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ASPECTS OF KNOWLEDGE WORK ASSESSMENT WITHIN CORPORATIONS

MOUHABBAT GARIFULLINA[1], SVETLANA YUDINA[2]

Kazan National Research Technical University named after Tupolev A.[1], Almetyevsk State Oil Institute[2], Russia

ABSTRACT

Global economic changes cause certain problems of knowledge work assessment. The authors of this article offers three interrelated and interdependent block of corporate knowledge work assessment. Assessment of knowledge workflow complexity may be considered as the most important and fundamental element of the whole system of knowledge work evaluation as the basis of staff remuneration employed in knowledge work. In order to this definition has acquired the application meaning of the level of knowledge workflow complexity must be measured with parameters describing next characteristics.

JEL CLASSIFICATION & KEYWORDS

■ J01 ■ KNOWLEDGE WORK (WORKER) ■ WORK ASSESSMENT ■ KNOWLEDGE WORKFLOW ■ WORKFLOW COMPLEXITY ■ JOB FUNCTION

INTRODUCTION

Global economic changes cause certain problems of work assessment. Labor intellectualization contributes to the person discharge from the process of direct impact on the nature. It is becoming more difficult to measure the contribution of a concrete knowledge worker [4] in to the extra consumer value of new product. High intercorporate, transnational mobility of knowledge workers is demands universal methodologies for assessing of knowledge work resources as well as their efficient use. There is a growing contradiction between individual's interest in the development of working potential and corporation interest to increase the result. A diversity of resources structuring principles is increasing. The prerequisites for exception of employee and the material means of production owners among the main "customers" and "consumers" work assessment systems are being arisen. Objective basis of methodologies establishment "self-assessment" is formed. The creative component of the knowledge work makes its evaluation very time-consuming, narrowing the sphere of application and the productivity of quantitative methods. All this makes the assessment of knowledge work a very difficult task, so that difficult that the theses on impossibility of objective assessment of such kind work are appeared frequently.

The Decent Work conception which was formulated and accepted at 87th Session of the International Labor Conference in 1999, suggests the necessity of work assessment as an obligatory condition of decent labour shortage liquidation. A lot of the foreign researchers works devoted to criteria of "decency" of labor: R. Anker [1], G. Standing [3], D. Beskond [2] etc. Discussing the national and methodological aspects of a given problem, expert community confirms the relevance of the work assessment in a variety of its forms. It should be pointed out decent knowledge work is an important issue and accordingly its estimation is an actual task for the researchers.

The assessment of corporate knowledge work is a system technology for determination of extent of conformity between the knowledge work in a variety of aspects and the requirements to management of status and development of the corporation as a complex socio-economic system.

Assessment of corporate knowledge work

We offer three interrelated and interdependent block of corporate knowledge work assessment (Table 1).

The format of this publication does not allow any detailed examination of each parameter included in to the evaluation blocks [5]. Let's focus only on those that are the most specific in the knowledge work assessment.

It is often not enough only to attract the official corporate financial information and social reports for reliable assessment of corporation activity. The company's reputation in the broadest sense and its market value depend not only on the cost of material and considerable nonmaterial assets according to specific methods, but on the level of knowledge work management. Transparency for shareholders of knowledge working potential developing management system is one of the strategic development conditions is many modern economic systems. It is necessary to have a system of objective indicators for identification and adjust ion priorities on concrete corporation development among variety of resources to supply that transparency.

The assessment of changes in various types of costs characterizing the ratio of corporate to knowledge work and reflecting its views on the development of knowledge work potential has fundamental importance in this context. Such an assessment may be given from the results of correlation of the dynamics of the direct knowledge work resources costs of and indirect knowledge work resources costs. Practically, to do it is not difficult, because in the cost structure of products and services of any company provided the account of some costs, which in some form accounting for in the various systems of corporative management and accounting.

The main problem of evaluation the result of knowledge work in a corporation is that different agent groups can be targeted to various performance indicators, which often contradict each other: a shareholder estimates the prospects of income from the shares purchase , the government evaluates tax revenues and prospects of formation of the budget revenue of different levels, financial and credit institutions evaluate credit risks of the corporation and management, as we know, not interested in the assessment, may still be interested in the prospects of increasing compensation.

Assessment of knowledge workflow complexity

Assessment of knowledge workflow complexity may be considered as the most important and fundamental element of the whole system of knowledge work evaluation as the basis of staff remuneration employed in knowledge work.

Usually, the complex workflow we understand as the workflow, or high qualification and special training of the employee requiring (as opposed to simple, that is more primitive and do not require special training), this pair is identifying with the dichotomy of physical and mental work. No less often complex workflow understanding the workflow, consisting from the operations, and relationship between them is so complex that it can not be described.

Table 1: Blocks of assessment of corporate knowledge work

Block	Components of the block	Purposes of assessment of corporate knowledge work
Assessment of knowledge work resources	Assessment provision of corporations direct knowledge work resources with a certain quality and quantity	The identification of shortage of direct knowledge work resources with the specified quality characteristics (by sex, age and personal characteristics to the availability of the experience of participation in large-scale projects and the unique professional competence) in a corporation.
	Evaluation of knowledge workers in the selection and placement	The determining the extent of compliance the actual quality characteristics of the candidate (employee) to demanded and achieving to maximum exact "hitting".
	The relative assessment of the dynamics of the direct knowledge workers resources costs and indirect costs of the resources of knowledge workers	The analysis of the dynamics of growth of the ratio of direct knowledge work resources costs to the growth of indirect knowledge work resources costs, identifying the change factors.
	Assessment of effectiveness of the resource using (complex and particular)	The analysis of the dynamics of the all knowledge work resources using, and each individual resource calculated by indicators objectively characterizing knowledge work results, attributable on unit of work costs, or on unit of work resources.
Assessment of knowledge workflow	Assessment of complexity of knowledge workflow (the number and variety of functions or competences)	The decomposition of knowledge workflow carried out in the corporation and its departments, revealing a range of degrees of complexity, according to different parameters.
	Evaluation of positioning of particular knowledge workflow a total value chain (the complexity of interconnections between the individual processes)	The aggregation of knowledge workflow selected and evaluated by the degree of complexity, the definition of "nodal" operations and key (critical) knowledge workflow.
	Determination of provisions of knowledge workflow optimization	The analysis of unproductive expenses and loss of working time within knowledge workflow in corporation.
	Assessment workplace organization of the knowledge worker	The detection of variance between real and normative values of the factors influencing the level of employment during working time, the maximum efficiency.
	Assessment of the "decency" level and contentment knowledge workflow	The measurement or calculation of indicators of "decency" level of knowledge work in corporation, an analysis of their dynamics, a comparison of the results of the industry average values (for large corporations – with the country average values and the world values), a determining the level of knowledge work contentment for objective methods.
	Assessment of the "complexity" level of workflow	The determination of the proportion of creative, and information operations in knowledge workflow (such as work cost, and as a work result).
Assessment of knowledge working potential development	Evaluation corporate long-term development strategy	The definition of development prospects of the corporate knowledge work within the general strategy in corporation.
	Evaluation of corporate provision with indirect knowledge work resources	The detection of shortages of indirect knowledge work resources with the specified quality characteristics (e.g., deviation of the real technical equipment from the normative, the difference between the real and planned capital-labor ratio).
	Evaluation of the system of knowledge workers development	The analysis of the elements of the corporate staff development system and the connections between elements, and analysis of the dynamics, structure, and cost-effectiveness of training and development of knowledge workers.
	Assessment of the prospects of indirect knowledge work resources reproduction	The prediction of logistical, technological and financial state in corporations, analyzing and forecasting the development of management information system, including the corporate knowledge management system.

Source: Author

The complex knowledge workflow we shall mean as the workflow:

- consisting of many complex interconnected (series-parallel, with the feedback) work operations (functions);
- depending on the combination of factors, the effect of which is usually not linear;
- which can be described in the form of a simple model, only resorting to serious reservations and assumptions.

In order to this definition has acquired the application meaning of the level of knowledge workflow complexity must be measured with parameters describing next characteristics (Table 2):

A. The quantity of work operations (job functions).

B. The character of the relationship between the operations (functions).

C. The uncertainty level of external and internal factors (the proportion of the factors influencing on the process is non-linear the general sample of factors, weighted by the degree of influence).

D. The novelty degree of the methods (work practices) (the proportion of new methods in their total aggregate).

E. The distortion degree of models of the workflow in its simplification.

F. The influence degree on the information processes.

Scope of this assessment approach is essential. It can be used in determining the coefficients of the standard of part of the structural subdivisions using in the allocation of planned payroll of the company among its subdivisions. Providing that most of the business process is described, it can be applied in determining the base (tariff) income part of a particular employee as a reference point, or as one of the criteria in the multicriteria system, such as in grading. The approach is also to some extent, suitable as a basis for standardization of time of separate kinds of works for which it is appropriate.

Table 2: Methods of determining the complexity degree of knowledge workflow in the corporation						
The parameters of the workflow complexity	Evaluation of the workflow complexity, the scores					
The quantity of work operations (functions), units	2 – 5	6 – 10	11 – 20	21 – 30	more than 30	
	1	2	3	4	5	
The character of the relationship between the operations (functions)	serial P1	series-parallel PP		parallel P2		
	0	1		2		
The presence of feedback between the operations (functions)	nope -	there's +				
	0	1				
The uncertainty degree of the external and internal factors, percentage	no more 0,2	0,21 – 0,4	0,41 – 0,6	0,61 – 0,8	at least 0,81	
	0	1	2	3	4	
The novelty degree of the methods, percentage	no more 0,2	0,21 – 0,4	0,41 – 0,6	0,61 – 0,8	at least 0,81	
	0	1	2	3	4	
The Knowledge Worker type in the influence degree on corporate information processes	I type – Assistant	III type – Coordinator	II type – Servicemen, VI type – Inspector	V type – Organizer, VIII type – Mover	IV type – Analyst	VII type – Generator
	0	1	2	3	4	5
Source: Author						

Assessment of content of the specific knowledge workflow positioning in the overall value chain (the complexity of the relationship between the separate processes) is an aggregation of selected and evaluated by the degree of knowledge workflow, the definition of "nodal" and key (critical) knowledge workflow. This is important by reason of the position of these processes in the economic system will be the determining factor when making decisions about the withdrawal of some knowledge workflow to outsourcing or automation.

Information Processes of corporate knowledge work organization linked to a number of problems:

A. Violation of regulations and rules, in view of or to its imperfections, or to the inefficiency of the control system of implementation.

B. High duration of the procedures for obtaining access to information.

C. A large amount of documents.

D. It is difficult to eliminate (in particular, Russian companies), influence of human factor.

E. The derivative of the previous problem – the loss of working time.

Conclusion

Experience of implementation a variety of corporate information management systems such as SAP demonstrated the possibility of solving these problems by using access control sub-systems and user accounts. Despite the fact that these actions are carried out primarily in the information security, we think solving the problem of providing for employee roles to access the various systems, and adjusting redundancy of user rights, the complex problem of optimization of the amount of available information will be addressed in soon as possible.

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