

## **ABSTRACT**

Agile software development approach is the recent buzz word in Indian software organizations. Use of this approach is expected to result in speedy delivery with better quality, good rapport with the customer and market and fetch quicker return on investment. The agile software development approach is flexible. To achieve the above said characteristics, the agile software development organization should have dynamic and self motivating teams.

This research work initially identified the software process improvement pertaining to both traditional and agile software methodologies. Roles of an agile coach in a newly transitioned agile software development team and activity of the team members who work with approaches such as XP and scrum were analyzed. The challenges faced by the team members and their coach during the initial days of their project were identified. Factors influencing the support from the top management and the level of customer involvement were also discussed. Workings of the agile software development projects were inferred based on face to face discussions with a set of practitioners and observations carried out in organizations that work with agile software development. A questionnaire was also circulated to the

software practitioners to find their perceptions on the issues while working with the agile software development.

The results of this research provide greater understanding of the roles played by agile coach and other team members, the importance of customer involvement and the role of top management when working with agile approach to development activities. These insights are expected to make the transition to agile development approach by development organizations smooth or less painful.