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IDENTIFYING THE WEAKEST LINK IN THE SOFTWARE DEVELOPMENT SYSTEM

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Abstract

The relevance of this study is that the organization of the software change process is aimed at accepting effective proposals. Such proposals reduce the time the system is in an unstable state, which increases the reputation of developers. The basis for selection is the definition of a weak link, while private notifications are excluded from consideration. and, therefore, the influence of the external environment on the development process is reduced. As a result, the implementation of the next version of the system is carried out on time without exceeding the budget and in accordance with the accepted notifications.

Keywords: improvements, link, actuality, commoditization, stability, emergence, efficiency

1 Introduction

The current approach is that the process of developing complex software systems includes methodological principles of organization. Such principles increase the requirements for the main developer. His role is strengthened in the context of responsibility. In terms of Engineering Systems, the weak link is the developer himself, if he missed a productive proposal and included unnecessary elements in the new composition [1]. According to the provisions of the Agile principles, it is determined that developers who do unnecessary work do not know how to interact with the client [2]. The means of assessing the expected improvements should correspond to their value in practical use. This means that the theoretical value should be equal to the practical value for the implemented solutions.

Knowing the weak point removes the contradiction, which increases the level of trust from users. At the same time, the research problem is highlighted: "It is impossible to maintain stable functioning of the system without replacing the elements that prevent the achievement of the goal." From the point of view of emergence, it means troublesome elements will

sooner or later disturb the functioning of our system that is why they must be identified and managed.

The identified problem allowed us to determine the content of the object that is the carrier of the problem. In other words, if developers do not strive to exclude elements from the system that destroy its functioning, they will lose the so-called "sense of emergence" [3, 4]. In this situation, the possibility of inconsistency between the involved participants of the organization is excluded. Since the object of the study is compliance with the emergence property, the item of attention is the organization of the system for collecting, processing and analyzing all user complaints. With this formulation, it is necessary to select proposals of a complaint nature from among the multitude of notifications. In other words, the system developer directs the vector of cognitive activity to commoditization, not forgetting to inform the client about the content of the changes made to the next version of the system [5].

2 Research details

The interpretation of the concept is aimed at combining two incompatible approaches in one organization, identifying a weak link and commoditization: "How to maintain a reputation in a dissatisfied external environment?" From a systemic point of view, it is necessary to find means of measuring efficiency. Moreover, such that, having assessed the efficiency of the system as a whole, it would be possible to find deviations in its elements. In this regard, the goal of the study is put forward, reduced to the development of a procedure, ensuring the measurement of efficiency at intervals of different durations.

In other words, the goal of the system is: "Developing an effective software maintenance system in the context of aligning interests of all included parties".

Based on the stated goal, the following tasks were formulated:

1. Status quo analysis (in this very moment based on Commoditization effect).
2. Choosing short term solution (a year) – appraising effectiveness based on ROI system.
3. Creating a medium-term scenario (up to 3 years) in context of ensuring the emergence property
4. Appraising long term perspective (5 years).

It should be noted that the use of the ROI methodology for measuring efficiency allows solving problems of different durations. In this regard, the content of the fourth task requires clarification [6]. We are talking about measuring the growth potential. For this, the ROI indicator is calculated in terms of the SGR technology of sustainable growth [7]. At the same time, it becomes possible to assess the degree of improvement in the professional quality of the main developer. Such quality is manifested in his desire to improve the means of selection of proposals made to the next version, including cutting off the

unnecessary. This increases the reliability of the software. From the point of view of the subject of the study, the active actions of the developers are expressed in the term "focus". In our case it is efficiency. It has active action on our perception of both subject and item(aspect). The interpretation of the remark is manifested in the following two definitions. The 'lens' through which we examine our object (emergence) is the efficiency of the elements in the system. Efficiency is related to achieving the cooperative activities' target which has a social character instead of a personal one.

3 Conclusions

As practical results, it is necessary to highlight the use of methodology for identifying bottlenecks in the organization

The result is what we wish to achieve, in our case it is to identify the weak links that may harm our company in the future and make them work for us, creating a new chance for development from a possible problem.

An important conclusion is the recognition of the fact that if interest in the selection of proposals is lost, the system developer is a weak link. The novelty of the method is linked to recognizing the most important links of an organization which have a negative impact on the growth of its potential. In the process of their recognition organizational imbalances are found. At the moment the methodology is updated to also analyze the root causes of said negative elements and to use them to our advantage.

This approach has allowed us to generalize the concepts of synthesis and analysis to determine the importance of the performance skills of system developers. The details about our company that reflect its future chances for growth: possible new projects, ideas for development of current projects, etc. The combination of reputation norms with image measures characterizes the contribution of the weak link to the growth of the organization.

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