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Agile project management and changes to PMBOK standard processes

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Introduction

Generally, studies related to the field of project management and construction are related to the management of construction, industrial, oil and gas projects and the like. Due to the fact that traditional project management approaches of combining and implementing different processes as well as detailed and general documentation are very high and implementation in these projects is predicted based on planning, so the specificity of these projects is not compatible with the changes in these projects. And take their own paths, some of which are complex. The author of this research, according to his experiences in these projects, always has a negative view of this category and considers the changes in the defined details of the project as an annoying issue. At the same time, this is a mental challenge for him on how to change the approach to change and use it as an opportunity.

The root of the change can be considered the requests and expectations of employers or customers and the reason can be considered in the speed of change of the types of products they need. This diversity has led to the generalization of the expectations of employers or customers to all the products they need, including construction. Many project managers may have encountered this problem in their projects and due to the incompatibility of the traditional project management approach with this speed of product diversification, it is not possible for them to respond properly to customers, which has caused dissatisfaction among employers or customers. Significantly reduces the chances of projects succeeding.

Therefore, the need for research and study on how to change the approach to this new age challenge can be aligned with the expectations of employers or customers, led the author to describe the management methods of other areas and compare the two traditional and new approaches to research. Provide descriptive-explanatory and evaluation methods.

Leading these areas are software and information technology spaces in which the pace of development has increased over the years and a new type of management style called agile software project management approach has been implemented in this space in the last decade.

Therefore, after gathering information and studying numerous international and domestic articles in the field of agile project management and the sixth edition and two

other book titles, finally in three sections of PMBOK materials and methods, the standard book study of this figure is presented:

In the first part: research background, the process of formation and emergence of the concept of agile project management and its frameworks are stated and project definitions, project life cycle and its types are presented.

In the second part: theoretical foundations and research method, a comparison will be made between the two types of frameworks defined for agile project management and the research method will be stated.

In the third part: research findings, a comparison is made between agile project management processes and the mentioned standard processes.

In the fourth section: Conclusion and suggestion, some things will be said about the prospects of using agile project management in the construction industry.

Methodology

Considering that in order to do any scientific writing, a research method appropriate to the subject should be used, in order to create coherent foundations in this article, a descriptive-explanatory method has been used, therefore, there is a need for research and case study on how By changing the approach to this challenge of the new era, we can be in line with the expectations of employers or customers, the author decided to use this research method to describe the management methods of other areas and compare the traditional and new approaches.

Results and Discussion

At the beginning of the research findings chapter, a comparison between standard process and Agile methods is presented. The pyramid of separation of impact levels from the standard to the project management system and the general differences between cascading and agile approaches are some of the issues discussed in this chapter. At the end of this section, different areas in cascading and agile approaches are described in detail.

In this section, the theoretical foundations of the well-known event are presented along with a detailed comparison. The most important difference between the Scrum and Kanban methods is the default criteria for planning and improving the process, templates, estimation and ranking of items. On the other hand, research shows that these methods have significant similarities in agility, timing, and fast transfer to software.

Conclusion

Prospects for the application of agile project management in the construction industry Conclusion As mentioned earlier, the concept of agile management in the last decade has added a new form of project management approaches to this knowledge. In recent years, this approach has been used in various business environments such as software projects, research and development projects, information technology projects and the like with considerable scalability.

In the construction industry, due to the long time of construction projects and issues such as capital sleep and return on investment period and competitive market

considerations, the attraction of construction craftsmen and consumers towards rapid production and reaching the final product. Therefore, today, construction is moving from the traditional mode to the production of advanced buildings, and the speed of this movement is expected to increase significantly in the coming decades. We will get closer to this prediction by studying the standard of the sixth edition of PMBOK and the significant difference that has occurred in adding the stakeholder area to the fifth edition, as well as assigning a separate section to the concept of agile project management. Codinhoto now states that there seems to be considerable potential for agile project management success in the design and pre-design phase of the building. In the not-too-distant future, project managers and project management knowledge will understand the new agile project management approach in construction projects.

Studies conducted in different parts of this research show that:

Agile management, by increasing customer participation and creating team unity and downsizing the product along with delegating authority to expert team members, reduces the knowledge areas of traditional projects and related processes and flexibly uses change as an opportunity for improvement.

To be used in non-software industries in terms of cost, risk, supply and procurement still needs to be addressed, but the rapid progress of technology, has led to the gradual evolution of this approach and those in charge should strengthen their knowledge by conducting studies in agile project management.

Agile management is an adaptive and repetitive evolution and this cycle is close and transparent with the concepts of nature cycles. It is recommended as an assumption that "Does bringing the product life cycle closer to nature cycles improve the product production process?" " Additional research and studies should reflect the face and results to the scientific community.

Keyword:
Comparison of Scrum and Kanban, Agility perspective in construction industry, Agile management frameworks, One-to-one comparison of cascading project processes with Agile

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