

## **ABSTRACT**

Information technology (IT) as an industry covers a variety of services that range from hardware procurement, installation and management, software design, development, deployment and maintenance, data management, networking and administration. Information Technology has become an integral part of any business and hence becomes very critical to the safety and security of any business information. Thus Information Technology services are to be provided with very high level of quality. To achieve such quality levels, underlying processes need to be well defined, applied, standardized, measured and improved continuously.

Software Process Automation provides a set of process guidelines and related tools in an integrated workflow based environment within a software services organization to enable the end users to follow certain process standards uniformly thereby deriving desired and expected outputs. Software Process Automation has great potential to impact software project execution positively. Software Project Success refers to the factors that contribute to customer satisfaction on delivery of a project. Though there are many factors that customers measure for a successful delivery, the most important explicit factors are Time, Cost and Quality. However, there has not been much work done on investigating the impacts of Software Process Automation on the software projects being delivered to customers.

The research is aimed at understanding how Software Process Automation initiative was adopted in software organizations and how they have impacted the success of Project deliveries. The primary hypothesis “There is no significant contribution by Process Automation on Software Project Success” is stated to provide a focus on the objective of the research study.

Data for the study was collected through a survey on a sample of 83 software professionals from two Indian and two foreign software companies. The responses were studied through distribution analysis to understand the characteristics of organizations, process characteristics, focus on the initiative, development, deployment and training methodologies adopted. Correlation analysis attempts to understand the relation between various groups of information gathered to finally derive a conclusion on the objective of the research.

The research has clearly brought out the facts that software process automation adoption has positively impacted software services organizations. The various benefits are seen in terms of quality improvement through error reduction, productivity improvement, process compliance, reduction in mundane activities and enhanced communication. When quality is maintained at a high level and clerical and administrative work are taken away from the project teams, productivity is positively influenced thereby ensuring a successful delivery of a project.

Overall, the responses confirm that adoption of Software Process Automation has been successful in their organizations. Further the study revealed that Software Process Automation has positively impacted Project successes in ways such as time to market, reduced cost through improved quality and increased productivity.