The success of Toyota, the inventor of Lean Systems has drawn the attention of academics, researchers, and executives in the last decades. However, existing lean research is largely focused on developed economies in Europe, the Americas, and in Southeast Asia with little focus on the Arab world in general and Qatar specifically. There has been an emergence of manufacturing organizations and Small and Medium- sized Enterprises (SME) in Qatar recently which was the focus of this research. Despite the many attempts to implement lean in organizations, there have been a large number of failed attempts.

This research aims to study the Qatari Manufacturing Organizations attempts in implementing lean. The main goal of the thesis is to shed a light on the current state of awareness of lean in Qatari Manufacturing Industry and SME and the potential barriers and challenges that prevent the successful adoption of lean. In order to do so, an online survey was designed through the SurveyMonkey tool and organizations were asked to participate. Numerical and statistical results from the survey are discussed along with Pareto charts and two hypothesis tests. The finding indicates that there is no difference between ISO certified and Non-ISO certified organizations in lean implementation. Further, it is understood that most of the manufacturing organizations in Qatar have some level of awareness of lean concepts/tools and practices. The results also show that organizations are not implementing lean concepts and are not using quality management practices effectively. The main obstacle that manufacturing organizations in Qatar face when implementing lean is "Lack of Employee Engagement" and "Unsupportive Organization Culture". However, it is noted that the research has some limitations such as having most participating organizations in the survey from specific sectors.

Major: Industrial Engineering

Educational Career:
Bachelor's of Industrial Engineering, BS, 2014, Arizona State University

Committee in Charge:
Ahmad Elshennawy, Chair, Industrial Engineering and Management Systems
Luis Rabelo, Industrial Engineering and Management Systems
Gene Lee, Industrial Engineering and Management Systems

Approved for distribution by Ahmad Elshennawy, Committee Chair, on October 14, 2019.

The public is welcome to attend.