

Motivation of It Specialists: Case of Latvia

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Abstract: Rapid development of technology boosts the demand for IT specialists that became a significant part of work force. In order to improve the performance of employees companies should attach importance to motivation. Various researches conducted in different countries proved that motivation factors of IT specialists differ from those inherent to professionals working in other industries. In this circumstances detection of factors that motivate IT specialists in Latvia is very topical. In order to find factors that motivate IT specialists in Latvia a survey was conducted. 1229 employees stated about the influence of certain factors on their motivation. The results were carefully analyzed and appropriate conclusion concerning motivation of IT specialists were made.

Key words: Motivation, informational technologies, motivation factors.

INTRODUCTION

Motivated specialists contribute to the success of the company (Vroom, 1964; Lindner, 1998; Poláčková, 2016). The importance of motivation is undisputable, however the question concerning how to motivate employees remains opened.

In 21st century when technology drives economic development the role of ICT sector constantly arises. Some forecasts predict that ICT industry rate will reach 4% of world GDP by 2026 and 8% by 2038 (Marmer, 2018). In 2011 3,7% of employed worked in ICT sector (OECD, 2018). Now days all 5 world's largest companies by market capitalization – Apple, Amazon, Alphabet, Microsoft and Alibaba Group work in ICT sector. Increasing demand for ICT specialists forms a necessity to identify specific approaches to their motivation that will meet needs and values of ICT sector employees.

Latvia is still viewed as a transitional economy. It combines employees that were raised during command system, during transitional period and those who were born and raised in market economy. Diverse structure of labor force makes it impossible just to drag the results of IT specialists motivation conducted in other countries into Latvian reality. Therefore the research of motivation of IT specialists in Latvia is very topical.

Theoretical framework

In general motivation can be defined as a psychological process which directs and invigorates worker's activity (Kanfer, 1990).

Starting from the middle of 20th century problem of motivation was widely discussed in scientific management society.

Motivation is correlated with person's needs. An individual is motivated to get something he needs. Maslow's hierarchy of needs states that need satisfaction is a continuous process: once previous need is satisfied the need one arises (Maslow, 1954). In addition to Maslow's hierarchy McClelland names three non-hierarchical needs: need for achievement, need for power and need for affiliation (McClelland, 1987).

Intrinsic-extrinsic theory presumes that individual's motivation may be viewed from the level of internal and external rewards. While internal rewards are subjective and refer to personal Perceptions, ideals and views, external rewards are granted from the outside by society. They may be tangible, for example prize or intangible, like praise (Small et al, 2004).

Herzberg's two-factor theory of motivation assumes that all the motivation factors can be divided into two groups: those that prevent workers from becoming dissatisfied and those that build work satisfaction (Herzberg, Mausner, & Snyderman, 2010). Herzberg's theory has a great influence on empirical researches in different areas. It found an implementation in quality management (Weichrich, 1994),

culture (Matei&Abrudan, 2016), medicine and pharmaceuticals (Bohm, 2012; Nakhate, 2016), financial institutions (Riley, 2005), military (Lopes et al., 2015) and many others.

Vroom's expectancy theory assumes that employees compare potential outcomes and efforts (Vroom, 1964). Vroom's theory helped to form Path-goal theory that proposed to influence paths, goals and valences to improve employee's motivation (House & Mitchell, 1980).

Peculiarities of IT specialists in terms of their motivation were mentioned by few scholars in different countries. One of the first researched conducted by Couger and Zawacki showed that IT specialists have higher demand for growth than professionals from other industries, but their need in social interaction is much lower (Couger&Zawacki, 1980). Late Burn, Couger and Ma found out that the factors motivating IT specialists in the descending order are: promotion prospects, job satisfaction, compensation package, training/career development, good management, working conditions, job security (Burn et al, 1992). McKnight et al. researched factors determining job satisfaction of IT specialists. These factors were divided into job characteristics and workplace characteristics. (McKnight et al, 2009). This approach estimated job satisfaction factors to be a component of turnover intention. Research of job satisfaction of IT specialists in Poland that is also a transitional economy and has many common traits with Latvia focused on distinction between satisfaction of IT specialists in developed and transitional economies. According to the results, IT specialists in transitional economies such as Poland feel that the compensation level of their companies is not adequate to the competencies they possess (Kowal & Roztocki, 2015).

Two researches conducted in different time in different countries contradict each other. Wynekoop&Walz found that IT specialists have lower demand for social interaction while their need in self-developing and education is high (Wynekoop&Walz, 1998). Ertürk&Vurgun research proved that IT professionals are motivated by positive social environment within the company (Ertürk&Vurgun, 2015).

The difference in the results concerning motivation of IT specialists proved that just being employed in ICT sector is not a sufficient parameter to determine employee's motivation. Other factors, such as country should be taken in account.

METHODOLOGY

Researched methods included content analysis on the literature in order to develop the research design for the survey of IT professionals. The survey was programmed with Sawtooth software by professional programmer. Data collection was done online using online survey panels and using targeting of the respondents, who have chosen occupation as IT professionals when filling the profiler on the online survey website. The questionnaire was distributed through online panel members' emails and also was available in their personal accounts in online panels. The invitation to the survey was sent to 4225 respondents, 1637 took part in the survey, 345 of them were screened out based on their occupation (do not work as IT professionals anymore or changed country of living), 63 were removed for not passing quality check for attention and for spending considerably short amount of time in the survey. Respondents were reimbursed for taking the survey, therefore only valid questionnaires, which passed quality check, were taken into account while analyzing the data gathered. The analysis was performed using SPSS software. 1229 questionnaires were found analyzable. Gender and age split of respondents is presented in figure 1.

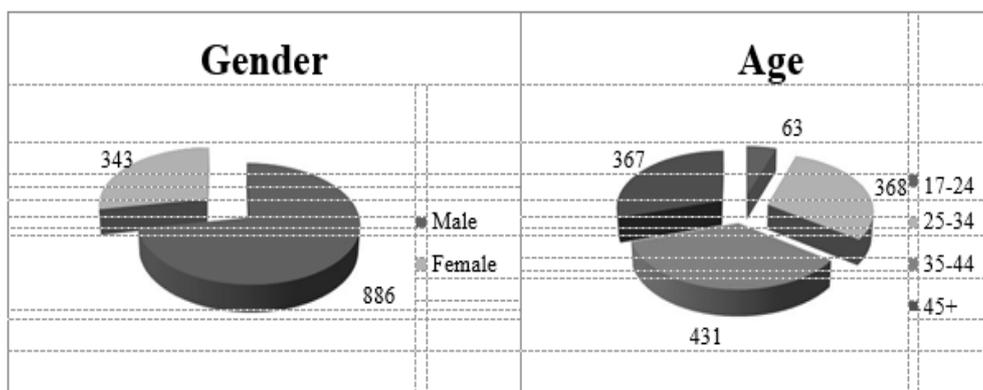


Figure 1: Gender and age split of respondents

Source: Authors' field survey, 2018

The questionnaire asked participants to choose the factor that is the most important, second most important, third most important and the least important to make your work likable. Six motivation factors were suggested: 1) having a complicated work that can bring satisfaction for your achievements; 2) having an opportunity to improve your qualification; 3) having good work conditions (good aeration, lighting, work space); 4) having an opportunity to decide independently how to do your work; 5) having an opportunity to realize your skills and perks fully; 6) having a work that leaves enough time for personal life.

RESEARCH RESULTS

The research results showed that the most important factors influencing motivation of IT specialists in Latvia are having a work that leaves enough time for personal life and having an opportunity to improve qualification. The least important factor is having an opportunity to improve qualification. Responses of Latvian IT specialists are presented in table 1.

Table 1: Importance of motivation factors to IT specialists in Latvia

#	Factor	First important factor		Second important factor		Third important factor		The least important factor	
		answers	%	Answers	%	answers	%	answers	%
1.	Having a complicated work that can bring satisfaction for your achievements	164	13,34	186	15,13	138	11,23	302	24,57
2.	Having an opportunity to improve your qualification	279	22,70	312	25,39	203	16,52	101	8,22
3.	Having good work conditions (good aeration, lighting, work space)	83	6,75	202	16,44	238	19,37	240	19,53
4.	Having an opportunity to decide independently how to do your work	193	15,70	200	16,27	245	19,93	243	19,77
5.	Having an opportunity to realize your skills and perks fully	219	17,82	180	14,65	226	18,39	148	12,04
6.	Having a work that leaves enough time for personal life	291	23,68	149	12,12	179	14,56	195	15,87

Source: Authors' field survey, 2018

However gradation of motivation factors by importance doesn't let to calculate overall impact of certain factor to employee's motivation.

Therefore a formula to estimate importance of motivation factor to employee and compare the influence of different motivation factors is proposed.

Motivation factors should be weighted. The weight of the most important factor may be estimated as 3, of second important factor as 2, third motivation factor as 1. Weight of the least important factor is 2 and it should be subtracted from the sum of the three most important motivation factors as it has no or very little importance to IT specialists

$$= n_1 * 3 + n_2 * 2 + n_3 * 1 - n_4 * 2, \quad (1)$$

where n – overall importance of motivation factor;

n_1 – number of respondents that named a factor as the most important factor;

n_2 – number of respondents that named a factor as the second important factor;

n_3 – number of respondents that named a factor as the third important factor;

n_4 – number of respondents that named a factor as the least important factor.

Overall importance of motivation factors of IT specialists in Latvia based on the results of current research is presented in Table 2.

Table 2: Overall importance of motivation factors of IT specialists in Latvia

#	Factor	Overall importance of motivation factor ()
1.	Having a complicated work that can bring satisfaction for your achievements	398
2.	Having an opportunity to improve your qualification	1462
3.	Having good work conditions (good aeration, lighting, work space)	411
4.	Having an opportunity to decide independently how to do your work	738
5.	Having an opportunity to realize your skills and perks fully	947
6.	Having a work that leaves enough time for personal life	960

Source: Authors' calculations, 2018

Having an opportunity to improve qualification is far ahead other factors that influence motivation of IT specialists while having good work conditions is far below. Achieved results are applicable for company's management for building a motivation system of IT specialists within their organizations.

LIMITATION

Although the research results presented in this paper answer the main question concerning the importance of certain factors for motivation of IT specialists in Latvia, research faces certain limitations.

First of all, the survey offers only six motivation factors while some of the factors that might be important to respondents are not listed.

Second, the research design does not give an opportunity to customize the answers. For example, respondents had no chance to add a factor they believe to be important or highlight only one factor instead of three when just one factor matters to them.

Third, the research does not conduct cross-gender and cross-age comparison of factors that motivate IT specialists. This comparison may contain high scientific and practical significance.

Limitations listed above does not impact the results of the research directly. They will be eliminated in future studies.

CONCLUSION

The study has confirmed the importance of IT specialists to business performance. Different approaches to motivation were discussed. The discrepancy in results of research of IT specialists motivation in different environments was detected and the necessity to take into account peculiarities of the country IT specialist live was proven.

Online survey of 1229 IT specialists in Latvia showed that the most important factors influencing motivation of IT specialists in Latvia are having a work that leaves enough time for personal life and having an opportunity to improve qualification. The least important factor is having an opportunity to improve qualification.

Formula to estimate overall importance of motivation factor was proposed. According to the results, IT specialists in Latvia are most motivated by having an opportunity to improve qualification and least motivated by having good work conditions.

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