Motivation Strategies of Human Resources in ICT Companies

Kiril Anguelov
French education faculty in electrical engineering
Sofia, Bulgaria
ang@tu-sofia.bg

Abstract— **The present paper explores the different methods and types of motivation strategies of human resources in ICT companies. Due to the fact that human resources are key and most important element of any companies, the way of their proper motivation could be considered as critical for the strategic development of the enterprise. When it comes to the high-technologies sectors where the changes of environment are so rapid, one of the effective responses applying by the companies is the improvement of motivation policy of their employees.**

Keywords— ICT companies, motivation strategies, motivation models.

I. INTRODUCTION

The question of how to achieve and maintain well-motivated employees has become more and more important especially in the economy where from the talent and creativity of the individuals depends more and more the strategic development of the enterprise. The powerfulness of the motivation is in the centre of the scientific focus since the Hawthorne experiments and the revolutionary findings of Elton Mayo that change forever the initial understanding of the people motivation at work. Since the beginning of the Human relation movement in yearly 1930s, the actuality of the effective motivation has become a continuous subject for many researchers, managers and practitioners. Nowadays the different methods and strategies for motivation acquire new importance and significance when it comes to the rapid changes industries with high level of competitiveness such the sector of the information and communication technologies is. Therefore the focus of the current paper is on the different new methods developed to achieve and maintain high motivated experts in ICT.

II. LITERATURE OVERVIEW

The scientific literature is really comprehensive and rich when it comes to the motivation strategies, theories, models and methods. Due to the strategic importance which brings, the motivation is subject of really impressive number of scientific materials and focuses attention to the numerous researchers. Despite of the large number publications on this subject, the motivation rests continuously within the actual problems discussed widely both by practitioners and scientists which are explored in many different aspects.

One of the interesting relatively new approaches of motivation is through gamification or incorporation of game elements and technics in the working context. Mitchel, Schuster and Jin explore how to increase the level of motivation through gamification. They focus attention on the relations between gamification and contextual factors which could play a role of accelerator for the level of motivation of employees. After an analysis and comprehensive empirical research they find interesting correlations: "Intrinsic motivation was positively associated with behavioural intention in workplace gamification use; competency and autonomy satisfaction was associated with behavioural intention, mediated through intrinsic motivation; the extrinsic motivation of identified regulation positively impacted on competency and autonomy needs satisfaction; relatedness satisfaction did not have a significant association with either intrinsic motivation or behavioural intention" [14]. Koivisto and Hamari share the interest and idea of gamification. In [9] the two authors make a comprehensive survey – they explore in total 462 research papers from the Scopus database, dedicated to the gamification. After an analysis in depth, they conclude "Most commonly, the empirical research papers examined perceptions of using a system, some specific system features, or some other assessments of use experiences. In a large portion of the studies, an implementation or a prototype had been developed and was subsequently studied with its users, so it is not surprising that inquiries regarding user experiences and perceptions are commonplace." Sailer et al presents an experimental study examining the way that gamification motivate in practice. Their conclusion are as follows: "badges, leaderboards, and performance graphs positively affect competence need satisfaction, as well as perceived task meaningfulness, while avatars, meaningful stories, and teammates affect experiences of social relatedness" [15].

On the other hand, there is another major group of scientists who explore different motivation according to the specifics of nationality. In fact the relation between specific national features and different way of motivation employees based including on the specific cultural tradition, is another big subject within the bigger theme for the different motivation strategies. Freitas and Duarte present case studies from three Portuguese small and medium-sized enterprises. Their survey includes both managers and employees. The authors admit in [4] "the dimensions "work organization" and "commitment" presented lower results in the three companies, while the other dimensions had higher ones in terms of motivation at work. Only in the "performance" dimension were there significant differences in motivation at work that occurred between SME Leader and SME Excellence.

Another major scientific interest is focused on the managerial point of view of motivation process in a more theoretical context. Diefendorff and Seaton for instance in [3] claim the following: "we elaborate on the role of goals as a central organizing mechanism through which motivated action is observed and discuss a variety of approaches aimed at understanding motivated behavior at work." Strauss, Parker and O'Shea explore the correlation between proactivity and the level of motivation. They believe that "when an individuals' motivation at work is characterized by

pressure and coercion (high controlled motivation), with no compensatory intrinsic interest in or identification with the work (low autonomous motivation), proactive behavior is likely to deplete employees' resources, resulting in job strain" [17]. In order to prove this hypothesis, the scientists conduct survey among 127 employees in different sectors of economy and the results confirm their hypothesis.

The other theory, which is in the focus of the scientific discussion, is the Self-determination theory, which describes different types of motivation from one side and on the other – the idea, that these different types of motivation have divers impact on the individuals. The major question for motivation and achieving satisfaction at work (and not only) is closely related to the exploring different phycology aspects. Howard et al consider the interesting aspect of the Self-determination theory. They study in depth through an empirical survey "simultaneous occurrence of multiple motivation types within individual workers by adopting a person-centered approach on two samples of employees from different countries" [8]. After an analysis of the results gathering from survey (covering 723 employees from 286 countries) the authors claim that "… results support the hypothesis that autonomous forms of motivation are far more important in promoting positive workplace outcomes than more controlling forms" [ibid]. Arvanitis presents new idea in the Self-determination theory, connecting to the Kantian ethics. In [2] he claims "Self-Determination Theory (SDT) perspective of ethics can broaden the field of Kantian-based moral psychology and specify what it means, motivationally, to have autonomy in the application of a moral norm…this is possible when a moral norm is fully endorsed by the self through a process of internalization that is energized by intrinsic motivation and is facilitated by the fulfillment of the basic needs for autonomy, competence and relatedness". González-Cutre et al develop the initial concept of the SDT and propose in [5] "novelty as a basic psychological need in self-determination theory and develop a new measure to assess novelty need satisfaction". Welters, Mitchell, Muysken explore in more practical way the role of SDT in the process of job searching. On the base of data from the Australian labour market which the scientists analyse, their final conclusion is the following "workers who face externally regulated pressures (pressure arising from involuntary part-time or casual labour contracts) to search for alternate employment are less likely to find better work, than workers who use autonomous motives to search for work." [18].

III. OVERVIEW OF THE MOST FUNDAMENTAL AND USED MOTIVATION THEORIES

Nowadays the competition between enterprises is assured on many levels, including strive for high-skilled, well-motivated and well-educated and well experienced professionals who, under equal other conditions could give and are able to be the competitive advantage of the company. Therefore it is not surprising the fact that all motivation theories are closely explored by managers and absolutely consciously implemented at work environment. In this part of the paper we present some of the most fundamental and used in practice motivation theories and methods.

For the purpose of the present paper we will make short overview only of the motivation theories based on the needs

- These theories describe different human needs as well as the relation between them.

Maslow`s Hierarchy Needs

One of the most famous model is the Maslow`s Hierarchy Needs [10, 11]. According to Maslow, there are five levels of human needs which are hierarchically situated. Physiological needs are the base of the pyramid – they are vital for humans and therefore should be satisfied first. On the second level are needs for safety – these are needs of human to avoid any physical dangers, violence, emotional trauma and discomfort. On the third level are social needs – which describe human as a social animal who consciously looking to be part of some group – friends, colleagues, family etc. On the forth level are the needs of estimation which are expressed by the approval by the others and their recognition to the individual contribution. On the top of the pyramid are the needs of self-actualization and self-realization.

Herzberg two factors theory

According to his theory [6, 7] there are two types of factors - for satisfaction and for dissatisfaction. Herzberg claims that not all factors have to be considered as motivators – there are also factors which do not contribute to the human motivation and he defines motivation factors and hygiene factors. Hygiene factors are directly connected to the working condition and environment and do not motivate. On the other hand, in case of lack of hygiene factors, the employees will be totally unsatisfied and with negative attitude towards working processes.

ERG motivation theory of Alderfer

In general this theory reminds of the Maslow`s pyramid, but here the needs are grouping in different way and on 3 levels [1]: first level are for the existence needs, which combine physical and safety need and correspond to the Maslow`s first 2 level of the pyramids. The second level is for the relatedness needs – which means the social aspects of individuals but also and the recognition from the other. This level corresponds to the Maslow`s third and fourth level of the pyramid. The last one Alderfer puts the needs for growth – internal esteem and self-actualization.

Learned Needs Theory of McClelland / Three Need Theory

According to the McClelland [12] there are three types of needs – needs for Achievement – people always looking for a solution, wont to be creative, to achieve personal goals, and desire to overcome the different kind of difficulties. Second type is the needs for affiliation – covering all social aspects of humans. People are always trying to make friendship, interact socially with the other, are involved in different membership and groups. The third type is needs for power – to have a possibility to influence on the others behaviour and activities.

Theory on Psychogenic Needs of Murray

For Murray [13] the needs are not considered in hierarchical relations, but as a variation of options that influence the human behaviour. The logic behind the theory is based on the belief that individual has its own objectives and respective motivators. According to Murray people change or could modify its needs according to the social and life experience and on the knowledge as well. The needs

reflect the condition at the moment of the individual, its attitude to the social environment, people, groups and work. There are two key elements – the aim of their satisfaction and the way this satisfaction will be achieved. The Murray`s theory is adaptive to the environment and there is no hierarchy to the satisfaction process of the human needs. They could arise at any time, independently and could generate different reactions of the human behaviour.

The essence behind all these theories, according to Stoyanov [16] is the belief that human realizes the concrete needs, which reflect to the motivators to achieve the needs, satisfaction for the results and reword for the efforts.

IV. ICT COMPANIES AND FACTORS-MOTIVATORS

ICT is one of the fastest growing sectors of economy with one of the high level of competitiveness, especially as regards the human resources. To attract, motivate and develop special human resource policy could has crucial importance on the strategic development of the ICT companies. Therefore the efforts to achieve good level of motivated employees from the managerial point of view are absolutely obligatory for any serious company in the field.

On fig. 1 are presented the different aspects of factors-motivators for employees in ICT companies.

computer equipment, including mobile internet). Usually the starting salary of ICT companies in Bulgaria is relatively lower from the average of the business, but with offers for faster growth when the employee shows the needed skills and competences.

Working conditions – all material bases – office, location, number of people in one office place, level of hierarchy. Usually ICT experts do not admit strong and long vertical hierarchy and prefer more horizontal oriented and flexible structure.

Microclimate – this factor could be considered as a motive between 2-3 months after signing the working contract. Microclimate could not be described and has to be felt and understood. Good microclimate is hard to be build and more importantly – to be hold on a good level in order to achieve satisfaction from the majority part of the employees. This factor, due to its various dimensions is one of the hardest motivators for work. There are a lot of study cases that people left work only because low level of microclimate and collegiality, lack of trust etc.

Learning opportunities – in ICT companies these opportunities are really important due to two general reasons. First one – most of the study especially those which finish with the certificated level of competence, are expensive for the regular Bulgarian employee. Second one - if some expert

Fig. 1.   Basic factors-motivators for the ICT companies

According to employees and experts working on different positions in ICT companies, the management of these companies strive for good professionals and therefore could offer many other interesting benefits once the company finds such high-level class ICT expert. For the rest of employers there is a common policy which usually for good and serious company includes several basic factors:

Wage and social benefits. Logically this is the basic factor for anyone. In Bulgaria ICT business has in general, high level of salary but also depending on the company`s policy – there are different variation on the social benefits (such as food and beverages at the office; coupons for different magazines, company car, mobile, and other

has such class - certificate its career development is guaranteed. In the past some of the companies in ICT had a policy that required all employees who have certificate as a result of such company-funded training, to work for several years for that company. The logic here is that the company once invested in someone has to guarantee the reliability of this investment. But hopefully this practice at the moment is not very well accepted due to the reason that such policy rejects the employee`s freedom of choice. Therefore the company has to find some other methods to keep and develop its employees.

Opportunities for career development – standard but very effective factor for employee`s motivation. ICT companies

could offer also different project managers position, which shows the level of trust, expertise and competence of the employee. To be a leader of one project or a team leader is a good way of motivation based on the acknowledgment of the other for the work results achieved so far.

Life-work balance – for the employees of ICT business this factor is really important. Once the managers have technical possibility to assign tasks in distance, they have no big inhibitions to do it in reality. But on the other hand the compliance between personal and working life is important to the well-motivated employees. Here all good managers have to understand that have power over employees only at working time. Holidays and weekends are strictly devoted to the family.

V.   CONCLUSION

In strong competitive environment such is the ICT sector is, the clear company policy to develop and motivate human resources could become strategic key to a successful and sustainable business model. On the other hand, the requirements of employees towards their companies are increasing with the level of competitiveness within the sector. Therefore the serious companies try to offer predictable and overall policy to attract and develop employees having in mind that in their hands and brains could be the future competitive advantage of the company.

REFERENCES

[1]   Alderfer, C., Existence, Relatedness and Growth: Human needs in Organizational Setting. The Free Press. 1972.

[2]   Arvanitis, A., Autonomy and morality: A Self-Determination Theory discussion of ethics, New Ideas in Psychology, Volume 47, December 2017, Pages 57-61.

[3]   Diefendorff, J. M., Seaton, G.A., Work Motivation, International Encyclopedia of the Social & Behavioral Sciences (Second Edition) 2015, Pages 680-686.

[4]   Freitas, V., Duarte, M., Motivation at work: Case studies of Portuguese SMEs, Tékhne, Volume 15, Issue 2, July–December 2017, Pages 88-99.

[5]   González-Cutre, D., Sicilia, A., Sierra, A.C., Ferriz, R., Hagger, M.S., Understanding the need for novelty from the perspective of self-determination theory, Personality and Individual Differences, Volume 102, November 2016, Pages 159-169.

[6]   Herzberg, F., Work and the Nature of Man, T.Crowel, 1966.

[7]   Herzberg, F., One more time: How do you motive employees?, Harvard Business Review, Vol.22, 1979, p. 109-120.

[8]   Howard, J., Gagné, M., Morin, A., J.S., Van den Broeck, A., Motivation profiles at work: A self-determination theory approach, Journal of Vocational Behavior, Volumes 95–96, August–October 2016, Pages 74-89.

[9]   Koivisto, J., Hamari, J., The rise of motivational information systems: A review of gamification research, International Journal of Information Management 45 (2019) 191-210.

[10] Maslow, A., A theory of human motivation, Psycological reports, Vol. 50, 1943, pp.370-396.

[11] Maslow, A., Motivation and Personality, Harper&Bros, 1954.

[12] McClelland, D., The Achieving Society, 1963.

[13] Murray, H., Exploration in Personality, Oxford University Press, 1938.

[14] Mitchel, R., Schuster, L., Jin, H.S., Gamification and the impact of extrinsic motivation on needs satisfaction: Making work fun?, Journal of Business Research, Available online 22 November 2018, In Press, Corrected Proof.

[15] Sailer, M., Hense, J., U., Mayr, S.K., Mandl, H., How gamification motivates: An experimental study of the effects ofspecific game design elements on psychological need satisfaction, Computers in Human Behaviour, 69 (2017), 371-380.

[16] Stoyanov, I., Management, Avangard Prima, Sofia, 2018.

[17] Strauss, K., Parker, S., O'Shea, D., When does proactivity have a cost? Motivation at work moderates the effects of proactive work behavior on employee job strain, Journal of Vocational Behavior Volume 100, June 2017, Pages 15-26.

[18] Welters, R., Mitchell, W., Muysken, J., Self determination theory and employed job search, Journal of Economic Psychology, Volume 44, October 2014, Pages 34-44.