



**IMPLEMENTATION OF PROJECT MANAGEMENT TECHNIQUES IN IT  
COMPANIES**

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### **Abstract**

The thesis covers the topic of implementing the useful techniques used in Project Management in development of IT projects, which some of the IT companies seem to ignore using. Companies might prefer the freedom and flexibility in development by ignoring the fact that some techniques might increase the efficiency and provide the developer team and activities some firm organization.

*Key words:* Project management, product management, agile, flexibility

The objective. The objective of this article is to demonstrate the importance of implementing the techniques of Project Management in IT companies.

Brief methodology. For this research, the secondary source of data will be used by comparing the older and newer trends in IT companies. The sampling design will be done by applying non-probability sampling, where instead of wide and random range of resource units, the example of famous and successful companies will be chosen to demonstrate the efficiency of the Project Management techniques. The data collection is performed by studying documents and records, also the case studies will be used to make a detailed analysis of particular pattern in the IT industry.

Findings. One of the widely used techniques IT companies is the Scrum, which can significantly improve the quality of the product by a better management of the development processes depending on the time and resource limitations.

Brief interpretation. Brief interpretation of the idea is that the implementation of Project Management techniques would positively impact the usage of the company resources by approaching the scheduled tasks in a most flexible way.

Introduction. The competition in the global market requires the ability to adjust to the current pace and changes in business environment. The companies need an agility in project development to offer new products and solutions. This thesis will focus on the theory of Agile Project Management, where the New Product Development must be positively affected.

New Product Development. According to Almeida et al (2021), the development of a product is a complex procedure, requiring different set of management tools, which will result in faster deliverance of the final product with enhanced qualities. [3]

Agile Project Management. According to Stare (2014), it is implied that the project has



little information on what activities have to be done in initial processes. Therefore, it is accepted to use agile approach in creating the backlog of upcoming tasks after regular review of the smaller tasks in the initial stage of the product development. [2]

The agile approach is supposed to complement the traditional project management by enhancing the processes, which tend to stall the processes, which could be done in faster instances by bypassing the older approach. The usage of Agile Project Management supposes that the Agile approach could benefit in using self-managed team and wider vision of the processes. [2]

Backlog. According to Almeida et al (2021), the wider picture of the overall progress can be approached by using the backlog for the current product development, where the all upcoming but stalled processes are indicated in the “backlog” column of the canvas table. The “To do” activities could involve the processes, which are used to build a strong prototype and get the feedbacks from the customers. The iterative approach will bring the possibility to validate the customer demands and solve the active problems in the development of the new product. [3]

Pre-development stage. This stage must indicate all the important tasks, upcoming activities, restriction and limitations, an the critical points for the development of new product. The market research must be done in order to clarify the situation. The project mapping could be a great solution to create the clear image of current situation and identify the next steps in the overall process.

Development stage. According to Almeida et al (2021), this stage implies creating a prototype to test the product after each corrections made according to the customer feedback. The process can be iterative in order to provide a constant development and team’s understanding of the situation.

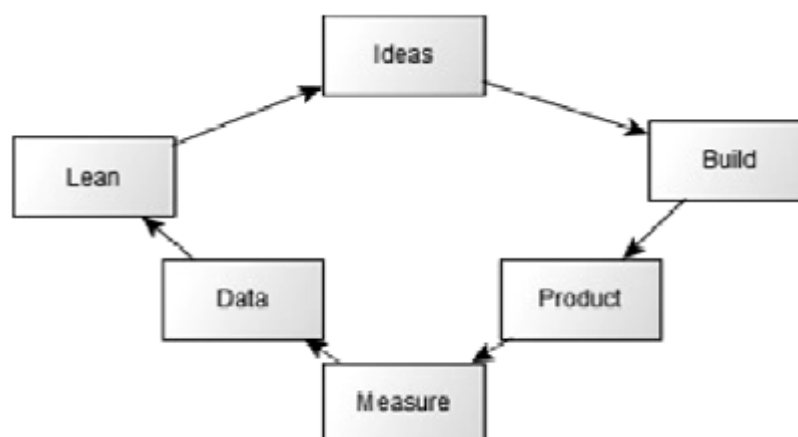
There are 4 steps in this stage: (1) Design for Additive Manufacturing, (2) Construction, (3) Test, and (4) Customer, where the customer’s backlog is fulfilled based on the initially set Backlogs. [3]

According to Stare (2014), the product development must be divided into smaller iterations, which are manageable in term of resources and time. Such approach could benefit in better organizations and execution of tasks. [2]

According to Nidagundi and Novickis (2016), the life cycle starts with predictions and ideas, which flow into tasks to be proven by some metric, which will result in being applied in a final product. The Figure 1 indicates the flow of the insights from “ideas” to the “measure”



milestone. [1]



Post-development stage. This stage implies the documentation and validation of the processes and succeeded milestones. The team can make a review of the results, processes to make some lessons before a closure of the project.

According to Nidagundi and Novickis (2016), the testers must be able to synchronize with the market and the developer team, in order to keep up with the current processes. [1]

### *Conclusion*

To conclude, it can be stated that the disadvantages of the classic approach to the project management could be complemented with the agile approach discussed in this thesis.

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