ABSTRACT

The rapid development in the software engineering field requires new technologies as traditional approaches are inadequate. Customers of software development companies have more and more complicated requirements for their software. It is no longer feasible to develop all the components of a system in-house. Customers expect the software to conform to their needs, even though they are not always able to define them exactly beforehand. In the traditional software development processes, the customer’s first touch to the developed software is in the end of the project, start falling apart. To remedy these problems, new approaches are required and these new approaches are called Agile Methodologies.

Agile Methodologies based development has been widely accepted in both academia and industry for building software systems. Various agile methodologies like XP, Scrum, FDD, DSDM, and Lean Development have been discussed in this dissertation. Each methodology has pros and cons. The comparison of agile methodologies is also done on the basis of various parameters. But an agile methodology is required which is having the features like independent of project type, according to the situation select its usage based and then develop a plan based Feature list/Functionality/Sprint, so that maximum return on investment can be attained in minimum time.

So here a methodology is proposed which exhibits the features like small team size, more adaptable to changes, having design phase, work week according to the project need, proper documentation and supporting code-refactoring with code ownership.

The results of this dissertation contribute towards greater understanding of agile software development and also useful to development firms that want to adopt agile methodologies as a generic development culture without worrying about specific agile methodologies.