

# Technical computing

Technical computing can help commercial industries such as manufacturing, oil and gas and the life sciences with strategic tasks including product design and analytics, but many companies are not tapping its potential.

Over

70%

of members of the National Center for Manufacturing Sciences (NCMS) believe increased adoption of advanced computing would lead to **competitive advantages**.<sup>1</sup>



Only

6%

of the estimated 300,000 manufacturers in the US are fully taking advantage of **technical computing** today.<sup>2</sup>



## Technical computing achievements

**The Boeing Company** aims to use simulations to redesign the vertical tail of a commercial jet, potentially saving

**\$300 million** in fuel costs annually.



Using IBM technical computing, **Vestas Wind Systems** reduced their wind turbine placement analysis from weeks to less than

**one hour.**

**Red Bull Racing** used IBM technical computing software to simulate new car designs and achieved a

**20% increase**

in performance and throughput, coming up with a design that reduces their cars' drag on the track.



<sup>1</sup> InterSect 360

<sup>2</sup> Digital Manufacturing Report