Abstract

The purpose of this research was to explore the issues and challenges that might arise in agile software development processes during the transition from traditional development methods to agile. It also provides insights for management to help organizations avoid and overcome barriers in adopting Agile. A qualitative research method design was used to capture the knowledge of software development practitioners in its natural settings.

Data was collected through semistructured face-to-face interviews. In the first round of data analysis, a simplified open coding technique was used to identify possible concepts, along with their properties and dimensions. The simplified open coding technique is a form of content analysis where the data is read and categorized into concepts. In the second round, the codes were reviewed, and the concepts were organized by recurring themes. These themes were used later as a basis for creating a set of stable and common categories.

The research presented 11 main findings, which are:

Finding 1: How software development teams understand waterfall & agile?
Finding 2: Waterfall could be suitable where failure will be catastrophic
Finding 3: Upfront design does not reduce errors or inflexibility
Finding 4: The ability to adapt to change is a key to competitive advantage
Finding 5: Agile leads to greater customer satisfaction
Finding 6: The day of monolithic documentation is over
Finding 7: Technical teams adopt agile faster than management, but before management buy-in transformation cannot be completed
Finding 8: Death march to delivery / burnout issue has to be dealt with
Finding 9: The QA approach in agile is still not perfect
Finding 10: Managing vendors is easier in waterfall
Finding 11: Coaching and training are essential for successful transformation