

RESEARCH DETAILS OF DR. RAJU H K, PROFESSOR & HOD

KEY CONTRIBUTIONS IN DOCTORAL RESEARCH ON LEAN SIGMA TO SOFTWARE DEVELOPMENT PROCESS - JANUARY 2012 TO MARCH 2015

1. Extended the applicability of a theory from the manufacturing process, Lean and Six Sigma to software development projects.
2. Held thorough discussions with project managers and software professionals from leading service and product oriented software companies in India and abroad to collect their opinions and insight on Lean Sigma to improve software project management.
3. Developed a conceptual model - *Design for Improved Yield and Accuracy (DIYA)* for the implementation of Lean Sigma approach to software development projects.
4. Validated the proposed Lean Sigma model and it is promising for the software development projects and can bring changes incrementally to better process for improved quality and productivity.
5. Identified significant opportunities in adopting Lean Sigma approach to eliminate non-value-added activities, reduce cost, improve lead-time and cycle time in the software development life cycle (SDLC) to deliver value to the customer.
6. Delivered a special talk at Global Village Tech Park on the practical implementation of real-time Kanban for Lean Sigma to improve quality and productivity in software development projects.

PUBLICATIONS OF JOURNALS

1. H. K. Raju, and Y. T. Krishnegowda, "Software sizing and productivity with Function Points," Lecture Notes on Software Engineering, pp. 204-208, 2013.
2. H. K. Raju, and Y. T. Krishnegowda, "Kanban Pull and Flow – A Transparent Workflow for Improved Quality and Productivity in Software Development," Proceedings of Joint International Conferences on ARTCom 2013 and ARTEE 2013, pp. 44-51, 2013.
3. H. K. Raju, and Y. T. Krishnegowda, "Value Stream Mapping and Pull System for Improving Productivity and Quality in Software Development Projects," Int. J. of Recent Trends in Engineering and Technology, Vol. 11, pp. 24- 38, 2014.