PREFACE

All improvements in software industry have been motivated by the need to be able to build better software more rapidly. Agile is a step towards better software development. In Indian organizations agile is in its embryo stage. Agile means quick moving and in this methodology for the customer’s satisfaction and due to customer’s frequent changed requirements, we are kicking the heavyweight methodology. Producing high quality software products and meeting the stakeholder’s requirements is a major challenge in software engineering. Today, little is known about which agile methods are being used by Indian companies and whether people are satisfied or not with the methods, they are using. This is due to the lack of objective surveys on the subject. To account for the lack of data, an independent online web based survey, interview survey and questionnaire survey was conducted to find the total percentage of users who are using agile and tried to find that does it increases the productivity and quality of software or not. This thesis with the help of surveys conducted in India will demonstrate what agility and agile development are, how much percentages of companies are using different methodologies of agile, and creates a comparison between different agile methods as well as comparison of these methods with heavyweight methods in Indian organizations.

The research method used throughout the thesis is questionnaire, interview and online survey. The methods are applied in different types of Indian
organizations such as small scale, medium scale and large scale. The project size is also taken for comparison. Hypotheses are designed to prove that productivity and quality increases and cost decreases by using agile methodology in case of small project development.

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