

# **Impact of Knowledge Based Engineering (KBE) on Engineering Operations**

## **Executive Summary**

The primitive concept of Knowledge based engineering (KBE) originates from ancient Greece. In modern day, KBE utilizes specifically developed software to design and manufacture products. This paper focuses on the application of KBE on product design.

Thorough techniques and advantages in application of: missile design, aircraft design and armored vehicle design are researched. Utilization of KBE allows for early detection of errors and thereby, making it a cost effective modification. Other benefits include - early clarification of projects based on previous databases, risk reduction, detailing, documentation and overall efficiency improvement of product design.

The social impact of KBE is untested and therefore, is projected to impact the job market the most. Drawing similarities from statistical data available for administrative jobs in United States between 2001-2015, prediction is that KBE may increase jobs in other sectors such as software development. However, this isn't the case for emerging markets where any reduction in job opportunity may lead to social unrest, political instability and chaos.