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Abstract of the Diploma Thesis

Application of agile methodologies as a contemporary approach to project management - case study of PersiLab company

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Summary: This thesis provides analysis and comparison of traditional approaches of project management and agile methodologies, to identify significant differences between them and select the scope of agile methodologies.

In the current conditions of a rapidly changing and developing market, it is important to keep up with pace of market development and technology. Particularly, it is connected with field of information technologies. In such areas science is developing rapidly and the project, which is created for several years, may lose its relevance by the end of development. Therefore, it is important to always be prepared to change the concept of the project or add something new during the development. Agile methodologies were created for this purpose. The following thesis provides analysis and recommendations about identified areas where agile methodologies can be successfully used.

Objectives

The main objective of this thesis work is to analyze projects that were built by using agile and traditional methodologies. The following analysis can help project managers avoid mistakes and take into account the peculiarities of application of agile projects.

Aims of the Diploma Thesis:

– Compare traditional approaches of project management with agile methodologies, to identify significant differences between them and select the appropriate scope of agile methodologies.

– Analyze projects that were built by using agile methodologies in case mobile development outsourcing company and make recommendations based on the result of the analysis.

Research questions:

– What advantages have agile methodologies in comparison with traditional project management model?

– What is the suitable scope of agile methodologies application?

– What problems may appear in companies that use Agile methodologies?

Methodology

Methodology of the thesis is based on analysis of available information sources and knowledge bases. This thesis is compound of two main parts which are divided into

chapters and subchapters. The theoretical part is based on the collection and analysis of the different methods and approaches of project management, in particular the traditional and agile methodologies.

Practical part can be divided into two parts. The first part is focused on the comparison and identification of the best applications of agile and traditional methodologies. Also in this part will be defined significant differences between traditional and agile methodologies. The second part focused on the case study of Russian mobile development outsourcing company using reports from JIRA system. In this part projects that were built by using agile and traditional methodologies will be analyzed. The analysis of the projects used metrics from book "Agile Metrics in Action: Measuring and Enhancing the Performance of Agile Teams" by Christopher W. H. Davis.

Also in thesis work were used next methods: observation the problem, analysis different project management approaches, relation analysis between agile and traditional project management methodologies, comparison different expert's opinions to make research more objective, inductive and deductive research approaches, synthesis of conclusions and recommendations.

Recommendations

Based on the analysis, the following conclusions were made. The researched young small company at this stage of development should choose less voluminous projects, due to the lack of a large team and the experience of large implementation of projects in general. Choosing small projects for implementation, the company will protect itself from complex and ambiguous projects that can drag on and go to the company's loss. Also, members of the company's employees and management will gain experience in conducting projects, negotiations with the customer and in other areas necessary for running a successful business.

Managers have to analyze the technical task of the customer carefully. Also it is necessary to specify at the customer all possible inaccuracies and in time to collect feedback. Before accept the project, management of the company must notify the customer about the peculiarities of the methodologies used. Employees of the company should strictly follow the methodology and differentiate positions and roles in the project. Some employees can perform several tasks simultaneously because of small number of employees and size of the company. The company management should not allow one

programmer or employee to participate in several projects at once, in order to increase the efficiency and concentration of a specialist on the current project. The team should carefully evaluate the tasks for the complexity and the required execution time. Scrum-poker can be an excellent tool for solving similar problems.

Conclusion

This thesis is focused on analysis projects that were built by using agile and traditional methodologies. To achieve the aims of the project which were set, was analyzed information about agile and traditional project management methodologies. The answers to the research questions were also found.

The advantages and disadvantages of agile methodologies were highlighted. The strengths and weaknesses of the traditional project management model were identified. As a result, a comparison was made between the traditional methodology and the agile approach to project management to identify significant differences.

Despite all the advantages and dignities of Agile, there is no need to apply this approach wherever possible. There are many projects that are perfectly implemented by the waterfall methodology, where there are good practices. In such projects, the use of agile is inexpedient and not justified. The traditional model of project management has the right to exist.

In the chapter Case Study, two projects were analyzed, information on which was provided by PersiLab for analysis. During the analysis of the project, potential and actual problems of using the agile approach were highlighted, such as unclear customer requirements, extended terms and a limited budget. As well as problems can be in the wrong calculation of the necessary time or incorrect assessment of the complexity of the job. Based on the results of the analysis of the projects, recommendations were put forward to address the identified problems.

Based on the project management methodologies analysis, recommendations were made about choosing an appropriate methodology for project management.

The appropriate scope for using agile approach was identified. Not only IT sphere was singled out, but also other, not related to it. For example agile can be implemented into education sector or banking sphere.

It is necessary to say that both models will help to realize project. First of all, project manager chooses an option that will allow him or her to make quality products and effectively manage company's budget.

It is also worth noting that the methodology does not exist at all in order to reduce the "overhead", or just increase the efficiency of the team. Methodologies are created to improve the manageability, predictability and effectiveness of project management.

References

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