

Conference Name:

63rd World Statistics Congress (WSC) - Virtual 2021 Conference by International Statistical Institute (ISI)

Paper Title (50 Word Limit)

Advancement in Manufacturing Domain Through Blended Analytics, Simulation and Lean Six Sigma Tools

Abstract (300 Words Limit)

In today's transforming manufacturing domain in line with Industry 4.0, technology adoption is highly demanding on a regular basis to ensure speed of delivery with higher effectiveness and lower cost. In current dynamic market condition, customer needs are changing very fast and it is critical to deliver intelligent product to customer with optimizing vital parameters by processing real time big data using available different tools. By evaluating each specific manufacturing activity and its connection with product performance in the field for better customer experience, it is essential to select appropriate Analytics, Simulation and Lean Six Sigma tools for quickly analyzing real time data to take desired actions for balancing performance and cost of manufacturing. This is ultimately enabling enhanced effectiveness of manufacturing processes with optimized performance by ensuring competitive cost advantage in very short time. In this presentation, demonstrated effective use of integrated vital Analytics, Simulation, Lean Six Sigma tools and methodologies using commercially available software's such as Minitab, R, Python, AnyLogic and DOE++ for revolution of manufacturing processes to deliver robust intelligent products.

Keywords (05 Words Limit)

Analytics, Simulation, Six Sigma, Manufacturing

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Ranjeet holds bachelor's degree in Mechanical Engineering and Post Graduate Diploma in Leadership (PGDL), he has 14+ years of diversified experience in Data Analytics, Manufacturing, Design, Reliability, Warranty, Supplier Quality, Lean and Six Sigma for New Product Development of appliance and off highway products. He is Certified Six Sigma Master Black Belt (CSSMBB) from Indian Statistical Institute, Certified Reliability Engineer (CRE) from ASQ and currently pursuing Data Science Specialization certificate from IIT Roorkee, India.