Additive Manufacturing in Aerospace: opportunities and Challenges

Additive Manufacturing will displace traditional manufacturing when it is utilized to create differentiating products with improved performance and durability, in shorter timeframes and at lower cost by incorporating engineering designs that are not possible to fabricate with traditional methods. In highly optimized designs, there is no 'plan b' for traditional fabrication. Herein lies the quandary: engineers are taught to design for reduced risk, and therefore are naturally more comfortable designing for a manufacturing process that enjoys decades of statistical data. Hence in order for Additive Manufacturing to become a truly disruptive technology, the Additive Manufacturing community must demonstrate that risk associated with less than decades of statistical data is well understood and can be mitigated.