutions, teaching staff have more privileges to attend L&D such as workshop, seminar and conferences. The teaching staff are also given opportunities to further their education like going for higher degrees as soon as they assumed work. Despite the opportunities given to attend L&D such as workshop, seminars, conferences and higher degrees programs, some teaching staff have little or limited access to fund and this often discourages them from attending the L&D programme (Khawaja, Shahid & Nasir 2011).

Many studies have dealt with effect of training and development on organizational performance, employees' productivity, employees' performance and support for the benefits of training for organisations as a whole. However, none has dealt specifically workers' job attitude in University of Ilorin, specifically, the University has enjoyed uninterrupted academic calendar for nearly 20 years with less attention to staff training needs. Therefore, this paper assessed the manpower training and development programmes among University of Ilorin teaching staff. Other specific objective is examine the influence of manpower training and development on job attitude of academic staff of University of Ilorin. Based on the problem identified above and the specific objective raised, this study is an attempt to bridge these theoretical gaps by seeking to answer the following research question:

- i. To what extent does manpower training and development have influence on job attitude of academic staff University of Ilorin?

## Material and Methods

### Conceptual Framework

The concepts of learning and development are used interchangeably (Obisi, 2011; Tsai, Yen & Huang, 2007). However, it can be differentiated from each other (Tsai, et al, 2007). Obisi (2011) described learning as the systematic development of the knowledge, skills and attitudes required by a person in order to effectively perform a given task or job. Learning is a pervasive activity in society, taking place within industries and commerce, government agencies and departments, health care organizations and all branches of the armed services (Raja, Furqan & Muhammad, 2011). Mwesigwa, (2010) opined that within every organization, training occurs at all levels of personnel and trainees may vary in terms of age, work experience, structure, educational background and skills level. Krueger and Rouse (1998) asserted that learning and workplace education programmes such as seminars, workshops and conferences have a significant effect on both the employees and the organization. Irene (2007), stated that most organizations have now recognized the value which workshops, seminars, graduate degrees and certifications could add to its development. As technology progresses, thereby making certain jobs and skills redundant, an increasing emphasis is being placed on the need for a skilled and highly trained workforce. While Obisi (2011) was of the opinion that objectives of training are what employees and the organization will gain after undergoing the training program. Ojo (1998) pointed out that the objectives of training are to provide initial training for new employees, professionals, technically skilled and semi-skilled personnel, train new employees without specific skills.

Development generally means the process of causing somebody or something to grow or making something to become larger gradually (Oxford Online Dictionary, 2017). In relation to manpower development, it can be seen as a process of increasing the quality or value or skill of an employee. It is an organizational effort and the employees' own efforts to increase his/her ability to advance in the organization or to facilitate him/her to perform additional job duties. Obisi (2001) stated that development is a long term educational process utilizing a systematic and organized procedure by which managerial personnel learn conceptual and theoretical knowledge for general purpose. It includes Masters' degree and other higher degree programs, while training is a short term process, utilizing a systematic and organized procedure by which non-managerial personnel learn technical knowledge and skill for a definite purpose like workshops and seminar. Lebron (2013) opined that management development takes several forms, from personal counseling to subsidized or fully-sponsored university courses. Development helps in building employees' confidence which will enable them to work more effectively and efficiently. Abdul-hameed (2011) sees development as a process that creates growth, progress, positive change or the addition of physical, economic, environmental, social and demographic components. In the views of Hwang (2003), manpower development refers broadly to the nature and directions of change induced in the employees as a result of educating and training programs. He stressed that development is managerial in nature and career focused.

Lebron (2008) and (Obisi, 2011) see employees' learning and development are two inter-related processes whose importance cannot be overemphasized in any decision of strategic human resource management. They are related in all series of activities, which an enterprise would embark upon to improve the quality of its managerial capacity. In some of the researches reviewed on L&D, the concepts are

used interchangeably, while others used training for non-managerial employees and Development for managerial staff. Hence, the researcher intends to use the two concepts interchangeably because they are both methods of improving employees' skills, knowledge and attitude, and all means of achieving organizational goals. The purpose of L&D programs is to improve Employees' and organizational capabilities. Fagbounge (2009) and Dessler (2013) affirmed that when organization invest in improving the knowledge, skills and attitudes of its employees' through workshops, seminars, conferences the investment is returned in form of a more productive and efficient employees.

### Typologies of Training and Development

There are four (4) major types of training which include; On-the job training, Off-the-job training, Vestibule training and Management Development methods (Irene, 2009; Obisi, 2001, 2011; Cambel, 2000 and Ejiogu, 2011):

- a) **On-the Job Training:** This is a widely most accepted method of developing workers used by most organizations. This method places employee in actual work situations and makes them appear to be immediately productive. While Obisi (2011) opined that on-the job Training is normally handled by colleagues, supervisors, managers or mentors to help employees adjust to their work and equip them with appropriate job related skills. Ejiogu (2011) sees on-the-job training as a method of training employees for job tasks by allowing them to perform such tasks under the guidance of more experienced worker. The experienced worker, through advice and suggestions, teaches the new worker or trainee the specific method of handling the job. According to Irene (2009), the three common methods use for on-the jobs are; learning by doing, mentoring, shadowing and job rotation. The advantages of on-the job methods are way to practice the specific managerial, team leading, technical and administrative skills needed by an organization and actuality and immediacy as the individual works, learns and develop expertise at the same time (Obisi, 2011). While the disadvantages of on-the job training according to Armstrong (2009); Fawad, Jan and Shaheen (2011) are that the effectiveness of learning is strongly influenced by the quality of the guidance and coaching provided on the job. The disadvantage lies in the fact that it could result to an unorganized, monotonous work and also using unqualified personnel for supervision when the qualified ones are undergoing the training. To resolve these disadvantages, train -the-trainers program should be regularly embarked upon to sharpen the skills of supervisors and in-house trainers (Obisi, 2011, Harrison, 2000, Hwang, 2003).
- b) **Off-the Job Training:** The different methods adopted in off-the-job training are classroom method, simulation, case study, role play, in-basket technique, discussion and conference. The classroom method is commonly used when concepts, theories, attitudes and problem solving abilities need to be learnt. Different types of classroom training are most commonly used for technical, professional and managerial personnel as well as high skill jobs. This method of Training is available from various sources, particularly courses offered by schools, college of technology, polytechnics and universities. The main classroom instruction method includes lecture (a formal, organized talk by the teacher or lecturer to a group of students or trainees in colleges or universities who usually take notes for subsequent view to assist retention. One of the advantages of this method is that it can be used for a very large group. However, it has the

shortcoming of generally being one way communication hence it violates the principle of learning by doing. Seminar can be a meeting for giving and discussing information by a group of advanced students studying under a professor with each doing original research and all exchanging results through reports and discussions. Case study method involves the analysis of written problem descriptions, generating alternative solution and choosing one with justification. Irene (2009) stated that case study is the method in which trainees are given case studies of real or imagined events in an organization to study, analyze and give opinion. After analyzing several cases under the guidance of instructors, the trainees are exposed to certain concepts, problems, techniques and experience which they will later face in the job. Role play is a technique in which some problems real or imaginary involving human interaction is presented and spontaneously acted out. If organized properly, observation of others performing the same role play will offer trainees from different backgrounds an opportunity to share valuable information and learn from each other's experience). Simulation and conference refer to discussion technique involving considerable participation from trainees. The instructor directs the participants to acquire knowledge including participants learning from one another. According to Hamby (2014) Conferences often features keynote presentations delivered to all attendees, as well as multiple break-out sessions. Attendees often expect to receive information about industry trends and developments). Workshop (a class training or seminar in which the participants work individually and/or in groups to solve actual work related tasks to gain hands-on experience).

- c) **Vestibule Training:** The vestibule training involves a formalized systematic training provided for a new employee in an environment replicating the actual productive environment, i.e. using facilities, equipment and workshop materials normally used in the workplace. Irene (2009) affirms that vestibule training is where the worker is trained to use machine or performs a task similar to the ones in the real work situation. The training is conducted out of the job area separated from the workplace under skilled instructor. After going through the vestibule Training for a specified time period, the trainees are expected to apply their newly acquire skill when they are assign to their real job. This method of training is beneficial to employees because it enhances the effectiveness of on-the job.
- d) **Management Development Method:** Obisi (2001; 2011) and Irene (2009) referred management development method as a philosophical and theoretical education concept involving long-term general purpose. It is a long term educational process utilizing a systematic and organized procedure by which managerial personnel learn conceptual and theoretical knowledge for general purpose. The two other types of Management Development programs are understudying which is a person who is train to assume a position at a future date, the duties and responsibilities of the position currently occupied by the he or she is understudying and job rotation a management technique used to revolve the employees from job to job or from department to department or from one plant to another.

### Employees' Learning and Development Needs

Clarke (2004); Chen, Chang and Yeh (2004); DeCenzo and Robbins (2010) were on the opinion that among the symptoms that trigger learning and development needs in organization may include, when there are; high rate of absenteeism among workers; increased labour turnover among workers; decline in productivity among

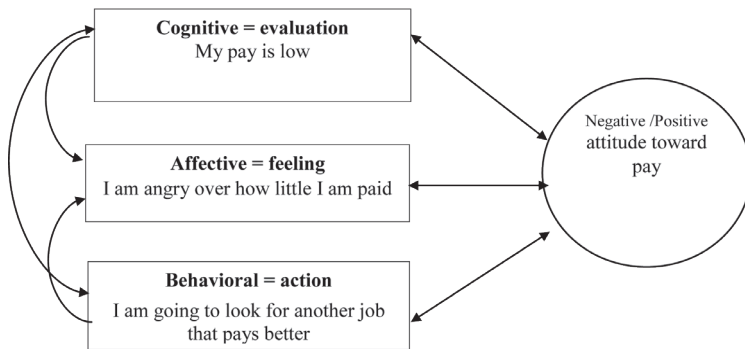


workers; poor job performance among workers; new machines are purchased to replace old ones; increase in the rate of on-the-job accidents among workers; an increased complaint from customers; reduced patronage from customers; visible negative work attitudes such as lateness and oscillation (motion without movement or pretending to be busy when in actual fact he or she is doing nothing) among workers; when there is noticed inability to take up challenges among workers and when there is noticed reduction in job involvement and organizational commitment (Choi & Dicson, 2010).

#### Employees' Job Attitude

Leong (2014) sees attitude as one of the most distinctive factors that make people differ from one another and allows people to be unique in their own way. Each person may possess many opposing attitudes which may tell a different story of the person's behavior at a certain time (Robbins & Judge, 2013; Griffin & Moorehead, 2012; Mura et al., 2017). It reflects how individual feels about something, for instance, when I say "I like my job", I am expressing my attitude about work. Typically, attitudes have three (3) components (Robbins & Judge, 2013; Hellriegel & Slocum, 2011); cognition, affect and behavior. The statement "My pay is low" is the cognitive component of an attitude i.e. a description of or belief in the way things are. It sets the stage for the more critical part of an attitude, its affective component. Affect is the emotional or feeling segment of an attitude and is reflected in the statement "I am angry over how little I am paid". Finally, affect can lead to behavioral outcomes. The behavioral component of an attitude describes an intention to behave in a certain way toward someone or something to continue with the example, "I am going to look for another job that pays better".

Figure 1 Components of Attitude



Source: Adapted from Robbins and Judge (2013).

The figure 1, illustrates how the three components of an attitude are related. For instance, an employee didn't get a promotion he thought he/she deserved; a co-worker got it instead. The employee's attitude toward his/her supervisor is illustrated as follows: the employee thought he/she deserved the promotion (cognition), he/she strongly dislikes his supervisor (affect), and he/she is looking for another job (behavior).



### Types of Employees' Job Attitudes

There are five major types of employees' attitudes (Robbins & Judge, 2009; Robbins & Judge, 2013; Hellriegel & Slocum, 2011); job involvement; organizational commitment; Perceived Organizational Support (POS); employee engagement and job satisfaction.

i. **Job Involvement:** Job involvement measure degree to which people identify psychological with their job and consider their perceived performance level important to self-worth. Employees with a high level of job involvement strongly identify with and really care about the kind of work they do. High level of job involvement is positively related to organizational job performance. High job involvement is also related to reduce absences and lower resignation rates (Robbins & Judge, 2013).

ii. **Perceived Organizational Support (POS):** is the degree to which employees believe the organization values their contribution and cares about their well-being (for example, an employee believes his organization would accommodate him/her if he/she had a child care problem or would forgive an honest mistake on his part). According to Robbins and Judge (2013), employees perceive their organization as supportive when rewards are deemed fair, when employees have a voice in decisions, and when they see their supervisors as supportive. Employees with strong POS perceptions have been found more likely to have higher levels of organizational citizenship behaviors, lower levels of tardiness, and better customer service. Though, little cross-cultural research has been done (Robbins & Judge, 2013), one study found POS predicted only the job performance and citizenship behaviors of untraditional.

iii. **Employee Engagement:** is a situation where an individual's involvement with, satisfaction with, and enthusiasm for, the work he/she does. Literature revealed that, highly engaged employees have a passion for their work and feel a deep connection to their company; disengaged employees have essentially checked out, putting little energy or attention into their work (Robbins & Judge, 2013).

iv. **Organizational Commitment:** In organizational commitment, an employee identifies with a particular organization and its goals and wishes to remain a member. Hellriegel and Slocum (2011) were in opinion that emotional attachment to an organization and belief in its values as the "gold standard" for employee commitment. A positive relationship appears to exist between organizational commitment and job productivity but it is a modest one (Robbins & Judge, 2013). Employees who are committed will less likely to engage in work withdrawal even if they are dissatisfied, because they have a sense of organizational loyalty. On the other hands, employees who are not committed, who feel less loyal to the organization, will tend to show lower levels of attendance at work across the board.

v. **Job Satisfaction:** When people speak of employee attitudes, they usually mean job satisfaction (Hellriegel & Slocum, 2011) which describes a positive feeling about a job, resulting from an evaluation of its characteristics. In other words, Robbins and Judge (2013) opined that job satisfaction is an affective or emotional response toward various facets of one's job. A person with a high level of job satisfaction holds positive attitudes towards his or her job, while a person who is dissatisfied with his or her job holds negative attitudes about the job. Newstrom and Davies (2005) has defined job satisfaction as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experience. Employees view their work with emotional feelings of likes or dislikes which could contribute to job satisfaction (Newstrom & Davies 2005). Job satisfaction results from the comparison between anticipated and

the actual outcome which creates an effective reaction towards oneself (Taipade, Selendar, Anttila & Natti, 2011).

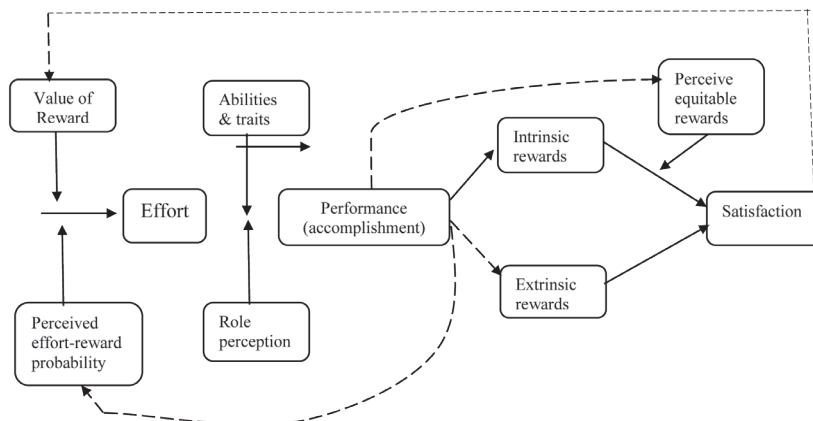
However, the study adopted job satisfaction for the study as an employees' attitude because, it is the general believed that job satisfaction is an attitude towards job and it measures specific outcomes of whether employees satisfied or dissatisfied in the workplace (Brum, 2007; Hellriegel & Slocum, 2011; Taipade, et al, 2011; Robbins & Judge, 2013; Christen, Iyer & Soberman, 2006).

### Models of Employees' Job Satisfaction

Nguyen, Taylor and Bradley (2003) explained the traditional model of Job Satisfaction as it consists of total body of feelings that an individual has about his/her job. The feelings are comprised of the influence of job satisfaction which Fredrick Herzberg listed as: the achievement, recognition, work itself, responsibility, advancement, salary, interpersonal relations, supervision, company policy and administration, working conditions, personal life and job security. Where the influence gives rise to feelings of satisfaction the individual is Job Satisfied, where they gave rise to feeling of dissatisfaction the individual is job dissatisfied.

According to the model job factors, job performance, firm's performance and problems the role perception determines Employee of job satisfaction. While Herzberg's model has stimulate much research, researchers have been unable to reliably empirically prove the model, with Hackman and Oldham (1997) cited in Lise and Timothy (2004) suggesting that Herzberg's original formulation of the model may have been a methodological artifact. Furthermore, the theory does not consider individual differences, conversely predicting all employees will react in as identical manner to changes in motivation/hygiene factors. Finally, the model has been criticized in that it does not specify how motivation/hygiene factors are to be measured.

Figure 2 The Porter-Lawler Model of Job Performance-Job Satisfaction Relationship



Source: Porter, L.W. and Lawler, E.E. (1968)

This early theory, suggested by Porter and Lawler (1968) in Judge and Churchill (2000), clarifies how this process might operate. According to them, job satisfaction and performance are not directly linked. Instead, effective job performance leads to job-related rewards, such as pay increases, promotions, or a sense of accomplishment. If the process for offering these rewards is perceived as fair, receiving these rewards leads to job satisfaction and also to higher and higher levels of performance. This creates a situation in which job satisfaction and job performance are actually independent of one another, but are linked because both are affected by job-related rewards. Interestingly, the Porter–Lawler model builds on the equity theory of motivation because notions of equity fairness in job-related inputs and outcomes are central to the argument. Specifically, motivation to perform the job and the satisfaction derived from the job are both caused by the relationship between what an individual puts into the job and what is received from the job in terms of rewards. In other words, both motivation and job satisfaction come from the perceived equitable relationship between the employee's inputs to the job and the job outcomes.

#### Theoretical Framework

Researchers have given a number of theories that put light on the individual learning patterns. Three (3) major theories were reviewed in this study viz a viz: Social Learning Theory, Reinforcement Theory and Cognitive Theory.

**Social Learning Theory:** Albert Bandura (1977) propounded the theory of social and learning behavior which proposes that new behaviors can be acquired by observing and imitating others. Its believed that employees acquire new skills and knowledge by observing other members of staff whom they have confidence in and as well believe to be credible and more knowledgeable. The theory posited that training and learning is influenced by person's self-efficacy and his ability to successfully learn new skills, which can be influenced by encouragement, oral persuasion, logical confirmation, observation of others.

**Reinforcement Theory:** The theory was proposed by B.F. Skinner (1957) believed that training is a strategic tool to make job interesting to the workers and as the avenue for the employees to improve themselves for optimal performance, which can culminate to promoting employees for outstanding performance, innovation, creativity because of training attended. This study is based on human capital model suggests that an individual's decision to invest in training is based upon an examination of the net present value of the costs and benefits of such an investment.

**Cognitive Theory:** Piaget (1936) in Lawson and Shen (2008) theory of cognitive development precisely explains how a child constructs a mental model. The theory disagreed with the idea that intelligence was a fixed trait, and regarded cognitive development as a process that occurs due to biological maturation and interaction with the environment but rather based on self-managed learning, it argues that if people have to find things out for themselves, then, they are more likely to learn and retain that learning. It is used as the basis for participative and case study training. It works if the learner wants to learn and if time is not an issue. The drawbacks are that it needs a good trainer who is skilled at giving guidance without seeming to do so. If learners come to the wrong conclusion too early. They are reluctant to change (Mahamuda & Nurul-Kabir, 2011)

## Results and Debate

The study adopted the quantitative (descriptive) research design. This design enables the researcher obtained the demographic attributes of the respondents as well as their opinions on the subject matter. The population of this study is made up of all academic staff in all faculties of University of Ilorin, Ilorin, Nigeria which stood at 1,876 as at December, 2017. The University of Ilorin was purposely selected for this study given the fact that it is a Federal University, old and large especially in terms of size of its faculties, specifically, the University has enjoyed uninterrupted academic calendar for nearly 20 years with less attention to staff training needs

Table 1 Number of Teaching Staff in University of Ilorin

S/N	Faculty	No of Departments	No of Employees	Bowley's Proportional Sample $n_h = \frac{n.N_h}{N}$
1	Agriculture	9	148	31
2	Arts	7	154	33
3	Basic Medical Sciences	8	103	22
4	Clinical Sciences	10	140	30
5	Communication & Information Sciences	5	104	22
6	Education	9	216	46
7	Engineering & Technology	10	225	48
8	Environmental Sciences	5	55	12
9	Law	5	60	13
10	Life Sciences	5	155	33
11	Management Sciences	6	65	14
12	Physical Sciences	7	184	39
13	Pharmaceutical Sciences	6	73	15
14	Social Sciences	7	92	20
15	Veterinary Medicine	10	102	22
		<b>109</b>	<b>1876</b>	<b>400</b>

Sources: Academic Planning Unit, University of Ilorin, 2017

Author's Computation, 2017

The sample for this study was drawn from the population using multi-stage cluster sampling techniques, because it involves two (2) or more steps that combine

some of the probability techniques. The sample size was determined using the Slovin's formula which is given as:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

**n** = desired sample size

**N** = population size

**e** = margin of error

For the purpose of this study, this margin of error is taken to be 5%.

Let the total population size be N. This implies that N = 1876. This also implies that e = 0.05.

Substituting these into the Slovin's formula and thus computed as shown below:  $n = \frac{1876}{1 + 1876(0.05)^2} = 399.77 \cong 400$ . This implies that a sample size of 400 was required to achieve a 95% precision from utilizing information and data collected from the sample.

The Bowley's proportional allocation formula was used in this study to determine the number of teaching employees to be selected from each faculty. The Bowley's proportional allocation formula is given as:

$$n_h = \frac{n.N_h}{N}$$

Where:

**n<sub>h</sub>** = sample size for stratum h

**N<sub>h</sub>** = population size for stratum h

**N** = total population size

**n** = required sample size

Primary and secondary data were used. A structured questionnaire consisting of 35 closed ended multiple choice-questions were employed for the survey. The instrument comprises of 18-item related to the construct variables of this study. 7 questions related to socio-demographical variables. The Likert-type scale was used and is considered more appropriate and reliable for eliciting data from the respondents on their perceptions and attitudes (Alreck & Settle, 1995; Miller, 1991). The study with the use of research assistants distributed copies of the questionnaire to sample elements in various faculties within the University of Ilorin. Follow-ups using personal contact, telephone and email were also done to ensure timely completion and return the administered questionnaire. Secondary data were obtained from relevant sources such as Academic Planning Unit (DAP) of the University, internet search engines, Google Scholar, Academia.edu, Research Gate, Sage, EBSCO, Encyclopedia Britannica, among others. A combination of descriptive and inferential statistics were employed as methods of data analysis. Linear regression were employed to analyse relationships among construct variables through the use of Statistical Package for Social Sciences (SPSS) v20.

### Socio-Demographic Characteristics of Respondents

Information gathered from the result were collected from the questionnaire, which statistical results obtained to answer research question raised for this study, and to test the formulated hypothesis for the study. The hypothesis were either accepted or rejected. The hypotheses were carried out using 5% level of significance.

Table 2 Socio-demographic characteristic of respondents

Age			
Valid		Frequency	Percentage
	18 - 25 years	8	3.5
	26 - 35 years	50	21.7
	36 - 45 years	97	42.2
	46 - 55 years	64	27.8
	56 - 65 years	10	4.3
	66 years and above	1	.4
Gender			
	Male	150	65.2
	Female	80	34.8
Marital Status			
	Married	141	58.7
	Single	75	32.6
	Widowed	6	4.8
	Divorced	8	3.9
Highest Educational Qualification			
	BSc. or equivalent	39	39.1
	Master's Degree (MSc./MA/MBA)	120	33.9
	PhD	71	3.0
Level/Rank of teaching staff			
	Graduate Assistant	20	8.7
	Assistant Lecturer	88	38.3
	Lecturer II	21	9.1
	Lecturer I	24	10.4
	Senior Lecturer	27	11.7
	Reader	6	2.6
	Professor	4	1.7
	Not Applicable	40	17.4

Source: Author's Computation, 2017

The majority of the respondents that participated in the research survey are in the age group category 36-45 years. This also implies that most academic staff of University of Ilorin are in the age category 30-39 years. The study also shows that more males (65.2%) than females (34.8%) took part in this research survey. This also implies that there are more male employees than females in University of Ilorin. Majority of the respondents that participated in this research survey are married. This also implies that most academic staff in University of Ilorin are married (58.7%). The table also shows that majority of the academic staff in University of Ilorin have M.Sc./MA/MBA (52.2%) as highest educational qualifications followed by those with Doctoral Degree (30.9%). The distribution of the Level/Rank of the teaching employees in the above table shows that majority of the teaching employees who participated in this research survey are "Assistant Lecturers", while "Reader" and "Professors" are the least.

### Test of Hypothesis

**H01:** Manpower training and development does not significantly influence employees' job attitude of academic staff of University of Ilorin

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.570a	.521	.500	.59641

a. Predictors: (Constant), Manpower training and development

#### ANOVAa

Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	23.728	151	1.680	10.689	.000b
	Residual	6.719	4	.157		
	Total	30.447	155			

a. Dependent Variable: Employees' job satisfaction/dissatisfaction

b. Predictors: (Constant), Manpower training and development

#### Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.307	.083		51.780	.000
	Manpower training and development	.617	.516	.553	6.049	.000

a. Dependent Variable: Employees' job satisfaction/dissatisfaction

The table above the influence manpower training and development on employees' job attitude. The table shows Correlation coefficient (R) and R-square to be 0.570 and 0.521 respectively. This explains that, manpower training and development

is highly related with employees' job satisfaction and manpower training and development variables explain for about 52.1% of the variations in the employees' job satisfaction/dissatisfaction and the remaining 47.9% was explained by other factors not included in the model. The F-statistic as shown from the ANOVA table is significant since the ANOVA significance of .000 is less than the alpha level of .005. This implies that the independent variable accounted for the variation in the dependent variable. Also, the regression sum of square of 23.728 is greater than residual sum of square 6.719, further showing the significant of the overall model. The coefficients of independent variable indicated that manpower training and development (.521) has a strong effect on employees' job satisfaction/dissatisfaction. In addition, the (probability) and t-statistics value of (.000) and 6.049 further suggest that the relationship between manpower training and development and employees' job satisfaction is significant since alpha level of 0.05 is greater than the p-value of 0.00. The conclusion therefore is that the null hypothesis is rejected and alternative hypothesis is accepted i.e, manpower training and development is significantly influence employees' job satisfaction

### Discussion of Findings

Out of 400 copies of the questionnaire distributed, 230 copies of completely filled questionnaires were retrieved from respondents through follow-up. This implies that the researcher got a response rate of 58%. The response rate can be said to be a very good response rate for the study. The study used IBM SPSS Version 20.0 software to carry out data analyses on the data extracted from the returned survey questionnaire. A Cronbach's alpha reliability test was carried out to test for the reliability and consistency of the research instrument. The test returned a Cronbach's alpha value of 0.765 on 25 items in the questionnaire which indicated that the research instrument had a good reliability and consistency. The researcher was also able to test all the research hypothesis using Simple Linear Regression.

The analysis also revealed that majority of the respondents 'disagree' that the workshops they have attended as academic staff of University of Ilorin were interesting, educative and beneficial to their jobs. Conversely, majority of the respondents were on the opinion of 'agree' that the seminars and conferences they have attended as academic staff of University of Ilorin were interesting, educative and beneficial to their jobs.

Henceforth, the study revealed that coefficients of independent variable indicated that manpower training and development (.521) has a strong effect on employees' job satisfaction as the (probability) and t-statistics value of (.000) and 6.049 further suggest that the relationship between manpower training and development and employees' job satisfaction is significant since alpha level of 0.05 is greater than the p-value of 0.00. The conclusion therefore is that the null hypothesis was rejected and alternative hypothesis be accepted which says manpower training and development do not significantly influence employees' job satisfaction in university of Ilorin. This conclusion was aligned with the studies of Susan (2007), Alexandrous and John (2008), Obisi (2011), Khawaja, Shahid and Nasir (2011) except Kumari (2011), Singh and Mohanty (2012) who were on the oppose opinion.



## Conclusion

From the findings, it is evidenced from the study that utilization of training and development manpower is a very important aspect of any organization. It is a continuous process which will last through employees working life, because this will assist them to adapt to new skills and knowledge required to carry out a given task. Also improves the quality of work and induces a certain behavioral pattern. In Universities, the training and development programmes such as workshops, seminars, conferences, and MA/MSc/Ph.D programmes have impact on employees' job satisfaction/dissatisfaction. Hence, more privileges be given to attend workshops, seminars, conferences, MA/M.Sc./Ph.D programmes. The study there recommends that

1. Training and development programmes should be organized for faculty members at least quarterly or twice a year, as this in turn improve their job satisfaction and performance of the institution.
2. The University should provide an open door for staff who want to further their educational programmes relevant to their field of studies. This will give a better understanding and knowledge required to carry out a given tasks.
3. There should be free flow of information to enable all the staff aware of the training and development programmes available both internally and externally.
4. The University should be organizing workshops, seminars and conferences regularly also department without postgraduate programmes such as MA/M. Sc./Ph.D should be encouraged so that staff can either train within the university.
5. The University should provide the Need for funds/Grants/Scholarship/TETFund for academic staff as self-sponsored candidates (use personal resources through monthly earnings and savings) and they find it difficult to fund postgraduate degrees program

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## FINANCIAL MANAGEMENT DECISION PRACTICES FOR ENSURING BUSINESS SOLVENCY BY SMALL AND MEDIUM SCALE ENTERPRISES

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### Abstract

This study centred on practices that small and medium scale enterprise financial managers/operators should adopt to ensure business solvency. Two research questions and two null hypotheses guided the study. The study used Survey research design and was carried out in Anambra and Enugu States Nigeria. The population was 373 registered SMEs financial managers/operators. Questionnaire was used for data collection. The instrument was validated by three experts. Cronbach Alpha Reliability Method was used, and a general reliability coefficient of 0.79 was obtained. Data were analyzed and hypotheses tested using mean, standard deviation and t-test statistics. Generally, the study found out that financial managers/operators of SMEs in Anambra and Enugu States, Nigeria very highly and highly required investment and financing decision practices for ensuring business solvency in their business operations.

**Key words:** *Small and medium scale enterprise, Finance, Financial management, Solvency*

**JEL Classification:** *M10, M20, M19*

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### Introduction

A business, whether small or big, simple or complex, private or public is created to provide competitive prices in an economy. Business in Nigeria has been classified as small, medium and large (Ayozie, Oborch, Umukoro & Ayozie, 2013). Though, in the context of this study, attention will be paid much on the small and medium scale enterprises in Nigeria, Anambra and Enugu State in particular. In both the developed and developing countries, the government is turning to small and medium scale enterprises as a means of economic development and a veritable means of solving societal problems. Small and medium scale enterprises (SMEs) as opined by National Council of Industries (NCI, 2004) is referred to as business enterprise whose total costs, excluding land, is not more than two hundred million Naira (N200,000 000.00) only.

Many authors like Kalanje (2002), Osuala (2004), and World Business Council for Sustainable Development (WBCSD, 2007) are in agreement that there is

no universally accepted definition of SMEs. However, The Association of Nigerian Development Finance Institutions (ANDFI, 2004) stated that some of the commonly used criteria in defining SMEs are the number of employees, value of assets, value and size of capital. Among these, the most common definitional basis used by different authors is the number of employees because of ease of comparative and ease of collecting information on them. Small and medium scale enterprises can be seen as a seedbed of innovations, inventions and employment. Presently in Nigeria, SMEs assist in promoting the growth of the country's economy, hence all the levels of government at different times have policies which promote the growth and sustenance of SMEs. Oni and Daniya (2012) asserted that small and medium scale enterprises constitute essential ingredients in the lubrication and development of any economy. According to the authors, in Nigeria, the story makes no remarkable difference as SMEs dominate the economy. To them, government over the years has formulated a number of policies aimed at developing small and medium scale enterprises. While most policies actually failed due to poor implementation, others, however, succeeded. Small and medium scale enterprises to Ahmed (2006) have better prospects for developing domestic economy, thereby generating the required goods and services that will propel the economy of Nigeria towards development. Since the office jobs that people desire every day are no longer there for the teeming population. SMEs will become, in reality, the only means of ensuring self independent, employment creation, import substitution, effective and efficient utilization of local raw materials and contribution to the economic development of the Nation (Ojo, 2009).

Small and medium scale enterprises in the context of this study, are enterprises that have the capacity to employ at most five hundred (500) employees at a time with a capital base not exceeding N200 million naira excluding land. SMEs have been proved to be the back bone of every economy and as such being regarded as the engine of economic growth and equitable development in developing economies. Agwu & Emeti, (2014) opined that SMEs are the key to Nigeria's economic growth, poverty alleviation and employment generation since they are labour intensive, capital saving and capable of helping create most of the one billion new jobs the world will need by the end of the century. Small and medium scale enterprise (SMEs) according to Okanazu (2013), occupied a pride of place in virtually every country or state. The author maintained that because of the SMEs significant roles in the development and growth of various economies, SMEs have aptly been referred to as "the engine of growth" and catalysts for socio-economic transformation of any country. All the aforementioned benefits of SMEs cannot be achieved or may just be a mirage or an illusion without the direct intervention of the government and financial institutions on the general operations and management of small and medium scale enterprises, especially their financial management practices.

Finance is one of the basic foundations of all kinds of economic activities. Finance, according to Karamage (2015), is provision of money at the time it is required. To the author every enterprise, whether small, medium, or big needs finance to carry on its operations and to achieve its targets. Without adequate finance, no enterprise can possibly accomplish its objectives as such finance is regarded as the life-blood of any business enterprise. Chuke (2001) defined finance as the study of the ways a person, company, government, organization manages their money. It deals with the way businessmen, investors, government, financial institutions, individuals and families handle their money. That is, the way they plan their budgets, savings, spending and investments. With adequate finance; an enterprise call it SMEs can acquire its factors of production such as labour machinery/technology, management,

land, as well as raw materials and embark on any business activity. Finance as further explained by Karamage (2015) and Chuke (2001) has triple components namely: public sector finance, international finance and private sector finance which is the main concern of this study. To Karamage (2015), private finance is concerned with requirement, receipts, and disbursement of fund in case of an individual, a profit seeking business organization and a non-profit organization. The author noted that private finance is classified into; personal finance, finance of non-profit organization and business finance. According to Guttman and Dougal (2015), business finance are those activity concerned with planning, raising, controlling and administrating of funds in business. These planning, raising, controlling and administrating involved in business finance are the key functions performed by the management of a business.

Management, according to Osuala (2006), is the planning, organizing and controlling of the total business activities and the leading of people so that the use of men, materials and equipment result in the efficient achievement of planned objectives. The author pointed out that cooperation is the key note of management success. Egbo (2007) defined management is the process of doing things to achieve results. It involves a series of actions, activities, changes and operations deliberately undertaken to achieve a desired goal. Management is the process of achieving results through and with people like managers. Manager in the opinion of Egbo (2007) is someone whose primary responsibility is to facilitate all the management and financial activities in a business organization. Financial activities to the author are part and parcel of financial management.

Financial management as defined by Guttman and Dougal (2015) is the managerial activity which is concerned with the planning and controlling of the firms' financial resources. It is concerned with the management of funds, the procurement and use of funds in a business or cooperate enterprise. According to Solomon (2016), financial management deals with the managing of finance of the business for smooth functioning and successful accomplishment of the enterprise objectives. The term financial management, managerial finance, cooperation finance are used inter-changeably. Most financial managers, however, seem to prefer either financial management or managerial finance. Financial management, as explained by Margaret (2016), involves managing a business organization's assets and liabilities, including monitoring operational financing items such as expenditures, revenues, accounts receivable and accounts payable, cash flow, and profitability. She affirmed that for SMEs to establish sound financial management, they require adequate financial discipline and sound organizational plan. Sound financial management will involve SMEs in long-term strategic planning and short-term operations planning and this could only work effectively when the financial mangers/operators of the business enterprises take sound financial management decisions.

Financial management decisions, also referred to as financial function in a business organization includes, four major decisions. Though, in the context of this study our focus will be on requisition of funds (financing decision) and funds investment in assets (investment decision) (Chuke, 2001). When taken these decisions in an organization, the objective of the firm will be to maximize the firms' core value. Chuke (2001) noted that financing decision is an important function to be performed by the financial manager. The manager in doing this must decide when, where and how to acquire funds to meet the firms' investment needs. On the other hand, investment decision relates to the selection of assets in which funds will be invested by a firm. Proper financing and investment decision will help business organization to avoid been insolvent.



Solvency, in business, is the degree to which the current assets of an individual or entity exceed its' current liabilities (Gaist, 2009). Solvency can also be described as the ability of a business enterprises/corporation to meet its long-term fixed expenses and to accomplish long-term expansion and growth. Zietlow and Seidner (2007) defined solvency as the ability of a business organization to meet its long-term financial obligations. Business solvency can be achieved by financial managers and it is essential to staying in business as it asserts a business's ability to continue operations into the foreseeable future. Financial managers as opined by Sokanu Education (2017) are people responsible for the financial health of an organization. They produce financial reports, direct investment activities, and develop strategies and plans for the long-term financial goals of their organization. In the area of the study, financial managers/operator of SMEs are entrepreneurs who possess characteristics which give them fortitude to continue in small and medium scale enterprises despite obstacles, and the ability to cope effectively in ever-changing situations (Osuala, 2004).

However, it has been worrisome that despite the incentives, policies, programmes and support aimed at revamping the operators of SMEs especially with regards to their financial management, SMEs business managers/operators have performed rather below expectations in Anambra and Enugu States especially with regards to their financial management decisions (World Bank, United Nations Industrial Development - UNIDO, 2014). The failure of business at any scale (micro, small, medium and large) is associated mainly with financial management incompetence of their financial managers/operators. Inability of small and medium scale enterprises to live up to its purpose of establishment which is to create employment and serve as the engine of growth and catalysts for socio-economic transformation of any country can be attributed to inadequate application of sound investment decision practices. Therefore, it is against this backdrop that the researcher sought to determine the financial management decision practices required for ensuring business solvency by small and medium scale enterprises in Anambra and Enugu States.

## Material and Methods

The main purpose of the study was to determine the financial management decision practices for ensuring business solvency by small and medium scale enterprises in Anambra and Enugu States. Specifically, the study determined the investment decision practices and the financing decision practices for ensuring business solvency by Small and Medium Scale Enterprises.

The following null hypotheses were formulated to guide the study and were tested at 0.05 level of significance:

**H01:** There is no significant difference in the mean ratings of small and medium scale enterprises financial managers/operators on the investment decision practices required for ensuring solvency in their business operations based on their location.

**H02:** There is no significant difference in the mean ratings of small and medium scale enterprises financial managers/operators with more experience and those with less experience on the financing decision practices required for ensuring solvency in their business operations.



Survey research design was adopted for the study. In the opinion of Fraenkel, Wallen and Hyun (2012), survey design involves asking the same set of questions (often prepared in the form of a written questionnaire or ability test) to a large number of individuals. The area of the study was Anambra and Enugu States South east Nigeria. The population for the study comprised 397 small and medium scale enterprises (SMEs) operators/financial managers registered with the Ministry of Commerce and Industries together with State Chamber of Commerce in Anambra and Enugu State respectively. Due to the relatively manageable size of the population, the entire population was involved in the study; therefore, there was no sampling. The instrument for data collection was a structured 43 item questionnaire titled "Financial Management Decision Practices for Ensuring Business Solvency in SMEs Questionnaire" (FMDPEBSSMEQ). The questionnaire was structured on a five-point rating scale of "Very Highly Required" (VHR)-5 points, "Highly Required" (VH)-4 points, "Moderately Required" (MR) - 3 points, "Required" (R)- 2 points, "Not Required" (NR)-1 point respectively. The instrument was validated by three experts. One from measurement and evaluation and two from the Department of Business Education, University of Nigeria, Nsukka, Enugu State. Cronbach Alpha reliability method was used and an overall reliability coefficient of 0.79 was obtained. Copies of the questionnaire were distributed and the collection was on the spot to avoid losing on transit. 373 copies of the questionnaire out of 397 administered were retrieved representing 93% rate of return. The data collected were analysed using mean and standard deviation for answering the research questions while t-test was used for testing the null hypotheses at 0.05 level of significance. The null hypothesis of no significant difference was accepted for items whose t-values were greater than 0.05 level of significance while null hypothesis of no significant difference was rejected for items whose t-values were less than 0.05 level of significance.

## Results and Debate

Result of the investment decision practices for ensuring business solvency by Small and Medium Scale Enterprises.

**H01:** There is no significant difference in the mean ratings of small and medium scale enterprises financial managers/operators on the investment decision practices required for ensuring solvency in their business operations based on their location.

The data for answering the first research question and testing the first null hypothesis are presented in Table 1.

*Table 1 Mean Responses on the Investment Decision Practices for Ensuring Business Solvency by Small and Medium Scale Enterprises*

S/N	Item Statements	X	SD	Remarks	Sig t-value	Remarks
1	The total amount of assets needed to be held by the business organization	4.73	.45	VHR	0.00	S
2	The amount of cash that will appear in the balance sheet of the business organization	4.47	.55	HR	0.08	NS
3	The composition of the assets of the business organization	3.77	.85	HR	0.03	S
4	How much of the business assets should be cash	3.92	.80	HR	0.98	NS
5	How much of the business assets should be inventory	3.74	.91	HR	0.02	S
6	How to dispose disposable assets	3.94	.78	HR	0.59	NS
7	Identification of various investments opportunities	3.74	.87	HR	0.32	NS
8	Matching the available resources with investment opportunities	4.05	.68	HR	0.04	S
9	Evaluating and committing funds into new investment proposals	3.84	.80	HR	0.00	S
10	Replacing, old and damaged assets of the business with new ones	4.04	.81	HR	0.10	NS
11	Maintaining the productivity quality of assets of the business	3.93	.89	HR	0.07	NS
12	Evaluating the benefits of any investment the organization is embarking on	3.97	.81	HR	0.61	NS
13	Criteria for determining the required rate of return on any investment	3.79	.85	HR	0.00	S
14	Maintaining a perfect assets mix and risk content	3.93	.80	HR	0.98	NS
15	Raising excess cash through debt capital, equity capital, and retained earnings	3.82	.86	HR	0.62	NS
16	The allocations of cash, cash equivalents, receivables and inventories in the organization	4.17	.70	HR	0.51	NS
17	Starting up a new business	3.87	.87	HR	0.99	NS
18	Expansion of existing business	4.12	.72	HR	0.65	NS
19	Determining investment/capital budgeting decision tools to be used in evaluating project returns	3.77	.84	HR	0.77	NS
20	Determining when to use Net Present Value (NPV) method to evaluate returns on a project	3.98	.81	HR	0.58	NS
21	When to use Internet Rate of Return (IRR) method to evaluate returns on a project invested on by the organization	3.98	.67	HR	0.03	S
	<b>Grand Mean</b>	<b>4.02</b>	<b>0.78</b>	<b>HR</b>	<b>0.37</b>	<b>NS</b>

*Source: analysis of field data 2018*

The data presented in Table 1 reveals that the mean rating of the respondents on item number one in the Table was 4.73. This indicated that the item one was very highly required. On the other hand, the mean values of the remaining 20 items, 2 -21 ranges from 4.47 to 3.77. This implies that the remaining 20 items are highly required in investment decisions for ensuring business solvency by Small and Medium Scale Enterprises.

Data presented in Table 1 on the first hypothesis show that the t-values of the 14 items ranged between 0.07 – 0.99 which are all greater than 0.05 level of significance. This indicates that there are no significant differences in the mean ratings of small and medium scale enterprises financial managers/operators in Anambra State and those in Enugu State on the 14 investment decision practices required for ensuring business solvency in their business operations. Therefore, the hypothesis of no significant difference was accepted on the 14 items. On the other hand, the calculated t-values of the remaining seven items range from 0.00 to 0.04 which in each case were less than 0.05 level of significance. This indicates that there are significant differences in the mean ratings of small and medium scale enterprises financial managers/operators in Anambra and Enugu States on the seven investment decision practices required for ensuring business solvency in their business operations. Therefore, the null hypothesis of no significant difference was rejected on the seven items.

The findings of this study on investment decision practices show that one item in the Table 1 that is: the total amount of assets needed to be held by the business organization was very highly required in investment decision practices for ensuring business solvency by small and medium scale enterprises. While the remaining items like: the amount of cash that will appear in the balance sheet of the business organization; the composition of the assets of the business organization; how much of the business assets should be cash; how much of the business assets should be inventory; how to dispose disposable assets among others were highly required in investment decision practices for ensuring business solvency by small and medium scale enterprises.

These findings corroborated the report of Sergei (2008) who reported that investment decision must begin with a determination of the total amount of assets needed to be held by the firm, that while taking the decisions, financial managers must either accept or reject long-term investment proposals. Chuke (2001) in a study found that investment decision is concerned with the allocation of capital to assets whose benefits are to be realized in the future. The author reported that investment decision involves economic activities designed to increase, improve or maintain the productive quality of the existing assets and that investment arises when the assets available are less than the level required to achieve the expected rate of return or when new business opportunities surface. In making investment decision the expected benefit of the intended investment is evaluated and the rate of return compared with the required rate of return. In addition, Ayozie, Oboreh, Umukoro & Ayozie (2013) reported that proper investment decision in small and medium scale enterprises (SMEs) will help in the provision of enabling environment for SMEs to thrive. Thus, when proper investment is done, there will be adequate provision of infrastructural facilities, constant supply of man-power, development in direct financial assistance and the establishment of finance institutions to support SMEs. The findings of the study also agreed with the recommendations of Nyabwanya, Ojere, Otiemo and Nyakundi (2010) who affirmed that ministry of commerce and industry should invest in SMEs in order to make it financially stable and an integral driver of its developmental policy framework. Similarly, Ignacio (2008) and Pandey (2007) supported the finding of this study when they noted that investment decision is one of the most important

finance functions and that it involves intelligent allocation of long-term assets to profit yielding ventures so as to get maximum yield in future. The findings of this study are in consonance with the report of Himanshi (2017) that investment decision relates to careful selection of assets in which funds will be invested by the firm. To the author, a firm has many options to invest their funds but firm has to select the most appropriate investment which will bring maximum benefit for the firm in the future.

There was no significant difference in the mean ratings of small and medium scale enterprises financial managers/operators on the 14 items in investment decision practices required for ensuring solvency in their business operations based on their location. This finding conformed to that of Businesscasestudies.com (2017) and BusinessTown Partner (2018) when they asserted that there are factors which financial managers/business operators irrespective of where they are must considered before investing in any business or choosing a business location. These factors include: location of the market and raw materials, cost of transportation, land and labour, safety of the business, waste disposal, and government policies, demographics, foot traffic, parking space and accessibility, competition, site's image and history, proximity to other businesses and services, the building's infrastructure, utilities and other costs. Furthermore, in the researcher's opinion business location is one of the factors that either make or mar a business. A well properly located business, notwithstanding its' capital outlay, would do far better when proper investment decision is made. Also, businesses are expected to be located near their customers to enable them have easier access to the business products and services.

Result of the financing decision practices for ensuring business solvency by Small and Medium Scale Enterprises

**H02:** There is no significant difference in the mean ratings of small and medium scale enterprises financial managers/operators with more experience and those with less experience on the financing decision practices required for ensuring solvency in their business operations.

The data for answering the second research question and testing the second null hypothesis are presented in Table 2.

*Table 2 Mean Responses on the Financing Decision Required for Ensuring Business Solvency by Small and Medium Scale Enterprise*

S/N	Item Statements	X	SD	Remarks	Sig t-value	Remarks
1	The sources of long term financing for the business organization	4.52	.76	VHR	0.18	NS
2	The sources of medium term financing for the business organization	3.94	.92	HR	0.23	NS
3	The sources of short term financing for the business organization	3.99	.74	HR	0.23	NS
4	The appropriate amount of fund to be committed in a project by the business organization	3.97	.89	HR	0.00	S
5	The nature, size and life span of a project/assets before financing	3.94	.78	HR	0.02	S
6	The determination of gestation period and scope of a project before financing	3.74	.87	HR	0.00	S

7	The appropriate proportion of easily and debt financing to be used at every point in time in business organization	4.65	.68	VHR	0.89	NS
8	The cost, risk, return, flexibility, and control of fund invest in a project	3.76	.84	HR	0.00	S
9	The financing mix required by business organization	4.61	.71	VHR	0.81	NS
10	The financial structures that should be maintained by business organization	3.72	.89	HR	0.00	S
11	The appropriate methods and sources of finance required by business organization	4.74	.84	VHR	0.80	NS
12	The choice between alternative sources of financing a project i.e. equity, debt or retain earnings.	3.74	.86	HR	0.00	S
13	The appropriate time of floatation of securities in the business organization	3.93	.80	HR	0.04	S
14	How, where and when to sources for fund by the business organization	3.87	.87	HR	0.01	S
15	How to source for funds from international financing agencies and assets securitization	3.96	.75	HR	0.02	S
16	The costs and benefits of sourcing for funds to finance a project from medium term financing	3.82	.88	HR	0.00	S
17	The cost and benefits of sourcing for funds from short and long term sources to finance project in business organization	4.16	.64	HR	0.89	NS
18	How to source funds form lease	3.76	.84	HR	0.00	S
19	Hire purchase finance to execute organizational projects	3.97	.81	HR	0.08	NS
20	How to source funds for projects execution in business organization from factoring services	3.82	.91	HR	0.01	S
21	How to finance projects/assets with funds sourced from bill discounting and trade credit options	4.04	.74	HR	0.66	NS
22	How to fix ratio of owners/shareholders funds in business organization	3.88	.82	HR	0.01	S
	<b>Grand Mean</b>	<b>4.02</b>	<b>.81</b>	<b>HR</b>	<b>0.22</b>	<b>NS</b>

Source: analysis of field data 2018

Data presented in Table 2, show that the mean ratings of the respondents on four out of 22 items have mean values that range from 4.52 to 4.74. This indicated that the four identified items are very highly required in financing decisions for ensuring business solvency by Small and Medium Scale Enterprises. On the other hand, the mean values of the remaining 18 items have mean values that range from 3.72 to 4.16. This shows that the 18 items were highly required in financing decisions for ensuring business solvency by Small and Medium Scale Enterprises.

Also, the data presented in Table 2 on the second hypothesis show that the t-values of the nine items in the Table ranged between 0.08 to 0.89 which are in each case greater than 0.05 level of significance. This indicates that there are no significant differences in the mean ratings of small and medium scale enterprises financial managers/operators with more experience and those with less experience on the nine financing decision practices required for ensuring business solvency in their business

operations. Therefore, the hypothesis of no significant difference was accepted in relation to the nine items. On the other hand, the calculated t-values of the remaining 13 items specifically items range from 0.00 – 0.04 which are, in each case, less than 0.05 level of significance. This indicates that there are significant differences in the mean ratings of small and medium scale enterprises financial managers/operators with more experience and those with less experience on the financing decision practices required for ensuring business solvency in their business operations. Thus, the null hypothesis of no significant difference was rejected in relation to the 13 items.

The findings of this study with respect to financing decision practices reveal that four items in Table like: the sources of short term financing for the business organization; the appropriate proportion of easily and debt financing to be used at every point in time in business organization; the financing mix required by business organizations and the appropriate methods and sources of finance required by business organization are very highly required financing decision practices for ensuring business solvency by small and medium scale enterprises. While the remaining 18 items like: the sources of long term financing for the business organization; the sources of medium term financing for the business organization; the appropriate amount of fund to be committed in a project by the business organization; the nature, size and life span of a project/assets before financing among others are highly required financing decision practices for ensuring business solvency by small and medium scale enterprises.

These findings corroborated the report of Babar, Ahmed and Kashif-ur (2010) who reported that financing decision practices have significant and positive impact on organizational performance, and would eradicate insolvency and give no room for business closure as such financial managers/business operators of SMEs should focus on the financing decisions and investment decision along with other practices to achieve results in their business organizations. Pandey (2011) and Chuke (2001), in support, noted that financing decision is an important function to be performed by the financial manager, that the manager must decide when, where and how to acquire funds to meet the firm's investment needs. Similarly, the result of this study substantiated the reports of Ang, Rebel and James (2000) and Karamage (2016) that financing decision is concerned with the financial structure of a firm. To the authors, financing decision is concerned with the collection of the funds to finance a project, the methods and sources of finance, relative proportion and choice between alternative sources, time of floatation of securities among other. In doing these, financial manager needs to decide about the appropriate amount and sources of fund for a project. Also, in line with the findings of this study, ICAN (2006) posited that it is important to understand the nature, size, life span, preparation/gestation period as well as the scope and other essential factors of the project in order to plan for adequate financing. According to ICAN (2006) adequate financing here refers to fund sufficient to cover not only the long-term assets but the medium and short-term up to working capital level. A mistake in financing decision in a business organization like SMEs can lead to a mismatch that is financing a wrong project with the right capital/fund, or financing the right project with the wrong capital.

There was no significant difference in the mean ratings of small and medium scale enterprises financial managers/operators with more experience and those with less experience on the nine items of financing decision practices required for ensuring solvency in their business operations. These findings supported that of Lauren (2016) who stated that being a successful manager is completely different from succeeding in any other type of job. One might have all the necessary skills and expertise to perform in a job successfully, but becoming a financial manager/ business operator

needs further information. Therefore, if your goal is to become a financial manager/ business operator one day; Lauren (2016) outlines few tips one should strive to possess to include: gain more experiences, prioritize your projects and update your skills on a regular basis. The researcher in connection to the findings submitted that experiences of business operators/financial managers count more on the survival, sustainability and growth of any given business. Business operators/financial managers with more experiences would do better in the management of their businesses having encountered so many obstacles and challenges, and being able to maneuver them in the cause of their business operations.

## Conclusion

The relevance and mission of small and medium scale enterprises to any nation's economy is to eradicate unemployment, poverty and hunger and encourage national development and growth. Based on this premises, this study was conducted to find out how financial managers/ business operators required investment decision practices and financing decision practices in their business operations. Also, it was established that proper location of businesses and operators' experiences played a vital role in the survival, sustainability and growth of SMEs in Anambra and Enugu States.

Finally, it was deduced that not observing sound financial management decision practices may bring business insolvency as such non-survival and frequent closure of business operations in small and medium scale enterprises in the States. Thus, for SMEs to retain their mandates, mission, and relevance as engine growth and catalyst for national development, concrete efforts should be made by relevant stakeholder to redirect SMEs towards achieving their main goal in any economy. The study recommends that financial managers/operators of small and medium scale enterprises in Anambra and Enugu States should be subjected to short training on financial management decision practices required for ensuring business solvency in their business operations to avert businesses from becoming insolvent and possibly total closure; that there should be regular workshops organized by experts and academics to sensitize the financial managers/operators on financial management decision practices required for ensuring business solvency in their business operations for better performance of the businesses in the States; financial managers/operators of small and medium scale enterprises should acquire skills in the area of using Net Present Value (NPV) and Internal Rate of Return (IRR) methods to evaluate returns on a project. Also, skills in the areas of allocation of cash, cash equivalents, receivables and inventories in the business organization should equally be acquired and business owners/business operators in SMEs should locate their businesses where it will be closer to their customers, markets, raw materials among others.

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## VALUE-DRIVEN CONCEPT AND ASPECTS OF MARKETING COMMUNICATION IN PREMIUM GASTRONOMY

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### Abstract

The most recent concepts are considerably changing the character of traditional marketing and communication tools. A value-driven concept has logically resulted from current social as well as market changes which are strengthening a customer position within a market chain with the emphasis on his/her own needs and values. Value-driven marketing is said to be essential for creation of consistent relations and customer loyalty enhancement. In gastronomy, the terms such as quality, originality and added value are one of the key factors of a prosperous business. Studying the current state of premium gastronomy has shown that in Slovakia the value is not perceived as a complex framework and moreover, it definitely lacks the concept of principles and value to be applied to restaurants.

**Key words:** *Customer value. Value for a customer. Value attributes. Gastronomy. Customer experience.*

**JEL Classification:** *M 31, M 37, M 38*

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### Introduction

Gastronomy recognizes a certain set of values to be primarily oriented towards experiences which are related to its specificities. Services are a key element of this segment. Services and especially those in gastronomy copy the trend of a holistic marketing concept, i.e. complexity and interconnection between services and products. Apart from the value to be fulfilled and satisfied, gastronomy has to be regarded as a complex system due to the fact that the customer usually gets a general impression without focusing on its particular elements. Introducing a dish into our value ladder represents one of the fundamental needs of a person. Food and all the related activities are pre-determined by cultural and economic standard of the whole society, living standards, current social processes and cultural traditions. Nowadays, gastronomy is seen as a rather ambivalent term derived from its Latin origin word „culinaria“, generally translated as „cooking“, which is often referred to as incorrect by some sources. Our attitude to gastronomy is also important for religion as well as philosophy and therefore it is necessary to perceive it on the basis of our individual preferences within the whole human value system.

The process of creation and provision of values was defined by Webster (1997) who established three basic steps of a value process. In order to identify the attributes to be applicable in gastronomy, it is necessary to implement several steps which will help us to create composition of these parameters.

#### **Value defining process**

Market research is a key element of the value defining process. When it comes to premium gastronomy (the selected businesses we studied), it mainly relates to localities and businesses which meet the premium restaurant criteria. The selected businesses required a specific analysis having focused on customers' requirements and expectations.

#### **Value developing process**

Another step is to define specificities of the selected businesses in order to determine a customer segment with all its particularities. It all results in development and creation of a product or a portfolio of value elements which are part of a product portfolio. It is necessary to manage the activities necessary for preparation, delivery, selection of suppliers or sale of a finished product and services to a customer. In gastronomy we refer to a complex design of a business (inside and outside premises), menu creation and food styling and all the corresponding sources (food ingredients, drinks and food styling, personnel, etc.).

#### **Value delivering process**

In the value delivering process, which may either result in customer satisfaction or not (in case of non-fulfillment of some parameters), it is necessary to provide the participants in a business process (potential customers) with all the corresponding activities and simultaneously to maintain relations with the existing customers through available communication activities and tools. The key information attributes (features) are integrity, confidence, availability and incontestability (i.e. authenticity).

#### **Current trends in gastronomy**

Top or premium gastronomy does not need to be necessarily linked to luxurious environment or glamorous interior design. The quality gastronomy concept is before evolution. The quality can be regarded as the value itself or the added value for a customer. It represents the overall set of services, e.g. ingredients, eating habits, the art of cooking, lifestyle, culture, social events as well as agriculture, health, dietology and many others. Please find some of the current gastronomy trends below:

- **use of natural ingredients, elimination of preservatives and additives** – organic food;
- **popularity of so-called gastronomisation** – cooking TV shows, cooking competition shows, cooking video blogs, cooking tutorials, etc.;
- **nutritional value** – quality of ingredients and food, their content and cooking techniques;
- **digitalization** – in all the fields – from reservation through reviews, inspecting and controlling the ingredients and their freshness;
- **migration: food as a cultural identity** – different cultures and their role in gastronomy will be constantly growing;
- **polarisation:** organic food vs molecular gastronomy which uses non-standard food consistence and cooking techniques;

- **exact target audience of restaurants** – focus on specific target audience, e.g. vegans, lactose-free diet, gluten-free products, etc.
- **popularity of loyalty programmes and bonus systems** – as customer acquisition is six times more expensive and spending is much higher, the trend of customer retention will be constantly growing;
- **role of social media in gastronomy business** – a lot of restaurants do not even have a company website, only a Facebook fanpage;
- **preparation for Generation Y (Millenials)** – as these will account for a half of all the consumers in 2025, it is necessary to know their habits and expectations;
- **so-called employer branding** – employer image is rather important due to labour shortage, i.e. insufficiency of qualified and skilled workers.

## Material and Methods

Dynamic development and transformation of food businesses along with a considerable increase in the number of premium restaurants and continuous evolution of information and communication technologies, Internet, globalisation, changes to customer behaviour and growing requirements - all these represent key prerequisites for adaptation and customer focus. The key subject matter of our research was to specify the current tendency of a customer-oriented approach in the premium gastronomy segment. The whole research focused on Slovak premium food businesses to have been selected on the basis of previous analyses and corresponding value attributes.

In order to study the current perception of value delivering and its potential in premium gastronomy along with the application of a customer-oriented approach, it was necessary to conduct primary research. Within the analysis of the gastronomy segment, especially premium restaurants, and after having collected the quantitative data, it was essential to identify the current conditions, the quality and the overall perception of restaurants by Slovak customers and experts. As for the identification of customer behaviour, it was crucial to gather socio-economic indexes in order to define the purchasing power as well as the prospects of premium food businesses.

Statista.com, which has followed the progress of earnings in gastronomy business in Slovakia since 2008 with the forecast up to 2020 (in 2017 the earnings accounted for 1.187 ml. USD), forecasts the growth in earnings of 858 ml. USD, which accounts for 700 ml EUR. By the Statistical Office of the Slovak Republic, gastronomy business and services reported a 7.4% growth at the end of 2017.

Table 1 *Economic indexes of Slovak households*

Average costs and income of Slovak households in EUR	
Average monthly income of households	1.080
Average monthly net wage per inhabitant	710
Average costs per household member	358

Source: private sources, 2017, by <http://sberbank.sk>, <http://bookio.sk>, <http://reinisfischer.com>, <http://numbeo.com>

According to the research by Yahoo, which evaluated the European countries by their quality and level of gastronomy, Slovakia came 31st out of 48 countries (Alexander, 2014) while in the Buzzfeed research, Slovakia belongs amongst 41 best food quality countries out of 125 (Nashrulla, 2014). Yet our premium gastronomy businesses have one major weakness and that is their insufficient image, a lack of restaurants which would be attractive enough for tourists and the undefined market. We may notice that customer behaviour has undergone various changes as they seem to be much more educated, demanding and willing to pay a higher price for gastronomic services, as indicated by a higher number of clients and their visit frequency rate (over a fifth of them visit restaurants several times a week – the results of the online research from 2015). However, customer demands are constantly growing. Negative recommendations can even spread among those people who have never been to a particular restaurant thanks to experience from their friends (up to 71% of customers share their experience with their family and friends – the results of the online research from 2015)) or based upon the reviews and ratings on various web portals (there are over 20 in Slovakia). The Slovaks have learnt to show their dissatisfaction more expressively (by Staffino in the first half of the year 2015 customers filed 1,846 complaints about services – Miša, 2015). Based upon the research by Bookiopro and Zl'avadňa, these are one of the ways how to verify data from the primary research as they may show behavioural tendencies of Slovak customers. It demonstrates that businesses which tend to focus on a particular field or try to specialise in a limited segment, keep a competitive advantage as this attitude enables them to profile and define themselves.

Gastronomy experts and chefs show certain optimism, though. Slovak gastronomy is likely to become one of the pillars of economy on condition that restaurants make a customer feel comfortable and satisfied. It is necessary to identify the parameters (technical, product or price) which will be symbiotic with the values a customer expects. The analysis showed that the majority of restaurants to be highly acclaimed by customers or experts were unique by their specialisation, menu or their overall interior design.

Public evaluation by customers as well as experts – critics – demonstrates that the list of restaurants interchanges, which objective assessment with one important element: critic – guest. In 2017 2,520 respondents from the whole Slovakia (domestic as well as foreign ones) expressed their opinions. We selected nine web portals gathering restaurant reviews and ratings from customers. The second part of the analysis dealt with evaluation of the selected elements or attributes of particular restaurants, which were often referred to as positive attributes, and eventually, these were matched with specific businesses (these attributes were verified in the research).

The first research used **the method of in-depth interviews** with representatives of the selected premium gastronomy businesses as well as with gastronomy experts in Slovakia. The interviews with qualitative scaling measured various approaches, respondents' preferences as well as perception of the topic through a semantic differential using a standard deviation for closed questions.

We were interested in the final value of particular variables which is characterized by a rising tendency with a higher rate of compliance. In every group, each attribute was defined by a weighted mean for the purpose of the overall perception of the given attribute in the selected group of values. Based upon the results, we created a scale of values with the highest statistical significance to be attributed.

Table 2 Methodology of the first research

Type of research	Quantitative research
Object of research	Representatives of premium gastronomy businesses
Purpose of research	To identify value elements in gastronomy business from the viewpoint of premium gastronomy operators
Method	Detailed interviews
Data analysis	Content analysis, Scaling
Data collection	November 2017 - February 2018
Results interpretation	Graphs, infographics, tag clouds
Sample size	14

Sources: *private sources, 2018*

The main objective of **the questionnaire focused on clients of premium restaurants** was to obtain exact and objectively verifiable data on the subject matter of the research. A multidimensional dispersion analysis was applied for data processing. The results of the questionnaire are processed by means of a percentual representation of respondents classified into groups by their socio-demographic characteristics in the questions to be relevant for these classifications.

Classifying specific value elements into the categories of food, personnel and environment revealed significance of these values for particular areas. What is more, in specific categories it was recommended to identify the effectivity and the concordance rate for individual communication channels to be used in gastro businesses. As we processed various independent variables, it was necessary to answer the questions whether such changes in independent variables have an impact on dependent variables or what the relations among these two groups of variable are. In other words, we were trying to compare variability between the two groups. In case of the dispersion analysis, the answers related to significance and the role of particular attributes were divided into numeric variables and specific attributes were given literal coding. As for the closed questions,, total results were processed in the contingency table in integral numbers and percentages on the basis of socio-demographic characteristics and classification of the occurrence rate. This procedure was also applied for each research area to identify particular value elements.

Table 3 Methodology of the second research

Type of research	Quantitative research
Object of research	Customers of premium restaurants
Purpose of research	To identify value elements in gastronomy business from the viewpoint of customers
Basic sample size	200
Selected sample	184
Method	Electronic and written questionnaire
Data	Multidimensional statistical analyses
Data collection	December 2017 - February 2018

Source: *private sources, 2018*

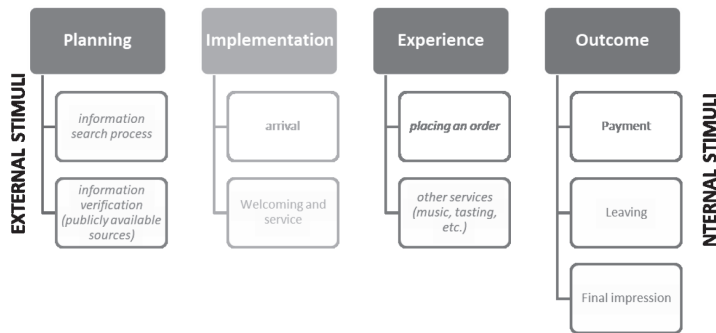
## Results and Debate

The objective of our first research was to find out the informability rate of customer preferences in the selected premium restaurants as well as their preferences in the value delivering process and its contribution to customer experience enhancement or the application of the above mentioned values in marketing communication. The second and key objective of our research dealt with more detailed value attributes related to premium gastronomy and focusing on specific areas which are directly linked to gastronomy businesses, e.g. food, services and environment.

### Summarizing and processing the research outcomes

For proper interpretation of a value system in gastronomy business it is necessary to identify a product and determine its parameters which shall take into consideration specificities of this industry. A general model consists of various phases from planning the customer reservation up to his/her arrival in the restaurant. Particular value attributes were defined through logical succession of steps.

Picture 1 Customer cycle in the provision of gastronomy services



Source: private sources, 2018

The time axis needs to be identified and defined from the business viewpoint in order to set all the processes necessary for application of key measures not only in marketing communication but also value orientation as well as from the viewpoint of new business opportunities including customer experience application which enables us to correctly reveal and forecast future customer behaviour on the basis of all the information available. The table below results from complex research into customer behaviour complemented with practical patterns within the market environment and the answers of gastronomy experts which served as a basis for the time axis.

Picture 2 Time axis in gastronomy services from the viewpoint of a business

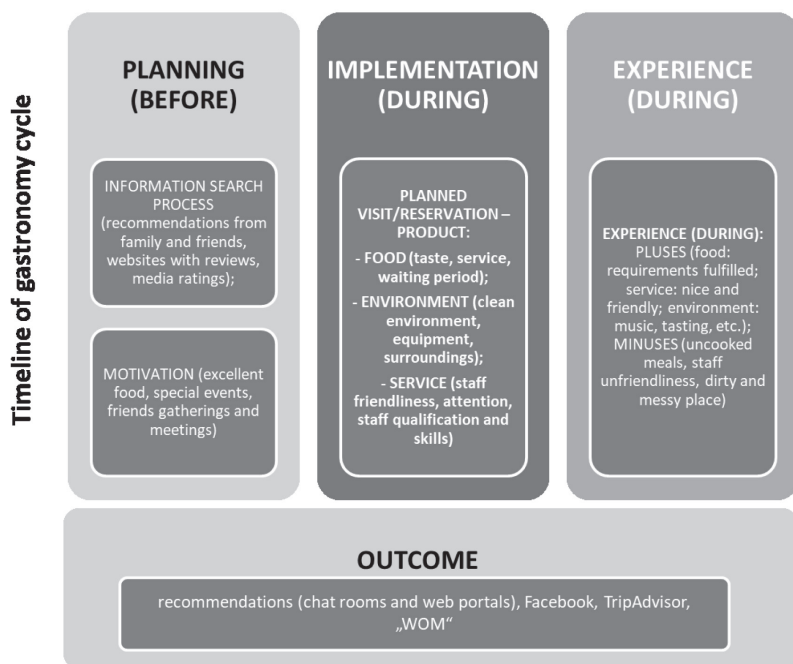


Source: private sources, 2018

The Picture 3 shows which attributes or factors are regarded as key elements by a customer and what a business should focus on taking into account all the customer data. The picture results from the research into value attributes which were summarized into precise time patterns. These represent a basis for proposed blocks comprising not only specific time areas but also particular parameters which are crucial for the time axis.



Picture 3 Value attributes of a Slovak customer in premium gastronomy



INNER MOTIVATION

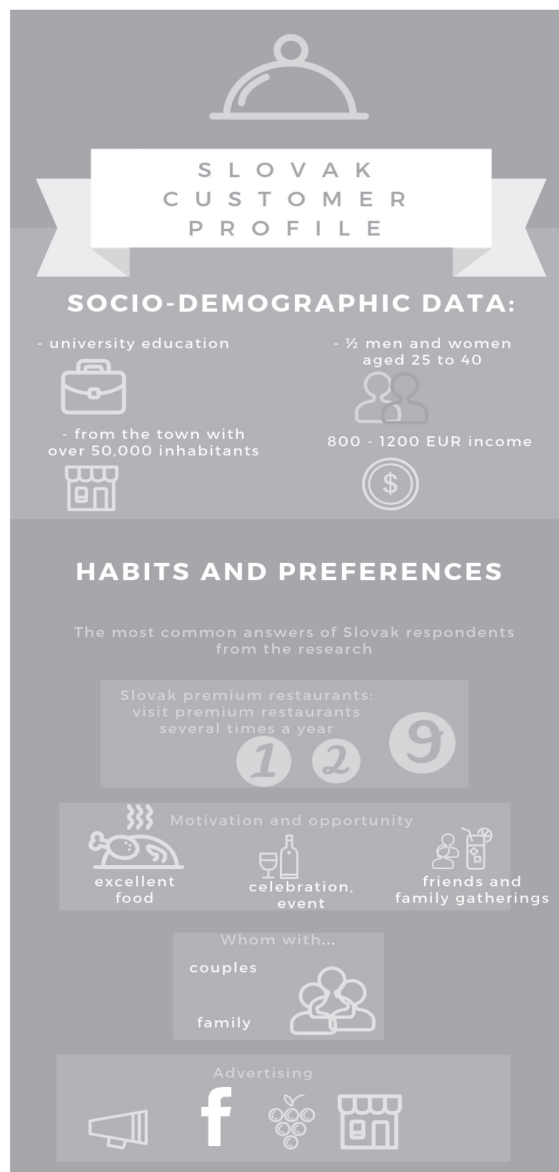
Sources: private sources, 2018

It is necessary to identify the state „before“, i.e. prior to visit as well as customer behaviour when being under the influence of various recommendations or ratings from third parties. Positive information from reviews generates motivation and expectations. The state „during“ represents the visit itself and specific consumption of products and services. Still a customer can be influenced by a number of factors. Positive impression generates positive associations of a customer which may even result in recommendations, positive reviews or repetitive visits. As the gastronomy business presumes wider propagation of reviews from a customer to customer (WoM), the moment when a customer transfers either a good or a bad recommendation may be of the essence. Good recommendations result from customer satisfaction which is directly linked to the attributes being fulfilled.

### Defining the profile of a Slovak customer in premium gastronomy

In the second research we assessed the results by specific categories and socio-demographic data of respondents. For further evaluation, however, the profile of a Slovak customer needed to be defined.

Picture 4 Slovak customer profile



Source: private sources, 2018

As for personal features, the ratio men – women remains almost equal. The majority of respondents come from bigger towns, have university education with the net income ranging from 800 to 1,200 EUR and visit premium restaurants several times a year. Most of them expect premium restaurants to serve excellent food with a high proportion of those who visit these restaurants on special occasions or for family gatherings. They go to a restaurant either as a couple or for business negotiations. Outdoor advertising, Facebook, videos or interactive links are the most effective marketing communication tools. Customers assume that the restaurants need to be visible not only in their location, but also on various events such as festivals, exhibitions, tasting, etc. where they can be properly presented.

### **Values and value application in the premium gastronomy segment**

On the basis of the content analysis of the answers of respondents from the first research, we elaborated specific questions with the emphasis on perception of the value by customers through particular attributes and value aspects. These needed to be properly identified and specified in order to determine the concurrence rate for each respondent. The questions focused not only on particular value attributes and their prioritising, but they also related to customers' relations towards restaurants, their selection, loyalty as well as opinions of the current situation within the premium gastronomy segment in Slovakia.

### **Motivation and opportunity for visiting a premium restaurant**

One of the two key areas of research was to identify and classify the value in the phase of decision-making, i.e. prior to provision of the service as well as to follow customer's perception in course of the interaction with a premium restaurant.

It is obvious that by the majority of respondents, each good restaurant should serve quality food (the highest value) and have careful staff. Customers do not tend to visit a premium restaurant in order to satisfy their hunger. They have much higher ambitions as they are looking for a gastronomic experience, comfort, luxury and harmony. The similar ambition is linked to special occasions or family gatherings or even business team buildings. A good chef is regarded as another major attraction by the two parties. Especially in hotels and restaurants located in tourist resorts or bigger towns, tourists represent appr. a half of all the visitors, even the local ones. The premium segment does not include the activities such as discounts and special offers or vouchers which ranked last.

Please note the table below which takes into consideration the preferences of respondents classified by socio-demographic factors.

Table 4 Motivation and opportunity for visit

Motivation and opportunity for visiting a premium restaurant:	1	2	3	4	5	%					Weighted mean	Standard deviation
people visit us for excellent food	0	0	2	2	10	0%	0%	4%	14%	71%	4,57	4,15
gastronomic experience	1	1	1	5	6	7%	7%	7%	36%	43%	4,00	2,49
unique atmosphere	1	1	3	2	7	7%	7%	21%	14%	50%	3,93	2,49
Famous chef	1	1	6	6	0	7%	7%	43%	43%	0%	3,21	2,95
individual approach and excellent service	0	0	2	4	8	0%	0%	14%	29%	57%	4,43	3,35
special events (anniversary, celebration)	2	0	4	3	5	14%	0%	29%	21%	36%	3,64	1,92
business negotiations	1	5	4	2	2	7%	36%	29%	14%	14%	2,93	1,64
cultural and regional specificities	3	2	4	2	3	21%	14%	29%	14%	21%	3,00	0,84
special offer	7	2	2	2	1	50%	14%	14%	14%	7%	2,14	2,39
company events	3	0	3	4	4	21%	0%	21%	29%	29%	3,43	1,64
workshops, parties – seasons	3	0	3	4	4	21%	0%	21%	29%	29%	3,43	1,64
family and friends	3	0	3	4	4	21%	0%	21%	29%	29%	3,43	1,64
Source: private sources, 2018											3,51	2,26

**Note:** Columns 1 – significance rate in absolute representation, Columns 2 – standard deviation.

#### A key factor for visiting a premium restaurant

Another major area of the research was to follow customers' positioning in course of the visit. It included all the key elements: service, food or atmosphere in a restaurant. The sequence was as follows: food, service, nice atmosphere and unique experience were stated by the majority of reference groups.

Table 5 Key factor for visiting a premium restaurant

Key factor for visiting a premium restaurant (integral numbers and %)	food expectation		service expectation		chef's skills		interior		nice music		peace and quiet		no delays		nice atmosphere and unique experience		depends on the situation	
men	31	15%	13	14%	12	2%	2	0%	0	5%	4	8%	7	14%	12	6%	5	6%
woman	35	20%	17	12%	10	7%	6	5%	4	1%	1	3%	3	20%	17	5%	4	5%
less than 20	3	0%	0	1%	1	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
21-30	25	20%	17	7%	6	3%	3	5%	4	2%	2	8%	7	13%	11	5%	4	5%
31-40	22	2%	2	13%	11	3%	3	0%	0	3%	3	3%	3	15%	13	5%	4	5%
41-50	13	10%	9	3%	3	1%	1	0%	0	0%	0	0%	0	5%	4	1%	1	1%
51-60	3	2%	2	1%	1	1%	1	0%	0	0%	0	0%	0	1%	1	0%	0	0%
high school	30	13%	11	13%	11	5%	4	3%	3	1%	1	6%	5	7%	6	2%	2	2%
colleague	22	13%	11	6%	5	3%	3	0%	0	1%	1	2%	2	19%	16	6%	5	6%
colleague upper	9	7%	6	7%	6	0%	0	1%	1	3%	3	3%	3	7%	6	2%	2	2%
Doctorate	5	2%	2	0%	0	1%	1	0%	0	0%	0	0%	0	1%	1	0%	0	0%
small city (>50 000 inhabitants)	14	9%	8	8%	7	2%	2	2%	2	5%	4	7%	6	9%	8	2%	2	2%
bigger city (<50 000 inhabitants)	40	22%	19	15%	13	5%	4	2%	2	1%	1	2%	2	22%	19	6%	5	6%
village	11	3%	3	2%	2	2%	2	0%	0	0%	0	2%	2	2%	2	2%	2	2%

self employed	3	3%	3	1%	1	1%	1	0%	0	1%	1	2%	2	2%	2	0%	0	0%
businessman	11	7%	6	8%	7	0%	0	0%	0	0%	0	2%	2	2%	2	0%	0	0%
employee - big company	23	21%	18	10%	9	5%	4	2%	2	5%	4	6%	5	20%	17	9%	8	9%
working abroad	2	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	1%	1	0%	0	0%
household	6	2%	2	1%	1	0%	0	1%	1	0%	0	0%	0	1%	1	0%	0	0%
employee - public, government	16	0%	0	1%	1	2%	2	0%	0	0%	0	1%	1	5%	4	1%	1	1%
freelancer	5	1%	1	3%	3	1%	1	1%	1	0%	0	0%	0	1%	1	0%	0	0%
less than 400 EUR	9	0%	0	1%	1	1%	1	0%	0	0%	0	1%	1	2%	2	1%	1	1%
401-500 EUR	2	2%	2	1%	1	0%	0	0%	0	0%	0	1%	1	0%	0	1%	1	1%
501 -800 EUR	15	10%	9	2%	2	1%	1	3%	3	0%	0	1%	1	6%	5	2%	2	2%
801-1000 EUR	14	5%	4	5%	4	3%	3	0%	0	3%	3	5%	4	10%	9	0%	0	0%
1001-1200 EUR	9	8%	7	1%	1	0%	0	0%	0	1%	1	1%	1	6%	5	2%	2	2%
1201-1400 EUR	3	3%	3	6%	5	2%	2	1%	1	0%	0	1%	1	1%	1	2%	2	2%
1401 - 1600 EUR	2	0%	0	2%	2	1%	1	0%	0	1%	1	0%	0	1%	1	0%	0	0%
1601-1800 EUR	4	1%	1	1%	1	0%	0	0%	0	0%	0	1%	1	1%	1	0%	0	0%
1801-2000 EUR	1	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	1%	1	1%
2001-2500 EUR	1	2%	2	2%	2	0%	0	0%	0	0%	0	0%	0	3%	3	0%	0	0%
2501-3000 EUR	1	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	2%	2	0%	0	0%
3001- and more EUR	5	2%	2	3%	3	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

Source: private sources, 2018

Notes: Column 1 – absolute number of expressions, Column 2 – relative number in %.

### Associations with a premium restaurant

The key point of the research was to evaluate value preferences of customers connected with a premium restaurant. It is understandable that the quality is a synonym for every good restaurant. Other factors are equally significant: originality, uniqueness (mainly for women), experience or pleasure (all the preferences account for 30%). Understanding and the ability to generate primary associations connected with a given subject matter of the research represents a key element for businesses not only in the application of communication tools, but also in course of the visit. If the restaurant is able to generate such associations in the customer's mind, we may suppose that the customer will always connect them directly with the business.

Table 6 Interconnections with a premium restaurant

Interconnections with a premium restaurant (in integrated numbers and %)	luxury	premium image	exceptionality	quality	pleasure	uniqueness	originality	taste	experience	smell
men	29 15%	18 9%	23 12%	52 26%	29 15%	15 8%	32 16%	23 12%	33 17%	4 2%
woman	27 14%	14 7%	37 19%	63 32%	29 15%	17 9%	34 17%	32 16%	30 15%	12 6%
less than 20	2 1%	0 0%	1 1%	3 2%	0 0%	1 1%	1 1%	2 1%	2 1%	0 0%
21-30	26 13%	11 6%	27 14%	46 23%	33 17%	14 7%	31 16%	22 11%	30 15%	4 2%
31-40	16 8%	14 7%	17 9%	42 21%	18 9%	10 5%	17 9%	17 9%	21 11%	7 4%
41-50	4 2%	2 1%	13 7%	16 8%	4 2%	4 2%	12 6%	11 6%	7 4%	3 2%
51-60	2 1%	0 0%	0 0%	6 3%	2 1%	3 2%	4 2%	3 2%	2 1%	2 1%
high school	30 15%	12 6%	22 11%	44 22%	19 10%	12 6%	26 13%	22 11%	24 12%	7 4%
colleague	13 7%	15 8%	17 9%	45 23%	25 13%	8 4%	20 10%	22 11%	25 13%	5 3%
colleague upper	13 7%	4 2%	17 9%	19 10%	10 5%	6 3%	14 7%	10 5%	11 6%	2 1%
Doctorate	0 0%	1 1%	2 1%	5 3%	2 1%	4 2%	4 2%	1 1%	1 1%	2 1%
small city (>50 000 inhabitants)	21 11%	7 4%	17 9%	29 15%	20 10%	11 6%	20 10%	9 5%	17 9%	5 3%
bigger city (<50 000 inhabitants)	27 14%	20 10%	35 18%	67 34%	30 15%	20 10%	34 17%	36 18%	40 20%	7 4%
village	8 4%	5 3%	7 4%	17 9%	7 4%	1 1%	12 6%	9 5%	5 3%	4 2%

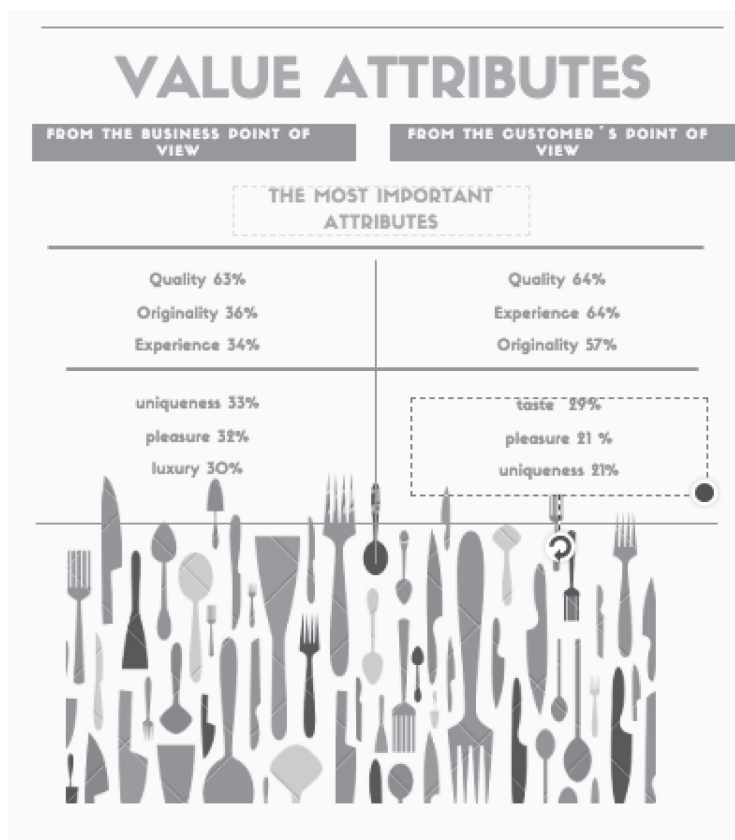
self employed	4	2%	2	1%	6	3%	11	6%	5	3%	2	1%	6	3%	5	3%	2	1%	1	1%
businessman	6	3%	3	2%	12	6%	20	10%	4	2%	3	2%	10	5%	12	6%	7	4%	3	2%
employee - big company	28	14%	17	9%	28	14%	50	25%	29	15%	18	9%	32	16%	25	13%	37	19%	7	4%
working abroad	2	1%	1	1%	1	1%	1	1%	1	1%	1	1%	0	0%	0	0%	2	1%	0	0%
household	4	2%	4	2%	1	1%	8	4%	3	2%	2	1%	2	1%	3	2%	4	2%	2	1%
employee - public, government	7	4%	2	1%	7	4%	20	10%	8	4%	4	2%	11	6%	9	5%	6	3%	3	2%
freelancer	5	3%	2	1%	5	3%	5	3%	7	4%	1	1%	5	3%	1	1%	5	3%	0	0%
less than 400 EUR	5	3%	1	1%	6	3%	10	5%	5	3%	3	2%	5	3%	5	3%	4	2%	2	1%
401-500 EUR	2	1%	0	0%	4	2%	4	2%	2	1%	0	0%	5	3%	3	2%	3	2%	1	1%
501-800 EUR	9	5%	7	4%	15	8%	26	13%	13	7%	6	3%	15	8%	10	5%	11	6%	6	3%
801-1000 EUR	12	6%	2	1%	15	8%	22	11%	14	7%	7	4%	14	7%	12	6%	16	8%	5	3%
1001-1200 EUR	7	4%	6	3%	9	5%	18	9%	9	5%	5	3%	4	2%	10	5%	9	5%	0	0%
1201-1400 EUR	9	5%	8	4%	2	1%	11	6%	6	3%	4	2%	10	5%	1	1%	3	2%	0	0%
1401 - 1600 EUR	3	2%	1	1%	0	0%	4	2%	2	1%	2	1%	3	2%	3	2%	3	2%	0	0%
1601-1800 EUR	4	2%	2	1%	0	0%	6	3%	3	2%	1	1%	1	1%	2	1%	5	3%	0	0%
1801-2000 EUR	0	0%	0	0%	2	1%	2	1%	0	0%	0	0%	0	0%	1	1%	1	1%	0	0%
2001-2500 EUR	2	1%	3	2%	2	1%	4	2%	2	1%	2	1%	4	2%	2	1%	3	2%	0	0%
2501-3000 EUR	0	0%	0	0%	0	0%	3	2%	2	1%	1	1%	1	1%	1	1%	0	0%	1	1%
3001- and more EUR	3	2%	2	1%	5	3%	5	3%	0	0%	1	1%	4	2%	5	3%	5	3%	1	1%

Source: private sources, 2018

**Notes:** Column 1 – absolute number of expressions, Column 2 – relative numbers in %. Consensus rate of value perception from the viewpoint of businesses and customers

One of the major outcomes of our research is the fact that the viewpoint of both businesses and customers is rather similar when defining the above mentioned attributes. By means of open questions we defined specificities and individual opinions of respondents. A lack of professionalism, passive customer approach and unfriendliness are referred to as major pitfalls of gastronomy business. The positive features, on the contrary, include quality, freshness of ingredients, professionalism or home-made – traditional cuisine. Our main objective was to specify marketing communication tools to be used by operators despite the fact that some of them seemed rather reserved in the area. However, we may assume that operators perceive the existence of the value system as a crucial part of their business as they understand that, besides descent food, a customer also needs to be provided an emotional experience when visiting a restaurant. Value attributes which seem to be essential in particular categories were examined in more detail, named and visually processed into accurate results. Based upon the findings of the analyses and further research, we drew our attention to value attributes and other corresponding factors. Moreover, it was necessary to classify them into specific channels and tools of marketing communication suitable for this segment.

Picture 5 Value attributes in premium gastronomy

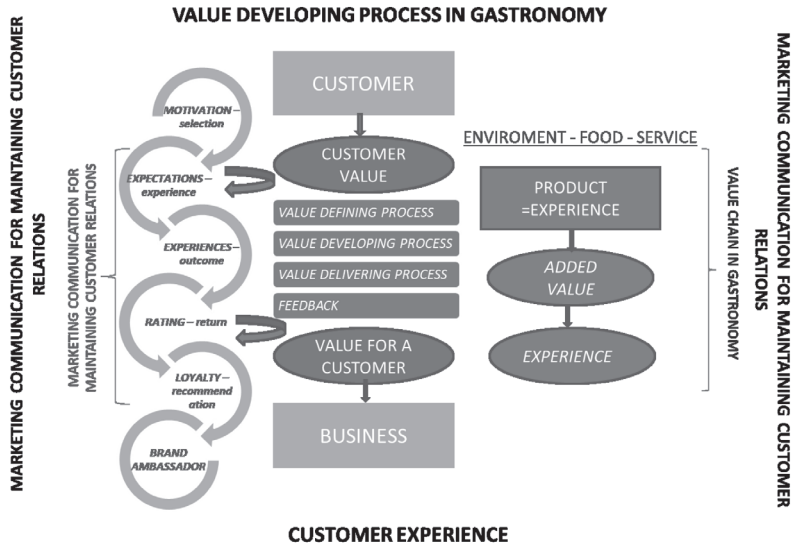


Source: private sources, 2018

### The concept of a value customer model for gastronomy businesses

Insufficient definition of values and their implementation into practice are one of the major obstacles gastronomy businesses have to face. A premium gastronomy segment should define these values as status quo and should be able to communicate them properly.

Picture 6 Value delivering in gastronomy



Source: private sources, 2018

The graph comprises the above mentioned theoretical as well as practical knowledge which defines the overall coherence and causality of particular value preferences of a customer at the time of using gastronomy services from the viewpoint of both a customer value and its perception as well as a value for a customer from the viewpoint of a business. The graph also defines a product or the areas representing the product at the moment of consumption and the factors which have a direct impact hereon. All these elements are linked to particular phases – from value defining up to value delivering process and feedback.

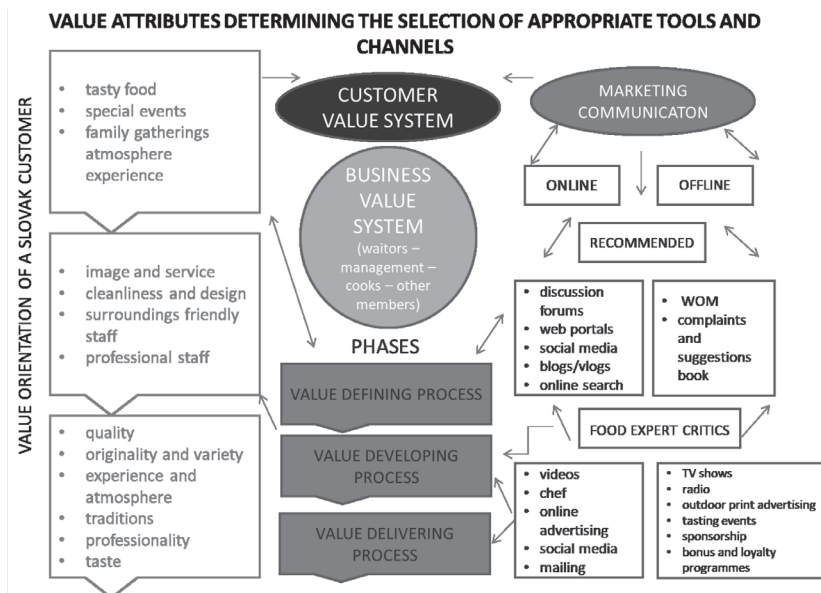
The final effect of the model is to deliver an added value to a customer, i.e. an experience. As the competitive environment leads to experience economy, reaching the given effect is one of the ways of business differentiation.

#### Value attributes determining the selection of appropriate communication tools and channels of the marketing concept

The value shall be perceived as a complex and holistic unit. A high rate of individualism and subjectivity is its unseparable part gastronomy businesses have to take into consideration. Specific value preferences linked to particular phases of a value process are a main precondition for perception by a customer. Simultaneously, it is a great challenge for businesses as shown in the chart below.



Picture 7 Value attributes determining the selection of appropriate communication tools and channels of marketing communication



Source: private sources, 2018

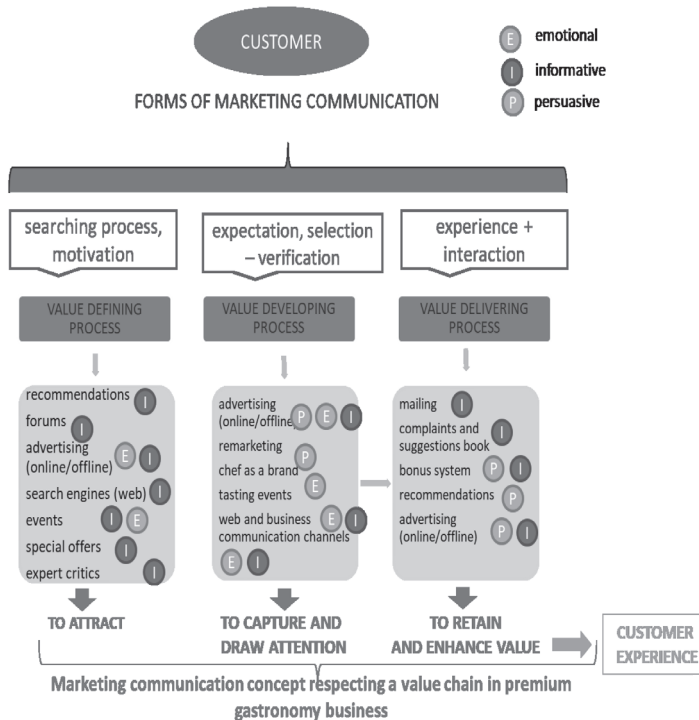
The proposal of the concept of marketing communication in the value enhancement process is the last from the elements of a concept model.

#### Communication model in the value developing and enhancement process

The whole model is based upon a concept – a customer value and a value for a customer. Specific tools and channels of marketing communication have been proposed in order to ensure necessary reactions and interactions for customers and meet the objectives of entities, i.e. gastronomy businesses.

Picture 8 Communication model in value developing process

## COMMUNICATION MODEL IN THE VALUE DEVELOPING AND ENHANCEMENT PROCESS



Source: private sources, 2018

A conception model applicable for gastronomy business and services in general is based upon an empiric approach and shall serve as a template for premium gastronomy businesses or could also be used in other fields of industry. This solution represents a shift towards a value-oriented marketing concept for those businesses where the value is regarded as a primary aspect of mutual communication.

## Conclusion

The need for application of value marketing has logically resulted from holistic and modern forms of marketing communication reflecting on current customer requirements, experience marketing and modern IT solutions which provide a customer with easy-to-access information, communication, shopping or a possibility for negative reviews and a selection of much more competitive environment. By

using modern technologies, businesses are able to meet customer requirements more flexibly, target them with personalized offers and increase the personification rate.

Therefore it is important to focus mainly on those psychological aspects which may fulfill individual requirements and expectations as the value ladder itself differs from person to person. Simultaneously, it is necessary to find a compromise between customer expectations and the company will or rather ability to identify and later satisfy these needs. In order to identify these demands, we have to make use of a high-quality database of knowledge and information on customer behaviour so as we could, based upon a set of analyses, measurements and evaluation criteria, forecast it and customize our offers accordingly.

A conceptual value model includes all other value aspects. All the components arranged into a logical framework and a structure create an integrated system. Along with the above mentioned communication tools and channels, this model is likely to increase company sales and enhance customer loyalty.

### Acknowledgement

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## GREEN ICT: SOME CHALLENGES AND POTENTIAL SOLUTIONS

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### Abstract

Interest in green information and communication technologies (ICT) is no longer new, but remains highly dynamic. Researchers and practitioners are keen to promote the benefits and minimize the negative effects of hardware and software use on the environment. Adoption of such initiatives within organizations varies depending on the field of activity, geographic area, culture and many other factors. This paper aims to analyse the main problems of green ICT adoption in companies and propounds solutions in order to encourage these initiatives. Based on green metrics and frameworks, the following challenges were identified: costs, nature of business and specific risks, evolution of customer demand and culture, standard of living and education. Each challenge is addressed in detail to provide potential solutions for reducing or eliminating it. A theoretical approach is proposed whereby the questions related to the adoption of green ICT are derived from recent research reported in the literature and international organisations' reports.

**Key words:** *green ICT, challenges, environment protection, energy efficiency, effectiveness*

**JEL Classification:** *O33, Q55, Q56*

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### Introduction

Information and communication technologies (ICT) are expanding rapidly due to the positive impact they have on production processes, national and global economies, and everyday life. ICT-based services, applications, data and users are growing in number daily. Energy consumption, water use, CO<sub>2</sub> emissions and e-waste are also increasing dramatically as a direct result of the widespread use of ICT. According to a recent study, this sector is already responsible for approximately 7% of global electricity consumption and the percentage is expected to rise to 13% by 2030 (Sadler, 2017). Estimates currently predict that by 2050, global water withdrawals for thermal electricity will have increased by 40% and water consumption by more than 100% (Ristic, Madani, & Makuch, 2015; United Nations World Water Assessment Programme, 2014; World Energy Council, 2010). Nevertheless, ICT can promote energy efficiency, which will, in turn, reduce greenhouse gas emissions across a range of sectors and industries. The SMARTer 2020 report announced a "significant adoption of energy-saving solutions within the ICT industry and increases in the role of ICT

in other industries" (GeSi, 2012). This report identifies an energy saving 16% higher than the figure previously published in 2008. However, these outcomes can only be realized if ICT products and services are environmentally friendly or green – a concept that is no longer new, but which remains highly dynamic. According to Suryawanshi and Narkhede (2014) it "is an pioneering way of using ICT that consists of policies and practices which deal with environment sustainability by minimizing carbon footprint, ICT waste and by optimizing energy consumption and by conserving natural resources for cost effectiveness, sustenance of ICT". Commitment to a reduction in the direct and indirect effects of ICT on the environment has been shown by businesses and governments worldwide, and is reflected in national and international strategies (Zhang & Liang, 2012). One possible solution would involve migration to sustainable hardware and software, minimizing the environmental impact; further benefits may also be achieved through optimization of business processes, thereby minimizing use of ICT resources (Fernandez, Procaccianti, & Lago, 2015). Both solutions have implications for the ICT industry. To date, key initiatives have focused on reduction or elimination of the use of hazardous materials and processes, more efficient use of energy and resources, e-waste recycling and reuse. Such measures will undoubtedly spread to other sectors and industries that use ICT products and services. However, to maximize the impact, business processes may need to be redesigned, requiring further investment and effort at both company and individual levels.

This paper will present (and analyse) the main challenges and solutions for green ICT adoption. The discussion will initially focus on green metrics, followed by the key challenges of green ICT adoption and potential solutions for overcoming these difficulties. Finally, conclusions will be drawn and recommendations made.

## Material and Methods

The study originated from the need to explain the difficulties that companies might encounter which intend to support environmental protection through ICT. The paper proposes a theoretical approach whereby the questions related to the adoption of green ICT are derived from recent research in literature and international organisations' reports. Green ICT is presented as a concept that aims to reduce negative environmental impacts and to increase technical and economic performances and social comfort. Their adoption has some limits that needs specific solutions. Companies in this field are interested to develop environmentally sustainable software and hardware. The aim of this article is to identify the main problems of green ICT adoption in companies. The research questions are: (1) What are the main challenges that influence the adoption of green ICT? and (2) Which are the best solutions to overcoming these challenges?

To answer first question, we have studied the scientific publications and international organizations' reports. Each challenge is addressed in detail and we have proposed solutions for overcoming it. These solutions are the answers to the second question. The first part of the study involved analysis of metrics used to measure the impact of ICT on the environment. In the second part of the study, the most important challenges of green ICT adoption were analysed and solutions for overcoming the difficulties were proposed.

## Background Research

According to Reichheld (1994), “If you can’t measure it, you can’t manage it.” In green ICT, performance is measured according to the level of environmental impact (carbon emissions, e-waste, power usage, etc.), whereby higher performance is associated with minimal impact. The first step is, therefore, to analyse the effects of ICT on the environment and identify the relevant dimensions to be assessed through metric calculations. Research has recently focused on data centres since they consume the most resources and their effects are centralized, making them easier to quantify. Metrics measure energy power usage, carbon emissions, water use, electronic disposal and green energy, etc. Most studies have focused on efficient use of specific resources during the operational phase, which may help reduce operating costs (Whitehead, Andrews, Shah, & Maidment, 2014). Table 1 presents a selection of green metrics.

Table 1. Green ICT metrics

Name	Formula
Power Usage Effectiveness (PUE) describes how efficiently a computer data centre uses energy.	$PUE = \frac{\text{Total Facility Power}}{\text{IT Equipment Power}}$
Data Centre infrastructure Efficiency (DCiE) is the inverse of the PUE.	$DCiE = \frac{\text{IT Equipment Power}}{\text{Total Facility Power}} \times 100$
Carbon Usage Effectiveness (CUE) is the total carbon emissions caused by the use of the energy in the PUE metric.	$CUE = \frac{\text{CO}_2 \text{ emitted (kg CO}_2\text{eq)}}{\text{Unit of Energy (kWh)}}$
Water Use Effectiveness (WUE) is the total facility water use divided by the energy going solely to the IT equipment.	$WUE = \frac{\text{Total Facility Water Use}}{\text{IT Equipment Energy}}$
Electronics Disposal Efficiency (EDE) measures the percent of the electronics and electrical equipment disposed in an environmentally responsible way.	$EDE = \frac{\text{Weight of responsibly disposed of IT EEE}}{\text{Total weight of disposed of IT EEE}}$ , where EEE is Electronics and Electrical Equipment
Green Energy Coefficient (GEC) is the energy coming from green sources (renewable energy).	$GEC = \frac{\text{Green Energy}}{\text{Total Source Energy}}$
Energy Reuse Factor (ERF) the energy exported for reuse outside the data centre.	$ERF = \frac{\text{Energy reuse outside the data centre}}{\text{Total Source Energy}}$

Source: adapted from Jaureguiualzo, 2011; Wang, Vasilakos, Chen, Liu, & Kwon, 2012; Azevedo, 2010; Banks, Benjamin, Calderwood, & Llera, 2012; The Green Grid, 2014

These metrics are key indicators used to measure the impact of ICT on the environment. Although originally designed for data centres, they can measure positive and negative effects in any business that uses ICT. Selected metrics reflect all major fields that have a measurable impact on the environment and can be used to determine the relationship between indicators. These metrics are interdependent: DCiE and CUE are calculated on the basis of PUE. GEC is favourably influenced by CUE

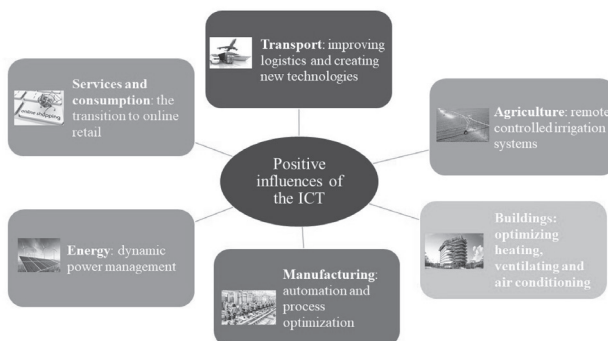
since it is calculated as the use of renewable energy. This can reduce CO<sub>2</sub> emissions. EFR also influences CO<sub>2</sub> emissions as a result of energy reusing outside the data centre for other activities. A key limitation with these metrics is the lack of available methods for managing and evaluating environmental costs of equipment that should be replaced. Energy savings resulting from replacement should be compared with energy used by old equipment, and energy and other resources used to produce the new equipment. An EDE metric is important in this case and could be an important part of the solution. To improve environmental protection, tools for assessing the maturity of green ICT in companies have been developed. For example, Accenture realized the Green Maturity Model (GMM), which uses 300 indicators in five areas: data centres, office environment, work practices, procurement and corporate citizenship. (Park, Eo, & Lee, 2012). Connection Research and RMIT University created the Green ICT Capability Maturity Model with 36 items in five areas: life-cycle, end-user, enterprise, enablement and metrics (Philipson, 2010). The G-readiness framework was developed by Molla, Cooper and Pittayachawan (2011) at RMIT University. This model has five green IT components and eight sub-components: attitude, policy, practice (procurement, energy audit and monitoring), technology (infrastructure, air flow management, cooling systems and power delivery) and governance (strategic foresight, resources and metrics).

The existence of these metrics and frameworks reveals the importance of green ICT in theory and practice, but companies face notable challenges when adopting these initiatives and must find their own solutions.

## Results and Discussion

On the basis of the metrics and frameworks mentioned earlier, this section presents the main challenges that exist in the case of green ICT adoption and possible solutions. The use of ICT clearly has both positive and negative effects on the environment. Positive influences include digitalization and dematerialization, improved data collection and communication, systems integration, and optimization of processes (GeSi, 2012; Whitehead, Andrews, Shah, & Maidment, 2014). Given that all industries benefit from ICT to a greater or lesser extent, it could be argued that they should help maximize the positive effects. Figure 1 shows how some sectors can become more environmentally efficient with green ICT methods and practices.

*Chart 1 Positive ICT influences in various industries.*



*Source: Designed by the author*



ICT also have negative effects on the environment, and businesses and citizens alike are responsible for reducing these through the adoption of green practices in terms of hardware and software acquisition and use. However, ICT companies themselves should move beyond this, actively developing green hardware and software.

ICT have contributed to economic growth across the world in recent decades, leading companies, governments and international organizations to invest in such field (Necula, Păvăloaia, Strîmbei, & Dospinescu, 2018; Georgescu & Popescu, 2016). Productivity gains and greater efficiency have improved firms' profit levels, but have also resulted in major fluctuations within and across industries. Empirical research has highlighted the following challenges, which influence the adoption of green ICT:

- *Costs*: e.g., procurement and implementation of equipment and applications; access to domain-specific knowledge and qualified personnel; organizational change goals and the level of innovation involved (OECD, 2003; Fernandez, Procaccianti, & Lago, 2015);
- *Nature of business and specific risks*: although potentially suitable for most fields, ICT, by nature, lend themselves more closely to certain domains than others and cannot be used uniformly across all areas of business or business models (OECD, 2003; Fernandez, Procaccianti, & Lago, 2015; Ozturk, Şi alţii, 2011; Radu, 2013a);
- *Evolution of customer demand*: ICT consumers have become more selective in terms of the quality of products purchased, which can lead companies to invest in certain features that will make their products more desirable, such as low energy consumption, smaller products, better reliability and implementation of a buy-back system (Verdecchia, Ricchiuti, Hankel, Lago, & Procaccianti, 2017; Raza, Patle, & Arya, 2012; Alena & Libor, 2012; Radu, 2013b);
- *Culture, standards of living and education*: environmental attitudes vary from one country to another and even within regions (Raza, Patle, & Arya, 2012; Vodă & Țigănaș, 2016). The negative effects of e-waste and problem of waste exposure between developed, developing or underdeveloped countries have been widely studied, but with questionable results. Informing citizens and providing the necessary infrastructure for recycling are essential in this case.

These kinds of challenges will now be addressed in more detail, along with possible solutions for reducing or eliminating them.

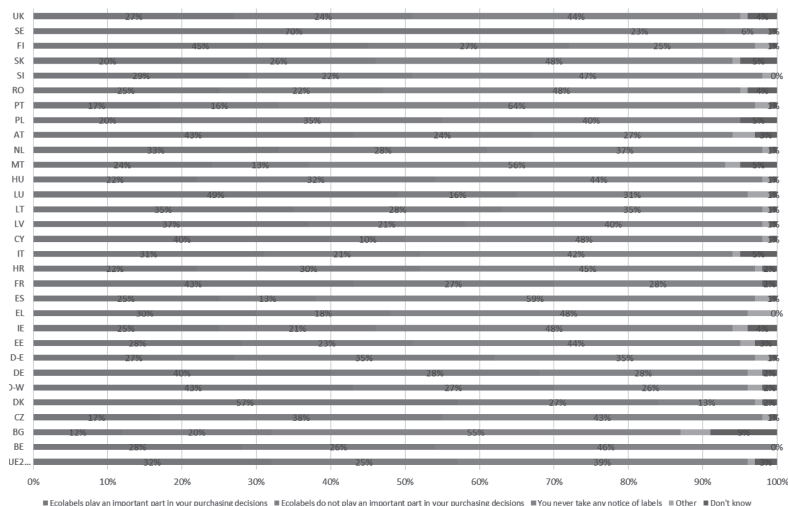
Direct and indirect costs have a major influence on the development and adoption of green ICT. Such expenditure could include the cost of replacing equipment and applications, attending training courses, and fees incurred when applying and validating the application of environmental standards. These offer medium- and long-term gains in terms of revenue growth by attracting new, environmentally conscious customers and reducing costs through falling consumption, lowering or eliminating environmental taxes and increasing efficiency. Managers must, therefore, weigh capital investment in green ICT against potential profit.

There is no one-size-fits-all green solution (Fernandez, Procaccianti, & Lago, 2015). Taking risks and accepting uncertainty arising from changing technology is an important challenge for any company and industry, but also for employees at all levels. In this context, managerial attitudes must: be rational but pro-innovation, encouraging critical, innovative thinking, which may identify issues and opportunities; support the acquisition of new skills, risk-taking, and synchronization of personal values with organizational values and goals. Direct and indirect involvement in environmental protection measures is also a prerequisite for green ICT. Managers need to develop policies that prioritize protection of the environment and encourage favourable attitudes amongst employees. There are variations, however, in the ways that managers

and employees involve themselves in pro-environment measures and the extent to which they are willing to address the repercussions of their business operations for the ecosystem. Possible solutions for encouraging green ICT adoption include: applying environmental standards within an organization; direct participation in environmental protection actions and projects; systems for monitoring energy consumption and CO2 emissions; and selection of 'ethical' suppliers who use hardware and software with minimal negative effects on the environment. Fortunately, in the case of ICT, new advancements tend to miniaturize the equipment, reducing the consumption of resources in general and non-renewable ones in particular, replacing polluting components with more environmentally friendly ones and adopting pro-environment strategies.

Ability to meet customer requirements is a constant challenge for businesses in any field. Managers must invest in specific products, services or production processes according to market evolution. Studies indicate growing interest in green products among consumers over recent years. In Europe, for example, a study of the Directorate-General for Environment (co-ordinated by the Directorate-General for Communication) reveals that more than 94% of respondents consider protection of the environment to be important to them personally (European Commission, 2017). According to the same study, 79% of respondents think that big companies and industry are not doing enough to protect the environment, and 67% of respondents think that their national government is not doing enough to protect the environment. Unfortunately, only a third of respondents declare that ecolabels play an important part in their purchasing decisions (Chart 2). Consumer expectations and pressure could influence adoption of green ICT through the following initiatives: explicit environmental protection requirements within product specifications; refusal to purchase products that do not comply with environmental regulations; demanding products dedicated to environmental monitoring; and requesting additional information on energy consumption and CO2 emissions for products purchased.

Chart 2 The influence of ecolabels on purchasing decisions



Source: own chart based on European Commission data, 2017

Culture, education and living standards can significantly contribute to the adoption of green ICT by improving the skills of hardware and software developers, and promoting end-user awareness. According to Lopez-Lopez et al. (2011), "increasing public knowledge about ICT and their effects on the environment, and (...) supporting environmental-related ICT skills and education" must be the first steps in the implementation of a green ICT adoption strategy. The study previously cited, undertaken by the European Commission, maintains that the most important measures for reducing environmental problems are "investing in research and development to find technological solutions (35%) and introducing heavier fines for breaches of environmental legislation (34%)" (European Commission, 2017). These solutions could be further supported by programmes dedicated to green ICT in universities (Suryawanshi & Narkhede, 2014; Chai-Aralert & Nakata, 2011), preparing specialists in this field, promoting pro-environment behaviours in developed, developing and underdeveloped countries, and informing citizens about the impact of ICT on the environment through formal and informal communication channels.

## Conclusion

This article has discussed some of the challenges facing companies in the adoption of green ICT: culture, standard of living and education, direct and indirect costs, nature of business, willingness to take risks, and the evolution of customer demand. Companies must customize their solutions to meet the needs of their business, market, customers and the industry in which they operate. Success depends on strategies for environmental protection at company, sector and national levels, together with support from governmental organizations and rigorous, enforced legislation. Furthermore, global commitment to green ICT must continue, along with improvements in technological performance, to mitigate negative environmental effects through smart systems. No single solution will be effective for all companies, so it is important for them to identify the best one according to the dynamic context in which they find themselves.

The paper is not without limitations: The main limitation of this research is related to its current phase as theoretical approach. Further research should be focused on the empirical evaluation of the solutions and their efficiency for overcoming the challenges of green ICT adoption. Second, the research has focused on green ICT adoption. Future research should identify the challenges and solutions related with green software and hardware production.

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## GHOSTWRITING AMONG BUSINESS MANAGEMENT STUDENTS

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### Abstract

The purpose of the study was to identify sociodemographic and situational conditions that affect business management students in the acceptance of the ghostwriter's services. The study utilised a quantitative design. The study was conducted at a private university with a population of about 3,500 students. The data were collected using convenience sampling. There were 687 usable responses. It represents 62.45% of the sample. Results showed that 29.21% is prone to tolerate academic dishonesty in the form of using the ghostwriter's services (Agree = 16.85%, Undecided = 12.36%). Study failed to reject the hypotheses about the impact of the study load ( $p$ -value = 0.0657) and gender differences ( $p$ -value = 0.6912) on ghostwriting. On the other hand, the differences in students attitude by degree ( $p$ -value < 0.0001) and generation ( $p$ -value = 0.0001) were identified.

**Key words:** *manager dishonesty, workplace, plagiarism, ghostwriting*

**JEL Classification:** *P36, M10, I23*

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### Introduction

Academic dishonesty is a multifaceted and pervasive global phenomenon (Bashir & Bala, 2018), which is presented in the literature in many forms (Krueger, 2014). Several studies confirm the link between academic and managers dishonesty in the workplace. Sims (2010) findings indicate that subjects who admitted to having engaged in a wide range of academic dishonesty also admitted to a wide range of work-related dishonesty. Additionally, those subjects who engaged in behaviours considered severely dishonest in college also engaged in behaviours considered severely dishonest at work. Lucas and Friedrich (2005) results with a college student sample showed that integrity test scores were moderate to strong correlates of self-reported academic cheating, that is why implications for the broader relations between scholastic and workplace dishonesty discussed.

Academic dishonesty can take many forms, which can be broadly classified as follows cheating, plagiarism, fabrication, falsification or sabotage (Whitley & Keith-Spiegel, 2001). Moreover, according to Johanson (2010), methods of cheating become more complex.

The issue of student plagiarism, one of the academic dishonesty forms, has generated a great deal of media and research attention and is an increasingly studied phenomenon in higher education research (Honig & Bedi, 2012; McHaney, Cronan, & Douglas, 2016). It is not a new subject, for instance, already Dr Martin Luther King's graduate work unveiled portions that were directly plagiarised without citation (Honig & Bedi, 2012), but new challenges arise alongside dramatic changes in the learning environment (McHaney & Daniel, 2012).

Plagiarism can be relatively straightforward defined. According to Carroll's (2013) for instance, it is an act of submitting someone else's work as own. However, most studies have adopted a particular definition of plagiarism, except for studies focusing on respondents' interpretation of plagiarism (Husain, Al-Shaibani, & Mahfoodh, 2017). Ghostwriting, on the other side, is the practice of hiring a writer (or writers) to produce a piece of work that follows a predefined style, and none of the original writing credit is attributed to the ghostwriter (Singh & Remenyi, 2016). Thus ghostwriting can be considered as a specific form of plagiarism.

Purpose of this study is to empirically examine the issue of plagiarism, more specifically acceptance of the ghostwriter's services by business management students' and to investigate the sociodemographic and situational conditions predictors of such behaviours. To summarise, study aim to contribute to the literature on plagiarism by exploring the role of gender, study load, degree and generation, on the percentage of plagiarism. The reason for choosing the topic was twofold. Firstly, the belief that academic dishonesty may also be a predictor of future managers dishonesty in the workplace (Desalegn & Berhan, 2014). Secondly, despite the number of studies carried out, some research gaps still exist.

Jereb et al. (2018) analysed gender differences in plagiarism within several socio-economic contexts (e.g. social life, living with parents/grandparents, living in a student hall of residence, the motivation for study and working during studies). Their findings have revealed statistically significant gender differences in students' plagiarism awareness; specifically, women have a much more negative attitude towards plagiarism than men. Sureda-Negre et al. (2015) results show that plagiarism is undoubtedly present and widespread in the classrooms. Furthermore, it shows that men have significantly higher levels of perpetration than women and then students who tend to leave the tasks until the last moment are more likely to plagiarise. Also, Ismail (2018) confirmed a slightly higher plagiarism prevalence among male students compared to female students.

The study load, in our study, represent the duration of the student's work per academic year. We distinguish between full-time and part-time students. This indicator is used to express the burden of study duties. Krueger (2014) found a positive relationship between the frequency of cheating in the classroom and clinical settings. His results revealed differences in frequency of engagement in and attitudes toward academic dishonesty by gender, a semester in the program, and ethnicity. Regarding differences between insurance and other business majors, year in school had a significant impact on insurance majors but not other business majors (Eastman, Eastman, & Iyer, 2008). Moreover, according to Molnar (2015) student acceptance of academic dishonesty at a large, public institution has declined over time and these students have become less accepting of academic dishonesty.

In term of generations and integrity, the findings suggest that Generation X's respondents are significantly more sensitive and concern on research integrity as compared to respondents from Generation Y and Baby Boomers. This finding was supported by the fact that Generation Y and Baby Boomers do share similar generation



characteristics thus have similar perception toward integrity in research, that is moderately tolerable to research misconduct as compared to Generation X (Abu Talib, Othman, Hamid, Zainuddin, & Nen, 2013; Duřová Spiřáková et al., 2017).

## Material and Methods

The study utilised a quantitative design. The survey was conducted in a private university with a population of about 3,500 students. The data were collected using convenience sampling. There were 687 usable responses, which represent 62.45% of the sample.

The self-reported questionnaire was used to collect the data. Questionnaires were delivered to the respondents by e-mail. Respondents were informed that the survey was anonymous and voluntary. The demographic data of the survey results (see Table 1) showed that male students represented 23% of the sample (N=185) and female students represented 73% of the sample (N=502). Table 1 also presents the structure of the respondents by study load, degree and generation.

*Table 1 The structure of the respondents by gender, study load, degree and generation*

Gender		Load		Degree		Generation		
		Full-Time	Part-Time	Bachelor's	Master's	X	Y	Z
Men	185 26.93%	47 6.84%	138 20.09%	93 13.54%	92 13.39%	35 5.09%	147 21.40%	3 0.44%
Women	502 73.07%	99 14.41%	403 58.66%	232 33.77%	270 39.30%	133 19.36%	359 52.26%	10 1.46%

Source: Own calculation

Respondents ghostwriting perception were examined with the question as follows: To what extent do you agree or disagree with the statement "I do not see anything wrong when someone else, especially weak student, uses the ghostwriting service for coursework, term paper or thesis". Seven points Likert scale was used to collect the answer with responses from "agree" (7 points) to "disagree" (1 point).

According to the purpose of this study, to empirically examine acceptance of the ghostwriter's services by gender, study load, degree and generation of business management students, four hypotheses were formulated:

- **H10** There is not a statistically significant difference in view of the ghostwriting services use between students by study load. **H1<sub>A</sub>** There is a statistically significant difference in view of the ghostwriting services use between students by study load.
- **H20** There is not a statistically significant difference in view of the ghostwriting services use between students by degree. **H2<sub>A</sub>** There is a statistically significant difference in view of the ghostwriting services use between students by degree.
- **H30** There is not a statistically significant difference in view of the ghostwriting services use between students by gender. **H3<sub>A</sub>** There is a statistically significant difference in view of the ghostwriting services use between students by gender.
- **H40** There is not a statistically significant difference in view of the ghostwriting services use between students by generation. **H4<sub>A</sub>** There is a statistically significant difference in view of the ghostwriting services use between students by generation.

For choosing a right comparison method, Shapiro-Wilk W normality test was used to determine if normal distribution models a data set. Also, the Robust Estimates and Outliers test was used to check outliers.

As Table 2 shows, Shapiro-Wilk W test rejects the normal distribution hypothesis ( $p < .0001$ ), after that non-parametric Wilcoxon / Kruskal-Wallis Tests was used to verify stated hypotheses.

Table 2 Normality test

Summary Statistics				
Mean	2.5240175			
Std Dev	1.8771892			
Std Err Mean	0.0716192			
Upper 95% Mean	2.6646367			
Lower 95% Mean	2.3833982			
N	687			
Fitted Normal (Parameter Estimates)				
Type	Parameter	Estimate	Lower 95%	Upper 95%
Location	$\mu$	2.5240175	2.3833982	2.6646367
Dispersion	$\sigma$	1.8771892	1.7829045	1.9820818
Measure				
-2*LogLikelihood	2813.9331			
AICc	2817.9507			
BIC	2826.9978			
Goodness-of-Fit Test	W		Prob<W	
Shapiro-Wilk W Test	0.787334		<.0001*	

Note: Ho = The data is from the Normal distribution.

Source: Own calculation

The described methodology has some limitations. Firstly, it is not easy to generalise results because of convenience sampling procedures were being used. Secondly self-report questionnaires, thus the results rely on the honesty of participants (their introspective ability, understanding and response bias).

## Results and Debate

### Descriptive statistics

In Table 3, descriptive statistics for the full sample is presented. We can see that about 17% of the students did not see anything wrong when someone else, especially weak student, uses the ghostwriting service for coursework, term paper or thesis, about 12% of the students are undecided, and about 71% of the students disagree.

If we add together students who have agreed and undecided students, we get a share of students who are, in principle, willing to tolerate ghostwriting (39% of the students).

Table 3 The occurrence of ghostwriting – descriptive statistics

Attitude	Likert Scale	N	% of Total
Agree	7, 6, 5	120	16.85%
Undecided	4	88	12.36%
Disagree	3, 2, 1	504	70.79%

Source: Own calculation

Our results do not differ from the other researchers' findings who report engagement in plagiarism, respectively other forms of academic dishonesty. For instance, Abusafa et al. (2018) report that 82.1% of the students had engaged at least once in the act of academic dishonesty in the academic setting. Kruger (2014) states 64.7% of participants who engaged in some form of academic dishonesty. Ismail (2018) indicate 54.3% of the students who practised plagiarism. Desalegn and Berhan (2014) mention that the prevalence of self-reported cheating was found to be 19.8%.

### Ghostwriting by study load

The term study load, in our case, refers to the burden of studying duties. We distinguish between full-time student and part-time students. In the Slovak Republic, the full-time form of study is organised in such a way that, depending on the study program, the duration of the student's work per academic year is from the range of 1,500 to 1,800 hours, including a separate study and independent creative activity. The part-time student workload is from the range 750 to 1440 hours.

To detect any statistically significant differences, hypothesis **H1** was formulated as follows: **H1<sub>0</sub>** - There is not a statistically significant difference in view of the ghostwriting services use between students by study load. **H1<sub>A</sub>** There is a statistically significant difference in view of the ghostwriting services use between students by study load.

Table 4 The acceptance of ghostwriting by full-time and part-time students

Study load	N	Mean	Std Dev	Median
Full-Time	146	2.773972603	1.974913522	2
Part-Time	541	2.456561922	1.846031381	2

Source: Own calculation

As Table 4 presents, there are some mean value differences in the acceptance of ghostwriting. While full-time students accept ghostwriting with a rating around value 2.8, part-time students accept ghostwriting with a rating around value 2.5. The revealed rating could mean that part-time students opinion is more reluctant than full-time students.

Table 5 The test of ghostwriting differences significance between full-time and part-time students

Wilcoxon / Kruskal-Wallis Tests (Rank Sums)					
Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
Full-Time	146	53902	50224	369.192	1.841
Part-Time	541	182426	186104	337.201	-1.841
2-Sample Test, Normal Approximation					
S	Z	Prob> Z			
53902	1.84052	0.0657			
1-Way Test, ChiSquare Approximation					
ChiSquare	DF	Prob>ChiSq			
3.3884	1	0.0657			

Source: Own calculation

As Table 5 shows, the resulting p-value test ( $p = 0.0657$ ) means, that we failed to reject hypothesis  $H1_0$ , after that we cannot consider the differences as statistically significant.

### Ghostwriting by study degree

As Table 6 presents, there are some mean values differences in the acceptance of ghostwriting by degree. While bachelor's degree students accept ghostwriting with a rating around value 2.9, master's degree students accept ghostwriting with a rating around value 2.2. The revealed rating could mean that master's degree students take a more negative attitude about ghostwriting than bachelor's degree students.

Table 6 The acceptance of ghostwriting by degree

Degree	N	Mean	Std Dev	Median
Bachelor's Degree	325	2.855384615	1.924663733	2
Master's Degree	362	2.226519337	1.78437774	1

Source: Own calculation

To detect any statistically significant differences, hypothesis  $H2$  was formulated as follows:  $H2_0$  There is not a statistically significant difference in view of the ghostwriting services use between students by degree.  $H2_A$  There is a statistically significant difference in view of the ghostwriting services use between students by degree.

Table 7 The test of ghostwriting differences significance between bachelor's degree students and master's degree students

Wilcoxon / Kruskal-Wallis Tests (Rank Sums)					
Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
Bachelor's Degree	325	123756	111800	380.786	4.902
Master's Degree	362	112573	124528	310.974	-4.902
<b>2-Sample Test, Normal Approximation</b>					
S	Z	Prob> Z			
123755.5	4.9025	<.0001*			
<b>1-Way Test, ChiSquare Approximation</b>					
ChiSquare	DF	Prob>ChiSq			
24.0365	1	<.0001*			

Source: Own calculation

As Table 7 shows, the resulting p-value test ( $p < 0.0001$ ) means, that we reject hypothesis  $H_{2v}$ , after that, we can consider the differences between bachelor's degree students and master's degree students as statistically significant. Our results are indirectly confirmed by Puengpipattraku (2016) research, which confirms, that insufficient knowledge and skills are one of the key factors affecting the act of plagiarism.

### Ghostwriting by gender

Table 8 shows that there are some mean values differences in the acceptance of ghostwriting by gender. While men accept ghostwriting with a rating around value 2.4, women accept ghostwriting with a rating around value 2.6. The revealed rating could mean, that there are differences in-between men and women opinion on ghostwriting.

To detect any statistically significant differences, hypothesis  $H_3$  was formulated as follows:  $H_{3_0}$  There is not a statistically significant difference in view of the ghostwriting services use between students by gender.  $H_{3_A}$  There is a statistically significant difference in view of the ghostwriting services use between students by gender.

Table 8 The acceptance of ghostwriting by gender

Gender	N	Mean	Std Dev	Median
Men	185	2.437837838	1.750054557	2
Women	502	2.555776892	1.922624125	2

Source: Own calculation

Table 9 The test of ghostwriting differences significance between men and women Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
Men	185	62779.5	63640	339.349	-0.397
Women	502	173549	172688	345.714	0.397
<b>2-Sample Test, Normal Approximation</b>					
<b>S</b>	<b>Z</b>	<b>Prob&gt; Z </b>			
62779.5	-0.39694	0.6914			
<b>1-Way Test, ChiSquare Approximation</b>					
<b>ChiSquare</b>	<b>DF</b>	<b>Prob&gt;ChiSq</b>			
0.1577	1	0.6912			

Source: Own calculation

According to Table 9, the resulting p-value test ( $p = 0.692$ ) means, that we cannot reject hypothesis  $H3_p$ , after that we can consider the gender as statistically non-significant.

Our results are consistent with the previously published ones. No significant differences across gender were reported by Hecker et al. (2013). Ismail (2018) reported slightly higher although the non-significant difference in the frequency of plagiarism among male students compared to female.

### Ghostwriting by gender

Table 10 presents some mean values differences in the acceptance of ghostwriting by generation. Generation X, typically with birth years ranging from the early-to-mid 1960s to the early 1980s, agree with ghostwriting at the value around 2.0. Generation Y, also known as Millennials with birth years ranging mid-1990s to early 2000s, agree with ghostwriting at the value around 2.7. Generation Z, the demographic cohort after the Millennials, agree with ghostwriting at the value around 2.5.

Table 10 The acceptance of ghostwriting by generation

Generation	N	Mean	Std Dev	Median
Generation X	168	2.02381	1.615614	1
Generation Y	506	2.689723	1.918274	2
Generation Z	13	2.538462	2.366974	1

Source: Own calculation

To detect any statistically significant differences, hypothesis **H4** was formulated as follows: **H4<sub>0</sub>** There is not a statistically significant difference in view of the ghostwriting services use between students by generation. **H4<sub>A</sub>** There is a statistically significant difference in view of the ghostwriting services use between students by generation.

Table 11 The test of ghostwriting differences significance between generations  
Wilcoxon / Kruskal-Wallis Tests (Rank Sums)

Level	Count	Score Sum	Expected Score	Score Mean	(Mean-Mean0)/Std0
Generation X	168	49129	57792	292.435	-4.126
Generation Y	506	183033	174064	361.724	4.168
Generation Z	13	4166.5	4472	320.5	-0.458
<b>1-Way Test, ChiSquare Approximation</b>					
<b>ChiSquare</b>	<b>DF</b>	<b>Prob&gt;ChiSq</b>			
17.6492	2	0.0001*			

Source: Own calculation

According to Table 11, the resulting p-value test ( $p = 0.0001$ ) means, that we can reject hypothesis **H4<sub>0</sub>**, after that we can consider the generation factor as statistically significant. Our results are the same as the Abu Talib et al. (2013) results which reported that there are significant differences of perceptions on research integrity between Generation X and Generation Y and also between Generation X and Baby Boomers.

## Conclusion

The massification of higher education and the importance of the higher education institutions made from a plagiarism a 'hot' topic (Macfarlane, Zhang, & Pun, 2012). Plagiarism rates in higher education around the world show, that academic dishonesty is an increasingly visible problem (Ives et al., 2017). However, this problem is much broader and does not only concern higher education institutions. Graduates that understand the importance of integrity in their profession are more likely to take on those values themselves (McHaney et al., 2016). There can be no doubts, that the personal integrity of future managers is a key factor affecting the economy of each country.

Purpose of this study was to empirically examine the issue of plagiarism, more specifically acceptance of the ghostwriting by business management students. We found out that the occurrence of the plagiarism in the Slovak Republic does not differ from other countries. We did not confirm the impact of study load and gender differences on ghostwriting, but the degree and generation seem to be influencing factors.

Our results, in line with others researchers, suggest to higher education institutions som implication. Firstly, insufficient knowledge and skills are one of the

key factors affecting the act of plagiarism (Puengpipattrakul, 2016), whereupon rather than focusing on the detection of plagiarism, focusing on preventive measures could have a positive effect on good practice in the near future (Jereb, Perc, et al., 2018). Secondly, to prevent plagiarism, students should be practically evaluated on a regular basis to ensure compliance to standards of academic honesty (Van Zyl & Thomas, 2015).

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## NUMBER OF ADVERTISEMENTS PER DAY AND THEIR RELEVANCE TO CONSUMERS

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### Abstract

The article focuses on the extent of commercially oriented communications in the media and public space. The main findings of partial empirical surveys and qualified estimates that have attempted to answer a research question over the volume of advertising messages faced by an average consumer in a single day over the last ten years are presented in the text. As the issue of daily exposure to advertising communications is not solved in the domestic environment, the article presents the conclusions of the empirical probe conducted in 2017 among the students of the University of Finance and Administration. Survey results indicate the number of advertisements per day, their number according to the media, their time interval or the subjectively perceived relevance of advertising messages to consumers. The aim of the survey is to find out what volume of advertising messages a university student faces during the day.

**Key words:** *Media types, advertising message, relevance of advertising, consumer.*

**JEL Classification:** *M30, M31, M37*

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### Introduction

Due to the title and focus of the article, several questions can be asked. How many ad messages do we have the chance to see in one day? From the moment we open our eyes in the morning to the moment when we go to sleep after all day activities? Where do these messages most often come from, what are the sources? How much of the total flood of message we are actually able to process and then recall? How do we handle these signals? These seemingly banal questions are addressed in this article. The aim of the survey is to find out what volume of advertising messages a university student faces during the day. This is based on a systematic empirical survey. Of course, we are not the first to think of these questions while trying to answer them meaningfully.

Advertising efficiency is very important in present marketing environment. In an advertising planning process, advertising professionals often conduct research

to ensure the success of their campaigns, including consumer research (Chang, 2017). Today's marketing uses also new forms and tools of communication. For example is Word of Mouth (WoM) marketing is a key element of marketing communication in social networks (Sharma & Srivastava, 2017), but marketing communication practitioners lack a guideline for implementing social media strategically (Cloete & Holtzhausen, 2016). Organizational participation on social media platforms is obvious in present day (Dawson, 2018). But social networks are not just the only tool. Video games have become one of the most valuable platforms used by advertisers when looking for new ways to reinforce brand awareness (Morillas & Cansado & Sastre, 2016).

The issue of daily exposure to advertising communications has been a matter of interest to media and marketing professionals for several decades and the average number of daily adpositions (exposions) has been repeatedly verified. However, not always systematically and on the basis of a clear, verifiable methodology.

There is one popular favorite myth that speaks about 3000. For example, Phillip Kotler, in the bible of marketing strategist Marketing Managment (2013 edition), states that today's city population is facing an average of 3,000 to 5,000 advertising messages a day (Kotler, Keller, 2013 ). Another author, in his publication, mentions an estimated range of daily intake of marketing communications around 1700 to 3000 (Morgan, 2011). According to an article published at the American Association of Advertising Agencies in 2007, however, no similar conclusion relates to any particular research, author or publication. If this figure is mentioned, always with a legitimate insight referring to a sort of anonymous authority (as is known, experts estimate, etc.). The aforementioned article sums up the proven facts so far and we did similar research of the available resources on the given issue in the framework of pre-research.

The first empirical effort to unequivocally demonstrate the total number of advertising messages was made in 1957 by American author Edwin Ebel. Based on survey of the four-member American family, he came with the number 1518. Converted to an individual, it would be approximately 380. However, the survey methodology of the 1950s remains unclear and gives room for many speculations (for example, monitored media types were not specified). The pair of US researchers R. A. Bauer and S.A. Greyser made a slightly more serious attempt in 1968. They conducted an extensive survey of 750 respondents. The addressed sample was divided into two groups by the authors, the first half of the respondents recording the number of messages they registered from the wake to the 5 PM, the second half was mapping the remaining half of the day. Respondents were only allowed to record such communications that they registered or gave attention to, and only in four selected media (television, radio, magazines and newspapers). The resulting average for the "daily" group was 36.3, the "afternoon" group recorded an average of 36.9 messages. The average full-day value is 76 registered ad messages (Bauer, Greyser, 1968).

It is important to note that this survey has mapped messages that has attracted the attention of recipients and the potential for exposure to advertising is, of course, several times higher. In 1970, Charles F. Adams made a certain modification of the survey. On the basis of his own research he found out the following facts: the average American reads 1.5 newspapers during the 16-hour daily cycle, passes half of the magazine, receives one advertising message in the form of direct mail. Watch TV for 2.5 hours and listen it for almost 4 hours. Described media makes the consumer target of a total of 560 advertising messages (Adams, 1965).

Here, the potential for intervention, but not its factuality (awareness), is anticipated. An interesting and inspiring review of this issue is made in an article titled "New Research Sheds Light on Daily Ad Exposure," which was published in 2014 by SJ Insights Research Server. The article is based on the findings of the regular media market analysis conducted by Media Dynamics. Their findings show that while the average American spends more time in the company of media over the last half-century, the number of ad messages that penetrate him is not dramatically increasing. Researchers at the agency also distinguish between the potentiality of addressing advertisements (the number of advertisements we have the chance to record during the average day) and the factual addressing, that is, communications that the recipient actually registers and devotes them to a few seconds of conscious attention. While in 1945 the average American spent 309 minutes on the media and was exposed to 340 messages (124), 433 minutes in 1985, 296 advertisements (121 recorded), and in 2014 media time extended to 590 minutes during which 362 ad messages and 153 registered (SJ Insights, 2014) entered the recipient. In the latest edition of Media Dynamics in the early 2018, the average American spends over 600 minutes in the media company and has a chance to come across 374 commercially motivated messages. 154 of them will realize or register. The media included in this analysis are television, radio, newspapers, magazines and digital media (Kivijärvi, 2018).

Since we have not found any relevant sources of information on this topic in our terms, we have made several lonely attempts in our workplace in the past. The number of interventions by advertising messages during the weekday was the subject of two bachelor's theses, in which the analytical part consisted of empirical verification of the problem. The total number of commercially tuned communications reached 731 in a first case, in the second one 812. It must be added that most of the registered messages came from out-of-home advertising (64% in the first case, 79% in the second). Of the four mainstream media (television, radio, print and digital media), the number of messages recorded by both watchers during the day was 267 and 167 respectively (Peksová, 2014; Dančová, 2013). A key variable of such surveys is, of course, the time spent by a researcher in contact with individual media types.

It is obvious that similar efforts are affected by many methodological problems. The key to the outputs of these investigations is primarily the operationalization of the research goal, ie the decision whether to follow really all commercially oriented messages, or to focus only on communiques that attract the attention of the respondent. For example, American marketing specialist Ron Marshall describes in one of his articles his attempt to verify the total number of daily interference with advertising communications. His intention was to record any commercially motivated message that is in its vicinity and has a chance to register it. In his experiment, he decided to count both the deliberately and the unintentional messages from the producers. Beyond standard ad communications, he also recorded, for example, home appliance logos or tagged clothes labels in the cabinet. His experiment had to end shortly after breakfast! Within two hours after awakening, he reached 487 (he counted only 214 food labels in the fridge). He realized he would not be able to count the number of messages after entering the public space (Marshall, 2015). Essential, of course, is the specification of the media that are monitored during the investigation. An attempt to systematically examine the problem was carried out with our students in 2017.

## Material and Methods

The survey took place during the winter semester in 2017. Respondents were students of two groups of Marketing Communication at the University of Finance and Administration in Most. The total number of observations from which the outputs will be presented is 23. Observations were carried out during November and December 2017.

The method of our survey can best be characterized as structured observation. Students were required to record all advertising (commercially-oriented) messages they registered during the selected day. The tool for recording individual communications was a freeware application for mobile phones, which serves as a clear counter.

In our survey, we used the Multi Counter application from TAKAOS. Finally, the students transferred their outputs to a pre-prepared record sheet and the input data were then comprehensively processed in the SPSS statistical program. As it was more about finding trends in the area, we did not test statistical hypotheses. We focused on the evaluation of the basic statistical variables of the monitored characters.

The record sheet, as well as the subsequent evaluation of the collected data, were structured into four thematic areas.

The first key data that respondents place on record sheets is the daily contact time with individual media types. Time was specified in minutes, in three time zones. The whole day of observation was divided into the morning (the time between waking up and noon), afternoon (noon to six o'clock in the evening) and evening (after six o'clock in the evening until the respondents were on their way to bed).

The second set of verified variables is, of course, the number of recorded messages. The default sorting criteria were individual media types, which we further specified in the subcategories. We investigated a total of 7 separate sources of marketing communications:

1. TELEVISION (TV commercials, product placement, teleshopping, sponsorship, other forms),
2. RADIO (radio advertising spots, other forms),
3. Press (newspaper and magazine advertisements, leaflets in the mailbox, catalogues in the mailbox, PR articles in printed media, other forms),
4. INTERNET - WEB SITE (video, image ads, text ads - banners, PPC, PR content of web sites, other forms),
5. INTERNET - SOCIAL NETWORK (video, image advertising, test advertising - banners, PR content, other forms of promotion),
6. MOBILE MARKETING (apps, games, telemarketing, SMS marketing),
7. OUTDOOR (large-format media, other street advertising media, classic in-store, other in-store interiors of commercial objects).

The third area we took into account in our survey was the targeting of recorded communications, respectively the relevance of the individual communications to the preferences, interests and current needs of the respondents.

The last mapped area in the investigation was closer identification of each of the respondents. We watched not only the sex, age and size of the respondent's residence, but also the total wake-up time, time spent in shops, behind the wheel and in the media company. In the survey, we also took into account the use of the adblock service in electronic devices of the respondents. Adblock is a designation for various web browser extensions that allow you to block a portion of the website's content,

especially ad messages. In 2017, approximately 11% of all Internet users used this service. In the Czech Republic, 10% of the internet population had “adblock” installed in their browsers (Cortland, 2017).

While, in the case of registration, recording and subsequent evaluation of advertising impulses appearing in classical and electronic media, we consider this survey to be methodically reliable, and we have great doubts about outdoor advertising. Therefore, the presented data for this media is considered as only indicative. As the respondents themselves stated in their comments on the course of the investigation, the public space, whether it be streets or shopping centers, is so overwhelmed by advertising communications that they have been unable to record their numbers consistently.

## Results and Debate

### Basic identification of respondents and their regular weekday

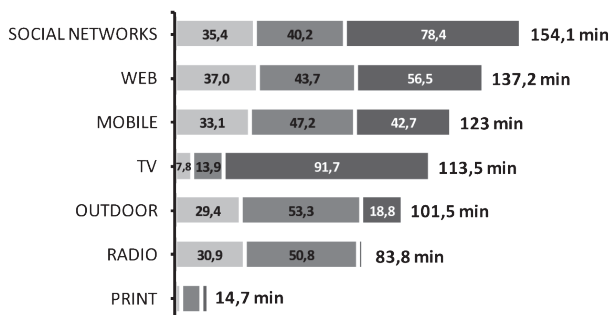
The survey was attended by 23 respondents, 16 women and 7 men. The average age of respondents was 22.4 years, the most commonly reported age was 21 years (the oldest respondent was 29 years). The investigation took place in the Ústí nad Labem Region in the Czech Republic. The most populous village in which the survey was conducted is Bridge, which had at the time of the survey 67 000 inhabitants. The vast majority of respondents (80%) conducted surveys in municipalities with more than 10,000 inhabitants. Students were most likely to get up during the day of observation between 6 am and 7 am and sleep between 22 and 23 pm. The average waking time during the day was 934 minutes, ie 15 hours and 34 minutes. The average time spent by respondents in stores was 34 minutes. Behind the wheel, respondents found an average of 1 hour and 10 minutes and stay on city streets for an average of 38 minutes throughout the day. It is necessary to emphasize that respondents were, for the most part, full-time students. Only two of them did full-time regular work at the time of the survey. This fact, of course, affects how much time a person can devote to free, unbounded activities during the day. Only two respondents do not use adblock services on any of their digital devices. In addition, 5 respondents have adblock installed on their computers only, 16 of 23 watchers use adblock options on both computers and mobile phones.

### Daily contact with media

Our survey showed that the overwhelming majority of respondents (more than 75%) spent their waking time surrounded by media. The total daily time spent with the media reached an average of 12 hours. As expected in this age category, the most time was spent with the digital media. They spent more than 2.5 hours on social networking activities, spent 2 hours browsing the web, and spent 2 hours using their smart mobile phones with internet access. The total duration of time spent in the online environment exceeded 6 hours. From traditional media that still play a significant role in the media behavior of the student population, it is necessary to mention the television, watched by respondents for almost 2 hours, and a radio with a listening experience of almost 1.5 hours. A negligible share of students' daily media behavior was played by the press, or any press media. They devoted them on average for a

quarter hour. The distribution of contact with the media during the day was not quite even. The biggest part of day-to-day contact with the media is in the evening hours, from six o'clock in the afternoon to until sleep, with students spending most of the evening on the consumption of television and social networks. Detailed results are shown in Graph1 and Table 1.

Graph1 Average daily contact with media in minutes (N=23)



Source: empirical research, own processing

Table1 Daily contact with media in minutes - basic statistical indicators (N=23)

MEDIATYP	Average	Median	Modus	Minimum	Maximum	Variance	Standard deviation
SOCIAL NETWORKS	154,13	130,00	130,00	0,00	585,00	16 126,48	126,99
WEB	137,17	100,00	80,00	0,00	370,00	13 185,97	114,83
MOBILE	123,04	70,00	50,00	0,00	430,00	15 474,41	124,40
TV	113,48	120,00	180,00	0,00	270,00	7 941,90	89,12
OUTDOOR	101,52	80,00	70,00	0,00	370,00	6 605,53	81,27
RADIO	83,83	35,00	0,00	0,00	600,00	22 766,70	150,89
PRINT	14,70	0,00	0,00	0,00	61,00	294,18	17,15
Total	727,87	955	450,0	230	1405	89 060,76	291,87

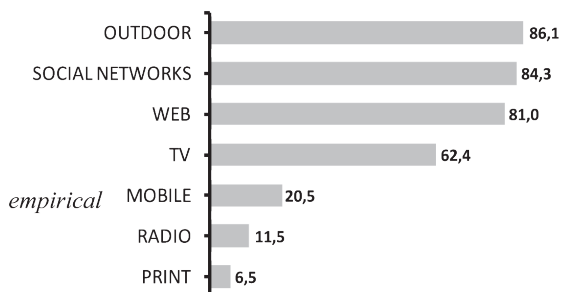
Source: empirical research, own processing

As can be seen from the values of the presented indicators of the statistical variability of the collected cases, the media behaviour of the respondents in the survey was very variable. Deviations from the average daily contact with the media exceeded the 1-hour limit in all monitored media types, except printed media. This is of course also related to the number of communications that were recorded during the observation. Although the results are not generalized to the population as a whole (and this is not the goal of this article), they still show interesting trends, especially in the field of advertising for younger age groups that use more diverse digital devices offering additional opportunities for advertising .

### Exposure to marketing communications

The average number of commercially-oriented messages our respondents registered during their weekday reached 352. The highest average number of registered messages belonged to several out-of-home ad formats. Their share reaches almost a quarter of all registered marketing communications (24.4%). Given that the methodology was designed to identify trends and tendency in a given area, the results serve as a guideline to more accurately estimate how many advertisements the young person faces during the day. It can be rightly assumed that the actual dimension of marketing signals will be several times higher in the case of outdoor space, especially because there are so many stimuli in the outdoor environment that it is very difficult to register them all consciously. Half of the total number of recorded ad messages were impulses registered on social networks, or different websites. Considering the time spent on average by respondents in the company of mentioned media, the significant representation of Internet platforms is not surprising. In the case of online advertising, the total number of the fact whether the person uses or does not use the adblock service affects them significantly. Persons whose Internet browsers do not filter in on advertising messages have been struggling with three times higher rate of advertising messages - both in the site and in the social networks. On mobile phones, non-adblock users recorded even four times higher rate of ad messages. The average number of recorded messages for all monitored media types is shown in Graph 2 and Table 2.

Graph2 Average number of recorded marketing messages by media type (N=23)



Source: empirical research, own processing

Table2 Number of recorded marketing messages by media type - basic statistical indicators (N=23)

MEDIATYP	Average	Median	Modus	Minimum	Maximum	Variance	Standard deviation
OUTDOOR	86,13	54,00	54,00	4,00	330,00	6 707,21	81,90
SOCIAL NETWORKS	84,26	64,00	47,00	0,00	399,00	7 154,20	84,58
WEB	80,96	59,00	5,00	0,00	483,00	10 848,86	104,16
TV	62,35	39,00	0,00	0,00	222,00	4 295,24	65,54
MOBILE	20,52	9,00	9,00	0,00	112,00	752,72	27,44
RADIO	11,52	7,00	0,00	0,00	40,00	142,08	11,92



PRINT	6,48	2,00	0,00	0,00	43,00	115,17	10,73
Total	352,22	343	24,0	214,47	45 998,6	24	1 034

Source: empirical research, own processing

Out-of-home advertising served to viewers primarily through large-format advertising formats (68% of all communications). As far as internet advertising is concerned, the most widely-advertised form of advertising was image-tuned banners - these accounts for half of all recorded social media messages and more than a third of the messages on other web portals visited by the respondents. The vast majority (85% and 99% respectively) of the registered advertising messages on TV and radio consisted of commercial spots. In the case of mobile marketing, it was mainly about advertising links popping up to users while playing games or working with other mobile apps.

### Saturation of individual media by advertising

However, the total number of recorded ad messages only very roughly reflects the extent to which individual media are saturated with commercially tuned communications. The results presented, of course, are in a fixed relationship with the total amount of time spent in the media company by the respondents during the day. The individual variability of all the data presented so far clearly demonstrates the indicators of their variability. A much more concentrated, clearer and more standardized view of this issue is, in our opinion, a pointer expressing the number of advertising messages that media respondents encountered during a fixed period of time. We bring this information in Table 3.

Table 3 The average time interval between two ad messages in each media type (N=23)

MEDIATYP	total time spent with the medium (min)	total number of recorded messages	average interval between 2 ad messages (min)
OUTDOOR	101,5	86,13	1,18
WEB	137,2	80,96	1,69
TV	113,5	62,35	1,82
SOCIAL NETWORKS	154,1	84,26	1,83
PRINT	14,7	6,48	2,27
MOBILE	123,0	20,52	6,00
RADIO	83,8	11,52	7,28
Total	727,87	352,22	2,1

Source: empirical research, own processing

As we have already commented, we assume that registration and recording of outdoor forms of communication was incomplete in our survey. Nevertheless, the saturation of the public space with commercial communications is the highest. Consumers can not escape from advertising messages in town streets, or shops, for obvious reasons. On average, respondents registered one message every minute. In such a crowded space, however, advertising usually plays a role of insignificant

background that is not consciously, cognitively processed. As far as the media space is concerned, the most significant volume of commercial communications can be attributed to both the monitored internet media and television. The average time interval between two independent ad messages is less than 2 minutes in this case. In the Internet environment (the WEB and SOCIAL NETWORKS), respondents whose browsers do not filter ads have been exposed to flood of commercial communications. The interval between the recorded messages lasted an average of 37 seconds. On the other hand, the longest intervals between two advertising messages were recorded for mobile marketing, or for advertisements appearing on mobile phones by respondents (advertising messages appeared on average after six minutes) and radio (the individual communications separated by interval 7 and a half minutes).

### Targeting recorded ad messages

The subjectively perceived relevance of the message was verified in our research. The research question is very simple. If we face more than 350 advertising impulses daily from different media, how many are actually targeted at our specific needs and desires? Following on the possibility of accurate targeting in Internet marketing campaigns, especially social networks, we expected the most striking results in these media types.

The overall share of messages rated as optimally targeted was 10% in our case. During the day, the student encountered an average of 34 messages that he considered helpful (or, at least, "memorable"). Seen from a different perspective, 90% of the total sum of the message that the average media recipient is forced to face every day plays the role of insignificant, often disturbing noise.

In this context, the conclusions of the last survey Czechs and advertising from 2018 can be mentioned. Respondents of the representative sample expressed the highest degree of advertisement over-crowding in commercial television and on the Internet. More than half of the sample of the Czech population negatively evaluates the number of leaflets in the mailboxes and the congestion of the public space by billboards. The negative attitude towards advertising on social networks is growing strongly (Mediaguru, 2018).

Contrary to the findings of the cited research, in our survey, the printed advertising media, or the leaflets found in the mailboxes, were markedly positive in terms of relevance. The investigation thus encourages the assumption that seniors are definitely not the only grateful recipients of this form of communication. Our student respondents met on average with three leaflets during the day. A surprising finding is relatively weak value relevance of all forms of Internet advertising. Appropriately targeted was less than one fifth (18%) of recorded social media messages, 13% of promotional impulses sent to viewers on their mobile phones, and only 11% of advertising messages registered with the WEB. On the other hand, it is not surprising that accurate targeting of advertising in public space is very low. All data found is shown in Table 4.

Table 4 Relevance of recorded ad messages (N=23)

MEDIATYP	Average number of recorded messages	Average number of relevant messages	Relevance (%)
PRINT	6,48	1,7	26,2
SOCIAL NETWORKS	84,26	15,3	18,2
MOBILE	20,52	2,7	13,2
WEB	80,96	9,2	11,4
TV	62,35	3,4	5,5
RADIO	11,52	0,6	5,2
OUTDOOR	86,13	1,3	1,5
Total	352,22	34,2	9,7

Source: empirical research, own processing

Its findings regarding the targeting of individual media types have provided respondents also personal commentary and reasoning. The high proportion of the media's good targeting is due to the direct distribution of action leaflets, which had increased relevancy during the pre-Christmas time for respondents (the research was carried out at the end of November and early December 2017). The attitude to this form of communication was apparently influenced by this circumstance. In the Internet environment, the search engine memory used by the particular user and the interconnection of people across different interest groups on social networks are responsible for the relevance of the admitted marketing signals. As one of the respondents noted: "Internet targeting is quite successful today, so most of the ads were targeted to me by my behaviour on the Internet. Especially in my case, I immediately started running ads for new laptops, which was an activity I previously used on the Internet. "Similar observations were also made by respondents in the case of social networks. One of the respondents gullibly summed it up: "I'm following people on social networks, and I'm in touch with people who have similar interests to me, so some of my ads have been interesting. Because I use alternative products, I'm inspired by the ad, and I'm selecting a brand recommended by favourite blogger"

And what is it like to try to focus on recording commercials in one day? Here is a commentary by another respondent, who mentions how difficult it is, even with a conscious effort, to record all advertising messages in their immediate surroundings. *"In simplicity, we meet advertisement almost everywhere, I was surprised to see how many billboards and advertising messages I overlook outside, I notice ads on the Internet, but I have seen a banner blindness in the outdoors. There are banners I have overlooked in our town; I was surprised by Facebook. The ad haunted me from my previous search. When I viewed the site, I found myself in banner blindness; In my opinion, it is almost impossible to notice every single advertisement we see during the day. Whether because of "advertising blindness" or busyness and non-focusing on watching ads ... Finally, I am surprised how many ads I noticed per day despite the fact that I did not pay full-time attention all day."*

## Conclusion

In an empirical survey, 23 college students verified a seemingly simple research question looking for the total number of advertising messages that can be recorded during the day as average consumers / recipients. In the form of structured observation, we recorded not only the total number of ad messages during a randomly selected day, but also their distribution by the source from which they come to the recipient and we were also interested in the issue of the subjectively perceived benefit of registered communications.

The survey was carried out on a limited sample of respondents whose media behaviour showed significant differences. The average daily contact with the media points to tendencies in this area, but they can serve to clarify the estimates of how many advertising messages the young person face. In a follow-up investigation, it would be advisable to address the issue of how to ensure effective reporting of the number of advertising messages that act on respondents. It can be assumed that the respondent is limited by his / her ability of attention and other factors while recording the number of advertisements during the day.

The total daily time spent with media exceeded 12 hours, with the bulk of this subsidy going to digital media. Students spent more than 2.5 hours on some of the social networking sites, browsing the Internet for 2 hours, and using their mobile phones with an Internet connection for almost 2 hours a day. The total amount of time spent during the day in the internet company exceeded 6 hours. From our findings, it also emerged that the most powerful classical media for the current young generation remain televisions, which the students spent watching nearly for 2 hours. However, a wide-ranging representative survey would be needed to pinpoint the media behaviour of this age group more precisely.

The average number of recorded ad messages reached 352. If we deduct from this amount outdoor communication, whose registration was more than problematic from our point of view, it is 266 messages from the four main media (digital media, television, radio, print). The current US Media Dynamics survey, which focuses on the main media without outdoor communications, has generated 374 messages in the US media market environment.

The distribution of recorded messages in our survey according to their source, or media type, corresponds to the time spent in the company of the individual media during the day. Depending on the problematic outdoor, the largest share of daily admissions of registered advertising messages (53%) comes from digital media (WEB, SOCIAL NETWORKS, MOBILE). An important circumstance is that the total number of recorded messages in the Internet environment significantly affects the use of adblock, which can filter ad serving, and according to our findings it reduces the number of displayed ad messages three times. The specificity of our survey is the fact that the vast majority of students use this service (on both platforms, on their personal computers and on mobile phones) among the students who participated in this survey. This is not a standard among Czech Internet population in general. According to the latest data, only 10% of Czech internet users use adblock services. TV provided almost a quarter (18%, an average of 62 impulses) of all registered communications to students.

Despite the problem of recording advertisements in public spaces, it is clear that public space is the most saturated one by advertisement. The time interval between two independent messages was the shortest in the case of an outdoors. More relevant information, however, has brought our research to the rest of the monitored media.

In spite of trying to block advertising on the Internet, it is the medium that is most noticeably filled by the advertising impulses and the average time interval between the two registered messages is only slightly over 1.5 minutes. We have also noticed a similar degree of intensity of advertising communications in the case of television broadcasting. The Czechs and the Advertising research from 2018 also illustrate the subjective perceived saturation of advertising in the Internet, social networks and commercial TV stations. The students marked only a tenth of the recorded advertising messages as relevant (or interesting, funny). The most positive assessment surprisingly earned the print media, leaflets or transmitted into mailboxes. This fact is attached to the circumstances of the survey, which took place several weeks before Christmas. Despite the constantly improving ability of digital marketers to precisely target campaigns in an online environment, the subjectively rated relevance of their targeting did not exceed 20%.

It is clear from the results that the advertising message to humans is almost everywhere, and especially in the so-called digital world, the frequency of exposure is relatively high. Surprisingly, there is a relatively positive assessment of printed advertising leaflets, which to a certain degree are a standard, common means of promotion in the Czech environment.

If we were to further develop our research in the future, it would be necessary to carry out a specific survey for each of the monitored media. Above all, outdoor forms of communication should be a matter of particular interest. A key task is also the need to construct a larger sample of respondents. An appropriate addition to such investigations would also be a series of inevitable recall tests that would show how many messages and resources the recipients store in memory.

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## IDENTIFICATION OF KEY EMPLOYEE BENEFITS RELATING TO EMPLOYEE SATISFACTION IN SELECTED HEALTH ORGANIZATIONS IN THE CZECH REPUBLIC

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### Abstract

Employee satisfaction is a highly discussed topic in today's world. The goal of each employer is to have loyal and satisfied employees. The aim of the paper is to present the results of the research project, which is focused on the analysis of employee satisfaction in relation to the benefits offered by the selected healthcare organizations. Altogether, 619 questionnaires were evaluated. These questionnaires were distributed in selected medium-sized healthcare organizations in the Czech Republic. The research was implemented in the months of January to March 2018. The author has dealt with the benefits that respondents have identified as important, but they are not satisfied with their views. These benefits are holiday allowance, life insurance reimbursement and free days. Three research hypotheses were identified. They were verified using the Pearson's Chi-square test method.

**Key words:** *benefits, Czech Republic, employee satisfaction, healthcare organizations, loyalty*

**JEL Classification:** *I29, M10, M12*

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## Introduction

Healthcare sector currently employs around 10% of all workers in the European Union. Of that number, almost three quarters are women (Gilles, 2014). Each organization tries to have satisfied employees. In addition to interesting work, these employees also need a variety of benefits that complement the overall satisfaction with the work done. Organizational capital, human capital and physical capital resources are the three main categories of resources that provide a corporation (healthcare) organization with a sustained competitive advantage (Bejtkovský, 2017). Providing employee benefits is costly for businesses, yet providing such incentives is often necessary for the development of the human capital. While a broad mix of employee benefits can bring synergy effects, the adoption of a large number of benefits may not be available to businesses that are resource-restricted. That is why it is necessary to identify factors that are important from the point of view of employees and which create a high added value for them (Messersmith and Crawford, 2017). Attracting talented employees through employee benefits plays an important role in selecting

both new and existing employees (Zimmerman and Zeitz, 2002). Employee benefits further help to create solid foundations for building high-performance, high-performance workflow systems. Insufficient investment in employee benefits could therefore limit the development of human capital for organizations.

When looking at system perspectives, it is an effort to identify the impact of employee benefits on the functioning of organizations. Therefore, the question arises as to which employee benefit offers are linked to the increased likelihood of success and good reputation of the organization and which, on the contrary, are likely to be linked to the failure and dissatisfaction of employees? As said Coff a Kryscynski (2011), the critical path to human capital-based competitive advantage requires attracting, retaining, and motivating employees with valuable human capital at an economic discount relative to competitors.

Today's companies operate in a competitive environment at a global level and are forced to do everything on the market to become and remain competitive. In view of such a situation, it is crucial that management takes care of employee satisfaction, which is a key factor for organizational effectiveness and efficiency and for the successful implementation of the corporate strategy (Bigliardi et al., 2012). The author of the article focuses on the specific health sector. Gilles and col. (2014) are analysing the situation in the field of health sector, too. The current emphases on motivation in the field of public management support differences in motivation by sector. Thus, it is reasonable to question if determinants of organizational commitment vary across sectors. Employees are more committed to their organizations than private employees are because private sector employees are committed to their career more than to their organization, as they have relatively less job security (Drucker 1995). The interest in performing the medical profession will play a major role. If we are already analysing the current situation in healthcare organizations, it is necessary to focus on employee satisfaction. Here the employer plays a key role. Wiley (1997) argued that employers must understand what motivates employees; they must also emphasize employees' satisfaction. This is essential to improve productivity and ensure companies success.

When dealing with labour relations in economics, wages and their influence on employee behaviour and well-being are among the most prominent objects of research interest. In this context, the study of job satisfaction has gained increasing interest as it measures the subjective evaluation of many job aspects that cannot be captured otherwise (Diriwaechter and Shvartsman, 2018). Employers should be concerned about their employees' job satisfaction, as this can be considered a determinant, for example, of an individual's job-related well-being, commitment, and labour market mobility or turnover intentions (Johnston and Lee, 2013). Workers who are more satisfied with their jobs presumably change them less often and more often invest in firm-specific human capital. Lambert (2000) shows that perceived usefulness of benefits is related positively to employee attitudes about overall organizational support. Job satisfaction is not the same as motivation, although they are clearly linked (Gopinath and Shibu, 2015). Other influences on satisfaction include the management style and culture, employee involvement, empowerment and autonomous work-groups. Job satisfaction is a very important attribute which is frequently measured by organizations. In fact, there is little research on employee benefit programs in relation to job satisfaction.

According to Jex and Britt (2008), satisfaction in the workplace is crucial for organizational success. They also argued that satisfied employees commit to work more and have higher rates in retention and productivity. The authors also assert



that high satisfaction often means lower level of absenteeism while improving mental and physical health. Harrison et al. (2006) argued that workplace satisfaction can also be linked to other key factors of employees in the context of workload, stress and supervision at work, and the balance in domestic activities and work environment. Employees feel obligated to reciprocate by adopting a more positive attitude towards the workplace when they are exposed to a favourable work environment and desirable benefits (Parzefall and Salin 2010).

Employee benefits make employees feel truly valued and inclined to reciprocate by demonstrating positive work attitudes. According to Ko and Hur (2014) it is important to include procedural justice and managerial trustworthiness as social exchange variables that moderate the relationship between employee benefits and work attitudes. Muse and Wadsworth (2012) report that traditional benefits programs were not linked to perceived organizational support (POS) in a study of hospital employees, whereas non-traditional benefits did enhance POS. In addition, benefits have been linked to increased motivation for employees, though these increases do not always translate into enhanced productivity. These findings emphasize that not all benefits are highly valued by employees. It is for this reason that the benefits offered must be selected and examined also in terms of importance for the employees. The key success of each organization will therefore be the effective use of limited financial and human resources.

Roberts et al. (2004) divided employee benefits into two broad categories. The first category includes traditional benefits, including health and life insurance and retirement benefits. The second category includes family-friendly benefits that are designed to meet the diverse requirements of employees faced with the problem of balancing work, family, and personal needs. It is by linking work and private life to the WLBP. Work-life balance policies (WLBP) are formal or informal employer-initiated HRM policies or practices designed to help employees integrate their job and life (Ngo et al. 2009), also called family-friendly programs and work-family policies. Research on WLBP has focused on specific types of WLBP, such as flexible working arrangements, leave arrangements, and child/dependent care support (Beauregard and Henry 2009). However, one of the work-life programs – health and wellness – was found to positively affect satisfaction (Caillier, 2016). Workers juggle many roles at once – they have their work role and they have their personal role, which can be further categorized as family, social, leisure, and spiritual, among others. Research indicates that these two roles place enormous demands (e.g., time and responsibility) on individuals, and, if not handled properly, they can result in role conflict. Role conflict is a major concern for organizations because it can lead to undesirable attitudes, as well as negative outcomes in both work and personal roles (Brown and Sumner 2013). Since both these roles are essential, employees are frequently seeking to achieve the right balance, or harmony, between these two domains (Stankiewicz et al. 2014). Work life balance or the extent to which an individual (Greenhaus et al. 2003) is equally engaged in – and equally satisfied with – his or her work role and family role.

Health and wellness programs encompass health fairs, newsletters, preventative programs, fitness centres, life coaches, weight loss programs, stress management programs, and premium discounts for avoiding certain behaviours (Caillier, J. G. 2012). With scarce resources and escalating health care costs, public organizations have initiated these types of programs because they are designed to lower the cost of insurance premiums by reducing adverse health outcomes. Improved health outcomes reduce the amount of sick days, suggesting that health and wellness programs are positively associated with productivity as well (Benavides & David,

2010). The Society for Human Resource Management (2009) reported that about 20% of families provide some care to a senior relative or friend. Older adult care programs are designed to assist employees in balancing work and caregiving responsibilities. Such programs include flexible spending accounts, support groups, and resources for health insurance, health care, housing options, legal assistance, and financial matters. Older adult care programs primarily encompass support and assistance, even though flexible spending accounts can offset some of the cost associated with care for older adults. Similar to child care, care for older adults can assist in recruiting and job satisfaction. Under our circumstances, this benefit is unusual, but with the aging of the population, individual organizations, not just healthcare, will have to gradually add to their benefits.

Individuals with high levels of human capital (i.e. knowledge, skills and abilities) will be less likely to join a firm prior to it establishing some level of legitimacy. Offering employee benefits may be one such way that ventures can signal legitimacy to potential employees. However, these offerings must be balanced against the significant costs that ventures are likely to incur by offering extensive employee benefits (Messersmith and Crawford, 2018). Employer-sponsored financial education programs, which increase employee understanding of employer-provided benefits and their importance to employees' financial well-being, should improve overall employee satisfaction, loyalty, and productivity (Power and Hira, 2009).

## Material and Methodology

This article deals with the analysis and statistical evaluation of the satisfaction of employees in selected health care organizations in relation to the benefits offered. The aim of the presented paper is to find out the current state of employee satisfaction in connection with the provided system of employee benefits in the selected health care organizations. Health care organizations were selected in the Zlin and Olomouc regions. Selected healthcare organizations are classified as medium-sized hospitals, i.e. beds with capacities ranging from 100 to 499. These regions were selected on the basis of macroeconomic indicators, which are:

Table 1 Macroeconomic Indicators

	Zlin region	Olomouc region
<b>Population (total)</b>	583 093	633 157
<b>Gross domestic product (CZK million)</b>	222 918	215 650
<b>Unemployment rate</b>	3,43 %	4,35 %
<b>Average gross monthly wage (CZK)</b>	25 273	25 599

Source: Czech Statistics Office, own source

Both qualitative and quantitative marketing research was carried out in order to meet the main objective and partial objectives of the research. Qualitative research was conducted during January 2017 through semi-standardized interviews with selected healthcare representatives. Their goal was to identify key benefits that could benefit employees. Based on qualitative research data, a questionnaire was

formulated. Questionnaires were distributed in paper form to employees of selected healthcare organizations. The pre-test of the questionnaire was carried out on a sample of 20 respondents and was carried out in February 2017, based on the evaluation of the results, the main research was carried out in the months of March 2017 to March 2018. The results of the questionnaires were used to test hypotheses. Verification of the research hypotheses was determined using the Pearson's Chi-square test method. The questionnaire was divided into ten parts. The first nine parts were focused on determining the level of satisfaction of the respondents and the last part served to identify the respondents.

*Table 2 Respondents statistical information*

Region of the Czech Republic	Number of respondents	Gender of respondents	Number of respondents
Olomouc region	208	Female	146
		Male	62
Zlín region	411	Female	271
		Male	140

*Source: own source*

The total number of respondents was 619, of which 411 were respondents in the Zlín Region and 208 respondents in the Olomouc Region. From the questionnaires received, 17 questionnaires had to be excluded due to incompleteness of the data. Socio-demographic characteristics of respondents are shown in Table 3:

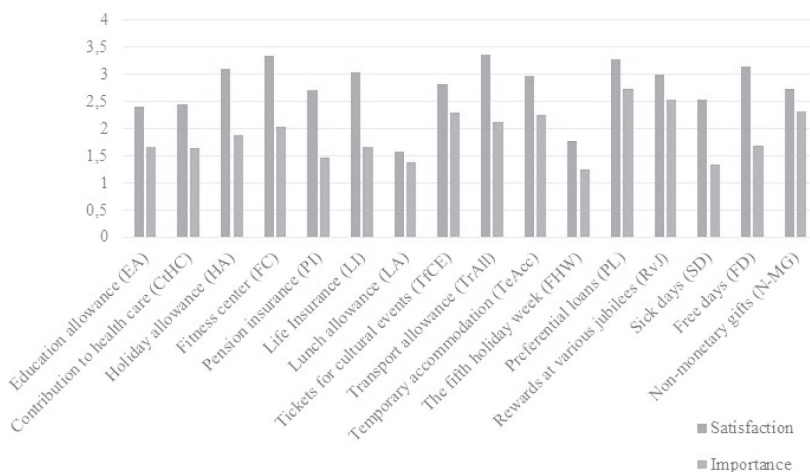
*Table 3 Socio-demographic characteristics*

Age of respondents	Number of respondents	Length of employment	Number of respondents
< 20	13	< 1	4
21 – 30	61	1 – 3	31
31 – 40	223	4 – 7	191
41 – 50	197	8 – 12	175
51 – 60	88	13+	218
61+	37	Total	619
<b>Total</b>	<b>619</b>		

*Source: own source*

Benefits were rated according to the importance and satisfaction of the respondents. The key benefits that health care organizations should address are those in which respondents expressed high importance and high dissatisfaction. The author of the paper focused on the comparison of satisfaction and importance of individual benefits. The results of the research project are shown in Figure 1 – the average of respondents' answers.

Figure 1 Average respondents' response to benefits



Source: own source

For the statistical analysis, the benefits that employees of selected healthcare organizations have identified as very important (i.e. value 2) will be used. These benefits are education allowance, language courses; contribution to health care, rehabilitation, massage; holiday allowance; pension insurance; life insurance; lunch allowance or racing meals; the fifth holiday week; sick days and free days. Satisfaction of employees was also measured. The author is interested in the benefits the employees are dissatisfied with, i.e. the satisfaction rate is more than 3. These benefits are holiday allowance; fitness centre and swimming pool; life insurance; transport allowance; preferential loans and free days. The author of the article will therefore look at the benefits the employees are dissatisfied with and at the same time express a high degree of importance. There are three of them – holiday allowance, life insurance and free days.

Based on the theoretical background and qualitative research, three research hypotheses were identified.

**H1:** There is a statistically significant relation between the benefit provided - holiday allowance and overall satisfaction of the respondents in the selected healthcare organization.

**H2:** There is a statistically significant relation between the benefit provided - life insurance payments and the overall satisfaction of the respondents in the selected healthcare organization.

**H3:** There is a statistically significant relation between the provided benefit - providing free days and the overall satisfaction of the respondents in the selected healthcare organization.

Research includes descriptive statistics tools. Hypotheses will be verified using the Pearson's statistical method of the Chi-square Independence Test on Research Hypothesis. The evaluation was carried out using the Statistical Package for Social Sciences statistical program (SPSS).

## Results and Discussion

The main objective of the presented article is to find out the current state of employee satisfaction in connection with the provided system of employee benefits in the selected health organizations. The author of the paper focused on the comparison of satisfaction and importance of individual benefits and will look at the benefits the employees are dissatisfied with and at the same time express a high degree of importance. There are three of them – holiday allowance, life insurance and free days.

Research hypothesis 1 (H1): There is a statistically significant relation between the benefit provided – holiday allowance and overall satisfaction of the respondents in the selected healthcare organization.

**H01:** There is no correlation between the benefit provided – holiday allowance and overall satisfaction of the respondents in the selected healthcare organization.

**HA1:** There is correlation between the benefit provided – holiday allowance and overall satisfaction of the respondents in the selected healthcare organization.

Table 4 Verification of H1 hypothesis

Benefit	Chi-square	df	p-value
Holiday allowance	276,061	9	,000

Source: own source

On the basis of the statistical results for a given benefit, we can say that given that the p-value is less than 0.05, the hypothesis  $H0_1$  is rejected. Thus, the hypothesis: There is no correlation between the benefit provided – holiday allowance and overall satisfaction of the respondents in the selected healthcare organization we reject the alternative hypothesis of  $HA_1$  for the benefit provided and the overall satisfaction of the respondents in the selected healthcare organization. The result of the confirmation of the hypothesis is that there is a relationship between the benefit provided and the overall satisfaction of employees in selected healthcare organizations. In other words, we can say that holiday allowance affects the overall satisfaction of employees.

Research hypothesis 2 ( $H_2$ ): There is a statistically significant relation between the benefit provided – life insurance and overall satisfaction of the respondents in the selected healthcare organization.

**H0<sub>2</sub>:** There is no correlation between the benefit provided – life insurance and overall satisfaction of the respondents in the selected healthcare organization.

**HA<sub>2</sub>:** There is correlation between the benefit provided life insurance and overall satisfaction of the respondents in the selected healthcare organization.

Table 5 Verification of H2 hypothesis

Benefit	Chi-square	df	p-value
Life Insurance	191,260	9	,000

Source: own source

The p-value for the  $H0_2$  hypothesis is also less than 0.05. So we also reject the  $H0_2$  hypothesis in favour of the  $HA_2$  hypothesis. So we confirm the alternative hypothesis of  $HA_2$ : There is correlation between the benefit provided life insurance and overall satisfaction of the respondents in the selected healthcare organization. In other

words, even in life insurance benefits, we find dependence that is directly linked to the overall satisfaction of employees of selected healthcare organizations.

Research hypothesis 3 (H3): There is a statistically significant relation between the benefit provided – free days and overall satisfaction of the respondents in the selected healthcare organization.

**H0<sub>3</sub>:** There is no correlation between the benefit provided – free days and overall satisfaction of the respondents in the selected healthcare organization.

**HA<sub>3</sub>:** There is correlation between the benefit provided – free days and overall satisfaction of the respondents in the selected healthcare organization.

*Table 6 Verification of H3 hypothesis*

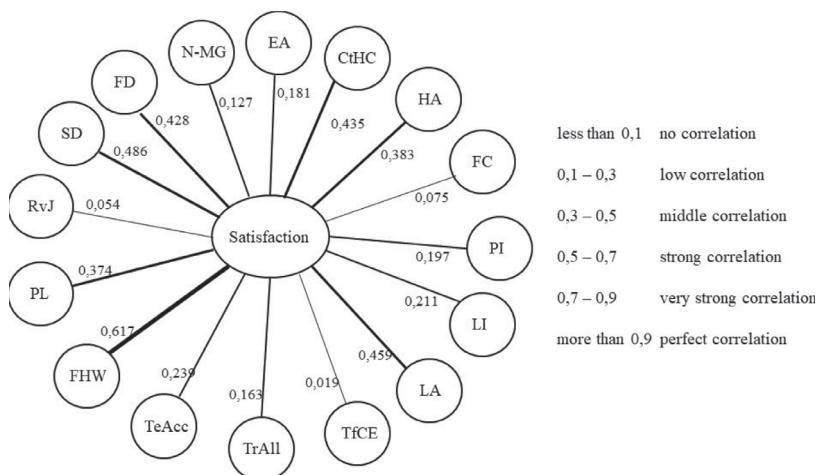
Benefit	Chi-square	df	p-value
Free days	65,916	9	,000

*Source: own source*

Third zero hypothesis H03: There is no correlation between the benefit provided – free days and overall satisfaction of the respondents in the selected healthcare organization was determined based on quantitative research. Statistical bases again point to p-value again below 0.05, so we also reject this hypothesis in favour of the alternative HA<sub>3</sub> hypothesis: There is correlation between the benefit provided – free days and overall satisfaction of the respondents in the selected healthcare organization. According to the research results, we can say that there is a direct link between the free days' benefit offered and the overall satisfaction of employees of selected health organizations.

All three zero hypotheses were rejected in favour of the alternative hypothesis. Thus, we can say that there is a correlation between the benefits offered and the overall satisfaction of the employees in selected healthcare organizations. From the point of view of employees, benefits are therefore very sensitive perceived. Figure 2 also shows the correlation strength of each benefit provided in relation to the overall satisfaction of employees. According to Vaus (2002) it is possible to divide the correlation force into six basic categories, where the correlation force can be from 0.01 to 0.99. The higher the number, the higher the correlation force. The following figure shows that overall employee satisfaction, in relation to benefits provided, is the most affected by fifth holiday week - there is the highest correlation strength, and is defined as strong. According to research results, among middle-strength correlation affecting the overall satisfaction of employees, is included contribution to health care, holiday allowance, lunch allowance, preferential loans, sick days and free days. These factors should focus on the key benefits provided to employees.

Figure 2 The power of correlation of individual factors in relation to overall satisfaction



Source: own source

Employers not only for healthcare organizations should therefore choose appropriate forms of employee benefits that will positively influence not only employee satisfaction but also their loyalty.

In conclusion, it is important to say that employee benefit policy is a very important issue that needs to be addressed. On the one hand, it is a cost-effective item for the organization, on the other hand, the organization's employee benefits must be provided. The main reason is satisfied and loyal employees.

The research results point to the importance of providing benefits. Gopinath and Shibu (2015) are also inclined to the same view, and say job satisfaction may be defined as a pleasurable positive emotional state resulting from the appraisal of one's job or work experiences. From the study, the researcher found that work, pay, promotion, supervision and co-workers are the factors determine the job satisfaction.

Regardless of whether same source or multiple source methods are used, and regardless of which typology is assessed, personality matters in job satisfaction. In and of itself, this is not a great revelation. This issue becomes, then, whether the typologies provide a unique contribution to the prediction of job satisfaction (Judge, Heller and Klinger, 2008).

Another approach is shown by Dirivaechter and Shvartsman (2018), linking employee satisfaction with regular wage increases. Wage increases are one of the most common methods used by firms to stimulate employee motivation. On the superficial level, this seems to be a reasonable practice, since hardly anybody would argue that employees dislike positive wage changes. Yet, the persistence of employee satisfaction remains a far more arguable matter. This approach is unacceptable to us, but it is also one of the ways to ensure employee satisfaction. In our view, however, the view is short-lived.

The core part of the article focuses not only on the satisfaction of employees but also on the benefits provided, which are interesting for employees in terms of motivation and satisfaction. Most of the knowledge about employee benefits is based on the fact that employee benefits are positively influenced by employee satisfaction. As a result, in order to capture the real impact of employee benefits, research must pay attention to details, including employee satisfaction. In addition, not every benefit is directly linked and influenced by the overall satisfaction of the employee. The reason is the distinction of the employees' personalities and their preferences.

When accounting for employees' preferences for work life balanced policies, compensatory time-off, childcare policy, health insurance benefits, and paid sick leave are positively related to organizational commitment. The findings indicate that understanding which WLBP employees prefer is important before implementing WLBP (Kim, Sangyub, 2017). Only one satisfaction variable, satisfaction with workplace health and wellness, is statistically significant, although overall satisfaction with WLBP is highly statistically significant.

From a social exchange perspective, when employees are provided with work-life benefits, they will respond by intending to remain with the organization and by increasing their satisfaction. Employees feel compelled to respond because work-life benefits demonstrate to employees that the organization cares not only about their work but their personal lives as well (Caillier, 2016).

Caillier (2012) examines the relationship between satisfaction with various work-life benefits and work motivation (organizational commitment and job involvement). Data from the 2010 Federal Employee Viewpoint survey were examined. Work motivation was not consistently affected by employees' level of satisfaction with the various work-life benefits. More specifically, employee satisfaction with most work-life benefits (i.e., telework, health and wellness programs, child care, and older adult care) were positively associated to organizational commitment, while none were associated to job involvement. The combined effects of employee satisfaction with work-life benefits were also associated to commitment but not to involvement. Thus, the proposition derived from the theory of work adjustments, that employees will show an increase in both commitment and job involvement by improving employee satisfaction with work-life benefits, was only partly validated by the findings.

Satisfaction with health and wellness programs was positively related to organizational commitment, validating Rudman and Steinhardt (1988) who suggested that a wellness centre led employees to have a higher regard for the organizations. Tucker and Irwin (2011) posed university students with several health constructs and found that they were most interested in those programs that focused on physical activity and dietary habits. Organizations might also find the same results among workers. The point is that to increase employee satisfaction with health and wellness programs, organizations should start by offering those programs that are of interest to employees. Moreover, some wellness programs could possibly improve performance directly (Benavides & David, 2010) and organizations should seek to offer those. Castle and Coll (2007) clearly show that training, rewards, and workload are important aspects of nurse aides' jobs. Caillier (2016) says that only health and wellness programs had a positive effect on job satisfaction. It could also be that these programs improve the health of workers, which has also been shown to improve employee satisfaction with the organization (Parks and Steelman 2008).



## Conclusion

As the research results of both the author of the article and other research focusing on benefit issues show, it is important to provide employees with variations that they can use. The economic complexity of benefits can be high, but the employee loyalty effect is very beneficial for a particular organization. As already mentioned, loyal employees are a valuable and irreplaceable human capital for the organization. Qualitative research also highlighted the importance and variation of benefits provided to employees. Addressing employees in management positions agreed on the need to provide benefits, but not at the maximum but at the optimum level. In other words, it is not important, from the point of view of the managers of specific healthcare organizations, to have a large number of benefits, but they must be properly targeted, ideally according to the individual needs of the employees. A specific example is the use of benefits linked to childcare - employees who do not benefit from this benefit must have an alternative option to benefit from the benefit. The basic principle is therefore to use the sense of justice.

The issue of employing employee benefits and employee satisfaction is a very interesting topic, which is important for both employees and employers. The basic goal of the two target groups is job satisfaction and sufficient human resources.

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## FOREIGN DIRECT INVESTMENTS AND POLAND'S ECONOMIC DEVELOPMENT – CURRENT SITUATION AND DEVELOPMENT PROSPECTS

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### Abstract

A characteristic feature of the modern world economy is the dynamic development of capital flows in the form of foreign direct investments (FDI). Due to the role FDI plays in the economy, it has generated much interest among economists. However, previous research on international capital flows focuses mainly on entities from developed countries, as they are both the main supplier and recipient of this form of capital flows.

The aim of this article is to present the scale and structure of foreign direct investments in Poland. To this end, the method of descriptive statistics was used. The research relied on indicators of the dynamics and structure of FDI in Poland. The article uses secondary data, and the primary source material was obtained from the statistical data contained in the publications by the Central Statistical Office (GUS) and in periodic reports of the National Bank of Poland (NBP). The analysis covered the time period from 2000 to 2017, as it is the most current time range for which comprehensive data is available. In addition, statistical data published by international institutions.

**Key words:** *foreign direct investment, economic growth, development, investing attractiveness*

**JEL Classification:** *F21, F23, F43*

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### Introduction

One of the important elements determining the growth of the potential of domestic economies is their participation in international capital flows (Bayar & Gavrilletea, 2018). Foreign investment is one of the forms of international capital transfer, defined broadly as the movement of money recorded in the balance of payments. Foreign investments can be either direct (FDI) or have the form of a group of assets (portfolio investments) (Skawińska, 2018).

Foreign direct investments are an integral part of an open and efficient international economic system, involving specific transactions taking place simultaneously on three levels: international transfer of financial capital, experience of management and technological knowledge, and entrepreneurship (Krugman & Obstfeld, 2006).

The concept of foreign direct investments is ambiguous (Puchalska, 2016, p. 296; Napiórkowski, 2016, p. 98). Institutions monitoring the FDI inflow rely mainly on the recommendations of the International Monetary Fund (IMF) and the Organization for Economic Cooperation and Development (OECD). According to the IMF, a direct investment is an investment designed to obtain a lasting impact on the operations of an enterprise in another country, whereas the investor aims to permanently manage that company. However, this definition seems too general and it was interpreted differently in different countries, which led to discrepancies in the classification of investments as either direct or portfolio-based (Pilarska, 2005, p. 9). To make the statistical data in international comparisons consistent, the OECD developed a benchmark definition of foreign direct investments. A foreign direct investment, as defined by the OECD, is the category of international investment that reflects the objective of a resident entity in one economy to obtain a lasting interest in an enterprise resident in another economy. A FDI is a venture in which the foreign investor holds at least 10% of shares in an enterprise and has long-term plans for it (Krajewska, 2018, p. 229).

In the global economy, most FDI is located in highly developed countries (UNCTAD, 2017). Recently, however, there has been an increase in FDI inflows to developing and transforming countries, including Poland, which has become one of the largest recipients of foreign capital from among the new EU Member States (Cieślak, 2018, p. 33-34, Czech, 2016, p. 36; Nazarczuk & Krajewska, 2018). For Poland, FDI has been associated with expectations mainly in the area of (Sporek, 2017, p. 97):

- filling capital gaps resulting from insufficient savings,
- technological modernization of the economy and popularization of modern management techniques,
- reducing unemployment by generating demand on the labor market,
- economic intensification of less developed regions.

Foreign direct investments in Poland triggered a dynamic increase in the share of enterprises with foreign capital in the total number of business entities and the amount of capital they move. The importance of foreign capital in the Polish economy is perceived in two ways. In the face of scarcity of domestic capital, modern technologies and management techniques, the inflow of foreign capital should be welcomed as a necessary instrument of structural transformations. On the other hand, the inflow of foreign direct investments poses a real threat to local businesses that may be forced out of the market (Firlej, 2011). Nevertheless, it is generally accepted that the advantages of FDI outweigh its undesirable aspects and that FDI provides a positive impulse for the economy in which it is located (Ptaszyńska, 2015, p. 27; Ambukita, 2013, p. 7). In recent years, companies with a majority share of foreign capital have often achieved better results than Polish businesses, consequently becoming an important driver of economic growth. Particularly in 2010-2015, foreign companies were behind the vast majority of employment growth in the enterprise sector in Poland. In 2016, during the economic slowdown, foreign companies accelerated the increase in generated value added, exports and employment, significantly mitigating the negative impact of other factors on the Polish economy. Importantly, in contrast to Polish businesses, foreign entities continued their investment activity in 2016, although at a lower rate than in 2015 (Mature leader of the CEE region 2017) (Janowicz, 2018, p. 21-22).

The aim of this article is to present the scale and structure of foreign direct investments in Poland. To this end, the method of descriptive statistics was used. The research relied on indicators of the dynamics and structure of FDI in Poland. The article uses secondary data, and the primary source material was obtained from the statistical

data contained in the publications by the Central Statistical Office (GUS) and in periodic reports of the National Bank of Poland (NBP). The analysis covered the time period from 2000 to 2017, as it is the most current time range for which comprehensive data is available. In addition, statistical data published by international institutions such as the World Bank and the UNCTAD (World Investment Report).

## Material and Methods

### Importance of foreign direct investments to the economy

Foreign investments, especially in the direct form, are widely recognized as one of the main factors of economic development of countries and regions, decisive for many favorable changes taking place in the area of investment location. The vast majority of FDI inflow concerns metropolitan areas, omitting the peripheries, which is justified by the availability of infrastructure, staff and the broadly understood sphere of business-oriented services. In principle, two basic paths of impact of FDI companies on the regional economy can be distinguished (Puchalska, 2016, p. 300): (1) direct effects - resulting from the operation of foreign enterprises on the market, including their supply and demand links with local cooperators, (2) indirect effects - emerging as a byproduct of external effects in the field of technology and the business environment. The direct effects include: direct participation of FDI companies in the regional economy, change in the economic structure, production profile, changes in the labor market, links with international trade (particularly a propensity to export and dependence on imports), as well as changes in the area of competition. The indirect effects, meanwhile, are primarily the impact on quality improvement, modernization and modernity of technologies used by enterprises in the host region. According to K. Puchalska (2010, pp. 352-353), one can also point to the effect of improving the technological potential in the context of innovativeness. In the literature, the opinion prevails that the penetration effect ultimately leads to an increase in the competitiveness of the host region. Most often, the following potential penetration channels are distinguished (Puchalska, 2016, p. 300-301):

- the demonstration effect - regional companies may adapt technologies introduced by transnational corporations,
- migration of human resources - employees trained by corporations may transfer knowledge to local companies, not only by changing their place of work but also by setting up their own companies in which they apply transferred knowledge and technologies,
- vertical connections - corporations may transfer technologies to companies that are potential suppliers of subassemblies, semi-finished products or customers buying their products.

An important element in assessing the significance of FDI for increasing the innovation potential of host regions is the impact of these investments on the development of local R&D activities, which is particularly valuable in peripheral, underdeveloped regions. Usually, these regions need new development concepts and strategies that will allow them to be modernized through the use of science and technology. However, for the development of technology to take place, high financial outlays are needed, which is something said regions often cannot afford. Foreign investments to fill this gap provide a solution. A very important impact of foreign

investments on the host region is the use of modern models of management and work organization. Enterprises propelled by foreign capital introduce modern management models using the latest techniques and procedures. This, in turn, allows them to gain an edge over local businesses. Consequently, local companies do not want to “lag behind” and also introduce innovative solutions, which ultimately increases the competitive ability of the host regions.

Foreign direct investment is currently the most important factor of regional development in the world, since it significantly updates regional economic structures and the extent of their use, which can be observed especially in the underdeveloped regions of certain countries, among them Poland (Ambukita, 2013, p. 9). The impact of foreign investments on the host country's economy, and in particular its specific regions, is very difficult to determine unequivocally, given that the positive and negative effects of FDI inflows are not universal in a given area. The benefits that FDI can bring do not appear overnight, plus they are not spread equally between countries or economic sectors. In order for FDI to be the least damaging, it is the responsibility of a host country to provide general conditions favorable to investments and to strengthen human and institutional capacities necessary to exploit them. Table 1 lists the potential benefits and threats arising from the location of direct foreign investments.

*Table 1 Benefits and threats of FDI in relation to economic development*

Benefits	Threats
<ul style="list-style-type: none"> <li>• overcoming domestic growth barriers resulting from a shortage of capital;</li> <li>• supplementing domestic savings with new capital;</li> <li>• increasing budget revenues;</li> <li>• applying new methods of production management and organization;</li> <li>• boosting employment through: creating new jobs, creating trade links with local suppliers and service providers;</li> <li>• increasing work productivity;</li> <li>• increasing the level of remuneration and providing better working conditions;</li> <li>• raising the professional qualifications of the local workforce;</li> <li>• increasing knowledge and technology, enabling the creation of new qualitative development potential;</li> <li>• filling gaps (between desired and actual state of investment in management and organization, efficiency, innovation, etc.) in the economy of the host country;</li> <li>• forcing an increase in efficiency among enterprises (spillover effects);</li> <li>• developing technological capabilities through R&amp;D activities;</li> <li>• expansion of foreign sales markets for domestic producers;</li> <li>• trade development and production growth;</li> <li>• increasing exports, improving the balance of trade and current account;</li> <li>• developing the broadly understood socio-economic infrastructure;</li> <li>• increasing the competitiveness of the economy.</li> </ul>	<ul style="list-style-type: none"> <li>• exerting an adverse effect on the environment (degradation in the case of ‘dirty technologies’);</li> <li>• weakening the motivation to increase savings and investments;</li> <li>• lower taxes paid than benefits provided to investors;</li> <li>• reduction of employment due to: liquidation of jobs as part of the restructuring of the acquired companies, preference for foreign suppliers and service providers, pushing local businesses out of the market;</li> <li>• increasing wage disparity and social dissatisfaction;</li> <li>• reserving executive positions for foreign staff;</li> <li>• development of undesirable areas of business activity;</li> <li>• unfair competition in relation to domestic companies;</li> <li>• transfer of profits from acquired companies;</li> <li>• limiting the sovereignty and effectiveness of domestic macroeconomic policy;</li> <li>• increasing imports, and thus deteriorating the country's balance of payments (research shows that foreign capital is more likely to import than to use domestic intermediate goods);</li> <li>• the risk of unfair competition in relation to domestic companies, especially in the situation of unequal treatment of domestic and foreign capital by the legal system.</li> </ul>

*Source: Ambukita, 2013, p. 15; Ptaszyńska, 2015, pp. 28-29.*

Based on experiences from around the world, it can be observed that the positive effects generated by foreign direct investments outweigh the negative ones (Bruno & Cipollina, 2018; Makiela & Ouattara, 2018; Ozga, 2009, pp. 113-114). Foreign investments are one of the most important factors of economic development, as - in addition to capital - technology, know-how and management techniques are also transferred. As a result of the inflow of foreign capital and the need to compete with local and foreign enterprises, domestic resources and their productivity may improve. Imitating by domestic enterprises the new solutions introduced by foreign capital may lead to changes in the competitive position of the whole country or region. Then again, a positive assessment of the impact of FDI on the host economy may also be accompanied by an unfavorable disparity among different regions in terms of economic development. This is due to the relatively low mobility of capital, which is the resultant of the supply and willingness to invest in individual regions. Practice shows that, most often, capital tend to flow into the economically strongest regions, which further expands the spatial disproportions of development (Heller, Warżała, 2005, p. 788).

Locating foreign investments in less developed regions depends to a large extent on local authorities. However, foreign investments should be expected to actually consolidate the uniqueness of the region, rather than challenge it. In line with this hypothesis, labor-intensive investments are located in places with the largest resources of cheap labor force or other ways of reducing labor costs, while technologically advanced investments are implemented in the largest growth centers (Ozga, 2009, p. 118). Notwithstanding, the impact of direct investments on the economy depends largely on the area in which capital is involved, e.g. in some areas, labor-intensive investments are undertaken involving medium-skilled and low-skilled workforce. If one invests in a technologically advanced industry, the inflow of capital triggers the learning processes of the workforce and the subsequent spread of knowledge. Due to the higher capital intensity of this industry, the investment then translates into an increase in sourcing imports. An important factor is also the way the investor enters the market, i.e. what form of investment is used, with green field investments being considered the most preferable because their contribution to the influx of new technology and modernization of the economy is the largest.

## Results and Debate

### Foreign direct investments in Poland

In the early 1990s, Poland saw the liberalization of capital flows resulting from the accelerating process of political transformation. This quickly made foreign investors interested in the Polish internal market. Initially, the inflowing capital was mainly portfolio investments, but over time, new legal regulations, tax rebates and reliefs, and the rapidly stabilizing political and economic situation of the country attracted direct investments as well.

The inflow of foreign direct investment to Poland in 2000-2017 is presented in Table 2 respectively.



Table 2 Inflow of foreign direct investments to Poland in 2000-2017

Item	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Share in the global FDI inflow in %	0.7	1.2	0.6	0.7	0.9	0.8	1.4	0.9	0.9	1.0	0.7	0.9	0.2	0.2	1.1	0.4	0.6	0.4
Dynamics index (previous year = 100)	100.0	94.5	46.6	102.6	145.8	125.4	248.5	91.6	94.0	68.9	77.7	170.9	22.2	108.0	382.9	53.9	151.7	56.6
FDI inflow (in millions of dollars)	9342	8830	4119	4225	6159	7724	19198	17580	16533	11395	8858	15139	3356	3625	13883	7489	11358	6434

Source: own study based on: World Investment Report from 2001-2018.

In 1990-2016, the inflow of FDI to Poland showed variable dynamics, with the highest values recorded in the early years of the transformation process and in 2004, and the lowest in the period spanning from 2001 to 2003. Between 1991 and 1995, the average annual FDI growth rate was approximately 131%, but it dropped to roughly 21% in 1996-2000. It is worth noting that between 1990 and 2000 there was an uninterrupted increase in the flow of direct investments, which totaled EUR 119.5 billion for that period. That trend was favored by the good economic situation and increasing revenues from the privatization of state-owned enterprises. The late 1990s in Poland were marked by a significant recovery of the inflow of foreign capital, although the total value was relatively low – both compared to the overall level of these investments in the global context, as well as in relation to the needs of the country's transforming economy. Nevertheless, in 1999, Poland had the highest cumulative value of FID from among the Central and Eastern European countries. In 1994-1999, USD 35.6 billion were located in Poland, i.e. 36% of the total capital employed in the Central and Eastern European region (Ptaszyńska, 2015, p. 30). This changed drastically in 2001-2002, when the slowdown in privatization and the economic downturn in Poland and in the world triggered the absolute decline in FDI. Between 2003 and 2007, a very high level of inflow of foreign direct investments was recorded, largely connected with Poland's accession to the EU and the fast rate of economic growth. In 2007, Poland achieved a record amount of inflow of foreign investments, which totaled EUR 17.5 billion. Then, in the period from 2008 to 2010, FDI fell by around 32% as a result of the global financial crisis. However, it should be noted that despite the general crisis and the decline in the inflow of FDI, this decrease was not as significant as in the case of other EU countries. In 2011, there was again

a strong increase in the inflow of foreign direct investment by over 35%, associated with good macroeconomic results of the Polish economy, and thus with a favorable investment climate. Unfortunately, in 2012, the positive upward trends in Poland came to a halt. The reasons for this decline can be traced back to transactions involving the outflow of capital in transit and the reduction of investments by European investors due to unfavorable prospects for economic growth in Europe. In 2013, the situation did not change much and the negative FDI trend continued. The drop in value of this magnitude may be further attributed to the: liquidation of special-purpose entities and their withdrawal from transactions, limitation of activities by some financial holding companies, sale of portfolio shares to portfolio investors, and withdrawal of capital invested in Poland by foreign investors. In 2014, the inflow of foreign capital to Poland totaled EUR 10.7 million, which meant that at the end of that year, the total FDI value was at EUR 174 billion. This increase in FDI compared to the previous year was due to economic stabilization in EU countries, thanks to which EU investors once again started to direct their investment capital towards Poland (Sporek, 2017, p. 101).

In 2016, there were 2,6015 entities in Poland backed by foreign capital, employing a total of more than 1.88 million people. Due to the size of these entities, the structure of the analyzed group did not change significantly in relation to 2015. The largest group of businesses, constituting approx. 65.7% of the total number of FDI entities, were micro-enterprises (employing up to 9 people), while large companies (employing over 250 people) accounted for 5.5% of all FDI entities in Poland.

According to the National Bank of Poland, the value of FDI in Poland in 2016 was EUR 12.6 billion, against EUR 13.8 billion in 2015 (down by nearly 8.7%). The inflow of foreign investments to Poland at roughly EUR 12.6 billion clearly exceeded the ten-year average (approximately EUR 10.1 billion in 2007-2016).

The geographical structure of FDI inflow to Poland has not changed significantly for several years (Table 3). In 2016, the major part of capital came from EU countries (nearly EUR 11.6 billion), especially: the Netherlands, Germany, Luxembourg, and France. Investors from other parts of the world were less active in 2016, while entities from both Americas withdrew from Poland funds totaling EUR 62.1 million, of which as much as EUR 35.5 million was withdrawn by Canada. Compared to 2015, FDI values also fell for Asian countries (EUR -17.9 million), with significant disinvestments from Saudi Arabia (EUR -61.2 million) and Hong Kong (EUR -57,8 million). On the other hand, a relatively large inflow of capital was recorded for Japan (EUR 85.1 million), Israel (EUR 37.7 million), India (EUR 16.3 million), and South Korea (EUR 9.9 million). In contrast to 2014-2015, there was also an inflow of FDI to Poland from Africa (EUR 22.6 million).

Table 3 Ranking of the sources of FDI inflow to Poland in 2010-2017

Rank	2010	2011	2012	2013	2014	2015	2016	2017
1	Jersey	Luxembourg	Germany	United Kingdom	Luxembourg	Netherlands	Netherlands	Germany
2	Germany	Spain	France	Germany	Netherlands	United Kingdom	Germany	Luxembourg
3	Luxembourg	Germany	United Kingdom	Switzerland	France	Germany	Luxembourg	Cyprus
4	Cyprus	Sweden	Austria	Austria	Belgium	Spain	France	Austria
5	Sweden	France	Cyprus	Netherlands	Cyprus	Austria	Austria	Hungary
6	France	Cyprus	Switzerland	Ireland	Germany	Luxembourg	United Kingdom	Czech Republic
7	Italy	Grecja	Spain	Norwegia	Spain	Sweden	Switzerland	Austria
8	Spain	Belgium	Belgium	United States	Ireland	Cyprus	Belgium	United States
9	United Kingdom	United Kingdom	Italy	France	Italy	Belgium	Cyprus	Spain
10	Ireland	Curacao	Ireland	Spain	Malta	Switzerland	Norway	Switzerland

Source: own study based on: National Bank of Poland (<https://www.nbp.pl/home.aspx?f=publikacje/zib/zib.html>)

Over the past years, the sectoral and branch structure of foreign direct investments in Poland has been gradually changing. There is a clear increase in the interest of foreign investors in service activities and a decline in investments pertaining to manufacturing, a trend which coincides with those emerging in highly developed countries. In 2016, the largest amount of FDI inflows in Poland concerned the service sector (nearly EUR 8.5 billion), of which almost EUR 2.4 billion was meant for professional, scientific and technical activities, while another EUR 2.3 billion went to the information and communication section. Investments in the industrial processing sector turned out to be the second largest in terms of the amount invested. An overall amount of over EUR 3.6 billion was added to industrial processing. The production of motor vehicles, trailers, semi-trailers and other transport equipment proved to be the most attractive for foreign capital (nearly EUR 1.3 billion). In subsequent years, it is desirable to change the structure of accumulated FDI in industrial processing, which should be aimed at increasing foreign capital investment in the areas of medium-high and high technology.

In Poland, at the end of 2016, liabilities due to direct foreign investments in innovative industries amounted to EUR 53.2 billion, which accounted for 30.2% of the total value of liabilities under FDI. In 2016 alone, the value of FDI transactions in innovative industries reached nearly EUR 5.6 billion and was 48.6% higher than in 2015, and more than twice as high as in 2011. The ratio of transactions in innovative industries to total transactions in 2011-2016 increased from 22.9% to 44.4%.

According to the 2017 World Investment Report (EY's Attractiveness Survey Europe), Poland was the 9th most promising country for FDI in the world.

The outlook for FDI inflow to Poland over the next years is optimistic. During the last years, the number of projects and jobs as part of FDI projects has been systematically increasing.



According to the results of the study by the Polish Investment and Trade Agency (PAIiH), Grant Thornton and HSBC, 92% of foreign investors who have invested in Poland are satisfied with their decision and would invest again. On a five-point scale used in the study, the investment climate in Poland is assessed at 3.7. Investors from France (4.1 points), Japan, Germany and Sweden (3.8 points each) value Poland the most, citing factors such as economic stability, internal market size, or the availability of materials and components.

The relatively high investment attractiveness of Poland is mainly due to favorable conditions in the area of traditional factors, in particular the country's stable political and legal situation, absorbent internal market, dynamic economic growth, labor market potential, degree of financial market development, exchange rate stability, low-wage labor costs and low business taxes. However, these advantages are being gradually undermined by the conditions constituting the investment climate. In this respect, the Polish economy fares rather poorly in the international context. This mainly concerns poor road and rail infrastructure, low clarity and consistency of legal regulations, administrative and non-administrative procedures related to setting up a business, and high non-wage labor costs. Without addressing these issues, it will be very difficult to for Poland to retain its leading position in Central and Eastern Europe and remain an attractive location for the inflow of foreign direct investments from around the world.

#### Conclusion

Foreign direct investments are the most desirable form of inflow of foreign capital to Poland. Unlike other sources of external financing (loans or credits), FDI does not cause an increase in foreign debt, and in addition to the inflow of capital, it is accompanied by other important effects for economic development, such as: flow of technology, know-how, management, and access to new markets.

Since the beginning of the political changes process in Poland in the early 1990s, a dynamic inflow of foreign capital in the form of direct investments has been observed. The analysis showed that these investments play an increasingly important role in the Polish economy. They contribute to the improvement of the country's economic situation, and as such, they improve the competitiveness of the Polish economy on the international market.

The inflow of foreign direct investments to Poland increases the efficiency and competitiveness of individual businesses and domestic economy as a whole by introducing modern technologies and management models, as well as better organization of production. In addition, the increase in the quality of manufactured goods and services, alongside the access to foreign markets through investors, determine the increase in exports activity among Polish enterprises. In summary, the importance of foreign direct investments for the increase of competitiveness of the Polish economy in the national and regional dimension is particularly important. Thanks to FDI, the Polish economy has the opportunity to bridge the development gap that separates Poland from highly industrialized countries in the world.

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