

Revolutionizing Healthcare System through Lean Thinking

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Abstract

Healthcare providers are facing increasing pressure to improve service, reduce costs, improve patient safety, reduce waiting times, and reduce errors and associated litigation. The United States spends 22% more than second-ranked Luxembourg, 49% more than third-ranked Switzerland on healthcare per capita, and 2.4 times the average of other OECD countries. In Ontario, healthcare will account for 50% of governmental spending by 2011, two-thirds by 2017, and 100% by 2026 unless a radical approach to healthcare is adopted. In China, 39% of rural and 36% of urban population cannot afford professional medical treatment despite the success of the country's economic and social reforms over the past 25 years (OECD Health Data, 2006). Clothier (2006) estimated that 50% of a clinician's time is not necessary and non-value added in the eyes of the patient. And as per Nino, V. et al., (2021) patient satisfaction can be availed by reducing the delays in registration process. By simplifying processes, lean thinking and lean principles can assist in removing wasteful motion, waiting, and other non-value-added tasks (Wickramasinghe, 2014).

Keywords (12 font)

Lean, Healthcare, Cycle time, Process optimization and non-value-added tasks

Biographies

Mohammed Raihan Uddin has completed his B.Sc. and also doing his M.Sc. in Industrial and Production Engineering, Faculty of Textile Management and Business Studies at the Bangladesh University of Textiles. He is a Certified Supply Chain Analyst (CSCA). His research interest includes supply chain management, quality management, lean six sigma operation management, CAD/CAM, Operation Research, Operation Management, Wastage Management Material Handling, Maintenance Management, Ergonomics, Safety Management, Artificial Intelligence, Industrial 4.0, Machine Learning, Project Management, Data Science, Nano Technology, Sustainability and E-Textiles development. One of his papers "Sustainable Supply Chain in the Textile Industry," placed 1st in the 5th IEOM Conference in Dhaka, Bangladesh, in 2022., Besides he is having 4 Years of Job experience in different Apparel industries and Currently Working in a Swedish MNC named Lindex.

Dr. Mohammad Asif Salam is a full Professor of Marketing & Supply Chain Management at the King Abdul Aziz University of Saudi Arabia. Prior to that, Dr. Salam has been a tenured faculty member at several Canadian universities including Ryerson University, the University of the Fraser Valley, and Mount Allison University. Dr. Salam earned a Doctorate in Business Administration in 2004. Dr. Salam's academic research focuses on interdisciplinary issues in marketing and supply chain management, sustainability and corporate social responsibility in purchasing and supply chain, healthcare logistics, lean and agile logistics, and humanitarian disaster logistics. Dr. Salam has published in numerous academic peer-reviewed journals indexed/ranked in the Social Science Citation Index (SSCI), Science Citation Index (SCI), Scopus, and Australian Business Deans Council (ABDC) including the Journal of Cleaner Production, Industrial Marketing Management, Journal of Business Ethics, European Journal of Marketing, Journal

of Business & Industrial Marketing, Journal of Manufacturing & Technology Management, Benchmarking: An International Journal, Industrial Management & Data Systems, Energy Exploration & Exploitation, European Journal of Management and Business Economics, Sustainability, Frontiers in Psychology, Frontiers in Psychiatry, Journal of Enabling Technologies, Social Responsibility Journal, International Journal of Procurement Management, International Journal of Logistics and Transport, Journal of Supply Chain Management: Research and Applications, International Journal of Services and Operations Management. Dr. Salam has received several national and international research grants and has been active in research across many topics related to logistics and supply chain management. Dr. Salam can be reached at E-mail: masalam1@kau.edu.sa.