Management of creative class. The case of IT professionals in Latvia

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Abstract. This paper has purpose to the study of factors for motivation of the creative class to work more efficiently. The paper examines the case of IT professionals in Latvia, a significant participant in knowledge economy. IT professionals are more flexible in terms of looking for a job on the labor market all over the world, opportunities of remote job allows they benefit on proposals from abroad, as there is a huge need for qualified IT employees in contemporary international environment. The article uses the results of an online survey of IT professionals in a sample of 1,200 individuals. Methodology of the study uses factor analysis and multiple regression models in order to reveal the connection between motivation for labour, stimulus for increasing productivity and demographic characteristics of IT professionals. The results of research show that IT professionals in Latvia are a special professional group and cannot be administered using traditional management methods. The incentive for efficiency to work, which is associated with solving interesting and prestigious tasks, is universal for IT professionals with any motivation to work, regardless of any demographic characteristics. At the same time, material incentive motivates only ambitious people, and the fear of dismissal and calls for responsibility generally does not motivate anyone.

1 Introduction

In the age of technological development, the rise of Information Technology (further in the text IT) industry constantly increases. The value of Information Communication Technologies sector is estimated as 3.112 billion USD and growth rates are significantly higher then average world economy growth rates: +4.3% in 2017 [1].

As a part of Global economy, Latvia follows the same patterns of IT sector growth as other countries. According to Central Statistical Bureau, in 2018 99.8% of Latvian companies are computerized, 99.6% have Internet Connection and 63% have a website [2].

Professionals working in the IT sector can be attributed to the creative class [3]. The actuality and the need of paying special attention in studying creative class especially can be explained by the fact that creativity along with development of IT has become significantly demanded in contemporary economy; people belonging to creative class work

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with innovations and create fresh ideas – they become the engine of contemporary economic development [4, 5].

IT professionals are more flexible in terms of looking for a job on the labor market all over the world, opportunities of remote job allows they benefit on proposals from abroad, as there is a huge need for qualified IT employees in contemporary business environment. For business organizations it is significant to employ well qualified, flexible and creative IT professionals in order to optimize their processes, develop and remain competitive.

Management of creative class involves the formation of a special system of labor motivation, since traditional incentives (material rewards, deprivation, threats of dismissal, etc.) are not effective tools for managing the creative class [6].

Motivation is one of the core problems of management. Motivation in management is complex approach to personnel management, driven towards creating motives, which make the employee perform better. For contemporary management motivation has become topical and critical issue to some extent. The way to productive work of the employee lies through right motivation.

The variety if motivation theories prove that the concept of motivation can’t be researched with a single approach. To a big extent, motivation is correlated with person’s needs. Once an individual feels the lack of something, he or she may become motivated to get it. Maslow’s hierarchy of needs shows that once previous need is satisfied the need of the next level arises [7]. In order to simplify Maslow’s theory, Alderfer regrouped human needs in three categories: Existence needs, Relatedness needs, and Growth needs [8]. McClelland names three non-hierarchical needs that are need for achievement, need for power and need for affiliation [9].

Expectancy theory, developed by Vroom compares potential outcomes and efforts. Employees are motivated when they expect the reward to trump the efforts they put into achieving the outcome [10]. Later Vroom’s theory developed into Path-goal theory. This theory proposed to influence paths, goals and valences to improve employee’s motivation [11]. Expectancy-value model states that people act only if there expectancies are positive. This means that incentive should lead to real change in worker’s life or at least a worker should think that it will bring a change [12].

Expectancy-value model describes the decision of a person to take an action. However, this dissertation is rather devoted to explaining the reasons of IT professionals actions then to decisions to act.

2 Methods

The methodology of this research is quantitative approach of online survey using proprietary online survey panels to get the respondents of the target group. The opportunity to program survey professionally allowed using quality check questions and traps to exclude bad quality responses, straight liners and speedster respondents. The sample size after quality check made 1200 valid questionnaires, which were further analyzed with SPSS program. In terms of socio-demographic characteristics sample included 27% males and 73% females; 17-24 made 5.1%, 25-34 made 29.9%, 35-44 made 35.1% and 45+ made 29.9% of sample; mostly residing in Riga (capital city) 68% ; 30% in big Latvian cities while 2% in rural areas.

In this research, factor analysis uses to study the motivation to work and labor productivity. For these purposes during the survey of IT professionals in the questionnaire there were included some judgments, with which respondents were asked to agree or disagree. The respondents on a ten-point scale, evaluated the degree of agreement or disagreement where one, means disagree, and ten means agree.
The judgments offered to the respondents described some characteristics of the work that could potentially make this work attractive for the respondent. These characteristics are from Rheinberg's schema [13]. They deliberately do not include material motivation to work, since the task of the study was to understand what the motivating factors in a situation where wages are adequate and fair.

As a result, the following considerations were included in the questionnaire:

1. Have a difficult job, the performance of which gives them a feeling of pleasure from their achievements.
2. To have the opportunity to improve their skills and acquire new skills.
3. Have good working conditions (proper ventilation, lighting, and workspace).
4. Have considerable freedom in how to do your job.

According to results of factor analysis, the first factor includes statements:

- Have the opportunity to improve their skills and acquire new skills
- Have good working conditions (proper ventilation, lighting, workspace)

This motivation can be called "Survival" when work is valued for providing knowledge and skills that can change it in the future, as well as working conditions that create minimal comfort and a sense of security.

The second factor includes such variables as:

- Have considerable freedom in how to do your job.
- Have a job that leaves enough free time for personal or family life.

This factor can be called "Freedom and independence." Such motivation implies that the employee distributes his working time and determines how he should perform the work. Minimizing external control and the ability to manage time are essential qualities of life for the creative class.

The third factor consists of statements:

- Have a difficult job, the performance of which gives you a feeling of pleasure from achievements.
- Have the opportunity to fully implement skills at work.

This motivation is associated primarily with the satisfaction of professional ambitions and “Professional self-realization”. In the field of IT technology, high professionalism is tightly connected with a successful career, and a career implies prestigious and well-paid work.

For estimation of stimuli that lead to the increase in efficiency growth of work of IT professionals the question, "Were their situations, when you worked, particularly well and fast? What factors made you work more effectively than usual?" was included in the questionnaire. This question suggested a choice of the following factors:

- Great financial rewards
- Interesting, and complicated creative task
- A chance for career growth
- Clarity and transparency of goals and desired result
- High importance and prestige of the task
- The respect of the team
- Approval of managers
- Crisis and understanding of responsibility
- Fear to be fired or lose the award
- Fear of disapproval by team and management

Factor analysis allowed selecting four factors that describe stimuli that make IT professionals work more effectively.

The first factor is "Material Incentives." It includes such indicators as:
• Great financial rewards
• A chance for career growth

Thereby, stimuli can be viewed either as a lump sum reward or as a career growth opportunity that also leads to the increase of financial prosperity.

The second factor consists of statements related to employees responsible for the results of their work. This motivator can be named as "Personal Responsibility." It includes the following characteristics:
• Clarity and transparency of goals and desired result
• Crisis and understanding of responsibility

Thus, it is possible to conclude that beside career growth and monetary stimulus, sufficient work may be caused by the crisis in case an employee understands how to solve it and he is the only one who can solve it.

The third factor describes motivators for creative people. It includes the respect of the team and career perspectives. Doing something better than others, doing something that cannot be done by other team members is a significant motivator for those, who try to realize themselves professionally. This motivator can be named “Career prospects.”

The fourth factor is "Opportunity for self-realization”. It includes such indicators as:
Interesting, and complicated creative task
High importance and prestige of the task

This motivator has no direct influence on a career, does not provide any material advantages, but it does affect the professional ambition of IT professionals. That is why this motivator is very effective in increasing the labour productivity of creative professionals.

In social studies, quite often, the question arises of how individual attitudes, values, and motivations change throughout life. The answer to this question requires researchers to simultaneously consider the impact of two different indicators that measure time: age (how old people are at the time of the survey) and generation (or cohort) (time at which a person was born and in which he socialized). There are several approaches to the definition of the concept of generation [14]. In this study, we use an approach that distinguishes generations based on collective historical experience in which socialization took place. Thus, we have identified three generations for research.

**Early Generation X**: Generation 1961-1970 year of birth. In Latvia, as in most post-communist countries and representatives of this generation were socialized during the Soviet expansion.

**Generation X (Traditional generation)**: Generation 1971-1984 years of birth. In the countries of Eastern and Central Europe, the members of this generation belong to the so-called transitional generation. The older members of this generation grew up during the transition to democracy and market reforms. They witnessed the collapse of communist regimes and rapid transformations. In Western literature, representatives of this generation are often referred to as generation X [15].

**Generation Y or millennial**: Generation after 1985 birth. The members of this generation hardly remember the communist regime; the new regime has become the norm for them. It is customary to treat this generation with a slight contempt: they are supposedly selfish, not serious, do not break away from smart phones and do not know how to concentrate. They are not in a hurry to grow up.

An essential task of this study is to understand why IT professionals and people belonging to the same social and professional group have different indicators related to the motivations to work and stimuli of labor efficiency. To solve this problem in this study uses the method of multiple regressions. The goal of the motivation management model is to link together the incentives for productive work, demographic characteristics (gender, age, generation, and partner) with work motivation. In order to solve this problem, three
regression models for labor motivation were built. Thus, the dependent variables are the values of the following factors obtained after the factor analysis.

Motivation to work:
- Freedom and independence
- Professional implementation
- Survival

The independent variables for building models, where the incentives for labor productivity (opportunity for self-realization, career prospects, material incentives, personal responsibility) and demographic characteristics (gender, age, and generation).

3 Results and Discussion

The first table presents the results of the regression analysis for motivation to work.

<table>
<thead>
<tr>
<th></th>
<th>Freedom and independence</th>
<th>Professional realization</th>
<th>Survival</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.269***</td>
<td>-0.032</td>
<td>-0.072</td>
</tr>
<tr>
<td>The possibility for self-realization</td>
<td>0.158***</td>
<td>0.029***</td>
<td>0.105***</td>
</tr>
<tr>
<td>Career prospects</td>
<td>-0.016</td>
<td>0.029***</td>
<td>0.072***</td>
</tr>
<tr>
<td>Financial incentives</td>
<td>0.048</td>
<td>0.030***</td>
<td>0.021</td>
</tr>
<tr>
<td>Personal responsibility</td>
<td>0.054</td>
<td>0.029</td>
<td>0.044</td>
</tr>
<tr>
<td>Traditional generation</td>
<td>-0.093</td>
<td>-0.124</td>
<td>0.162***</td>
</tr>
<tr>
<td>Millenial generation</td>
<td>-0.030</td>
<td>-0.189***</td>
<td>0.368***</td>
</tr>
<tr>
<td>Age</td>
<td>-0.017</td>
<td>0.013</td>
<td>-0.013</td>
</tr>
<tr>
<td>Gender (1=Male)</td>
<td>0.062</td>
<td>0.004</td>
<td>0.016</td>
</tr>
<tr>
<td>Partner (dummy variable)</td>
<td>-0.221***</td>
<td>0.026</td>
<td>-0.102</td>
</tr>
</tbody>
</table>

The first model demonstrates that the possibility of self-realization is the only strong incentive for IT professionals, who choose work that provides the freedom to make decisions and leaves time for personal life. This motivation is typical for employees, who do not have regular partners, since having a partner significantly reduces the significance of this motivation. The lack of connection of this motivation with belonging to a generation, age, and gender, suggests that at any age and in any generation, there are about the same number of people, and women are about the same tendencies to freedom and independence as men.

The absence of gender differences in all models is an important and interesting result. It confirms that among IT professionals, there are no gender differences associated with labor motivation and labor efficiency incentives. An analysis of the interviews revealed the fact that the hierarchy among IT professionals is based on their level of professionalism. Respondents said that they could even get a job without special education, if the applicant demonstrates good professional skills. All this creates a meritocratic environment in which there is a place for gender equality.
The second model shows, which incentives affect, people, for whom the ability to realize their abilities is important in their work and the need to enjoy work. As can be seen from the table, this motivation has a positive relationship with three motivators. Thus, ambitious people are well influenced by the challenges associated with solving interesting problems, and the approval of the authorities, and material rewards. Only the fear of dismissal cannot motivate people with ambitions.

The results of the study show that such a motivation to work is least characteristic of the youngest generation, no matter how old people of this generation are. It is possible that many young, ambitious IT professionals have left Latvia for other countries or are engaged in another profession.

The motivation to work, which can be called "Survival," is because people choose jobs that provide good physical working conditions and allow them to acquire new skills. Such work does not attract top qualified people, which is why this motivation is called "Survival."

As model 3 shows, such people are effectively influenced by the stimulus associated with the opportunity to participate in solving complex problems, as it gives a chance to learn something new.

A significant result of these models is that the incentive for efficiency to work, which is associated with solving interesting and prestigious tasks, is universal for IT professionals with any motivation to work, regardless of any demographic characteristics. At the same time, material incentive motivates only ambitious people, and the fear of dismissal and calls for responsibility generally does not motivate anyone.

All these results show that IT professionals in Latvia are a special professional group and cannot be administrated using traditional management methods.

The Figure 1 demonstrates the model, which explains how motives for increasing labor productivity influence motivation to work for IT professionals belonging to different generations. This model demonstrates that there is one universal motive for increasing labor productivity among representatives of all generations of IT professionals in Latvia. These professionals, belonging to different generations, work particularly in order to have freedom and independence. On top of that, for all the generations, opportunity for self-realization is significant as well.

However, for the youngest and oldest generations motivation that is more significant is survival. Obviously, this motivation have different nature for both of these generations. For young generation this motivation is connected with the fact that they do not feel themselves much confident as professionals yet and have many outstanding material needs. For the older generation the motivation connected with survival can be mostly explained by the fact that representatives of this generation more and more often become behind in competitive race with representatives of the younger generations.

It is worth to mention that not material payout but career opportunities have become more significant motivation option. This underlines once again that IT professionals are mostly satisfied with their salary. Vulnerability is more connected with position on the labor market, with existing competition not with the lack of material bonuses.

For the representatives of the middle generation professional realization is significant motivation, it is tightly connected with freedom and independence. At the same time, material payouts in this case become significant motive as well as a certain marker of professionalism.

In such a way, it is significant to take into account the following point for successful management of IT professionals:

All IT professionals work to any extent to have freedom and independence in their lives. This is absolute value for this professional community. Any system of increasing of labor productivity has to include the opportunity for self-realization and such motive works for
IT professionals with any motivation. Young people and people of middle age will work better if they are informed about perspectives of further development.

Managers have to take into account professional position of IT professionals they recruited or plan to recruit when creating the motivation strategy for them. Highly professional and highly qualified IT professionals do not need additional stimulation. They work as effectively as they can on regular basis.

![Model for the management of motivation to work of IT professionals](image)

**Fig. 1.** The model for the management of motivation to work of IT professionals

### 4 Conclusion

In the research, the motivation element “Survival” has been determined. It is explained with the choice of position, which offers decent labor conditions and allows gaining new skills. This type attract “new comers”, not experience IT professionals. These people are influenced by the opportunity to take part in complex problem solving process, as this gives an opportunity to gain new knowledge and skills, establish new professional contacts. This corresponds directly to satisfaction of self-expression according to Maslow and need for success according to McClelland. This is common for employees belonging to younger and middle generation than the older ones, as they are not into putting much effort to change.

Motivation based on the need of involvement by McClelland corresponds with the motivation based on need of socialization by Maslow. This is common to older generation representatives, who are proud that they were ones of the first IT professionals and took part in every IT development stage.

The expectancy theory is based on the statement that the existence of the certain active need is not the only needed condition of motivation for reaching one’s goal. As various employees have various needs and requirements for desired rewards, certain one might not have any value at all. If any of three factors have lower value, the motivation will be weak and results will be unsatisfactory.

Based on the above, it is possible to make conclusion that it is impossible to use one of the universal existing model while managing IT professionals in Latvia. This model need to be a combination of all the models and be notable for universality while certain elements should differ as the research demonstrated that there are several groups, which differ in professional position, gender, generation etc.

### References