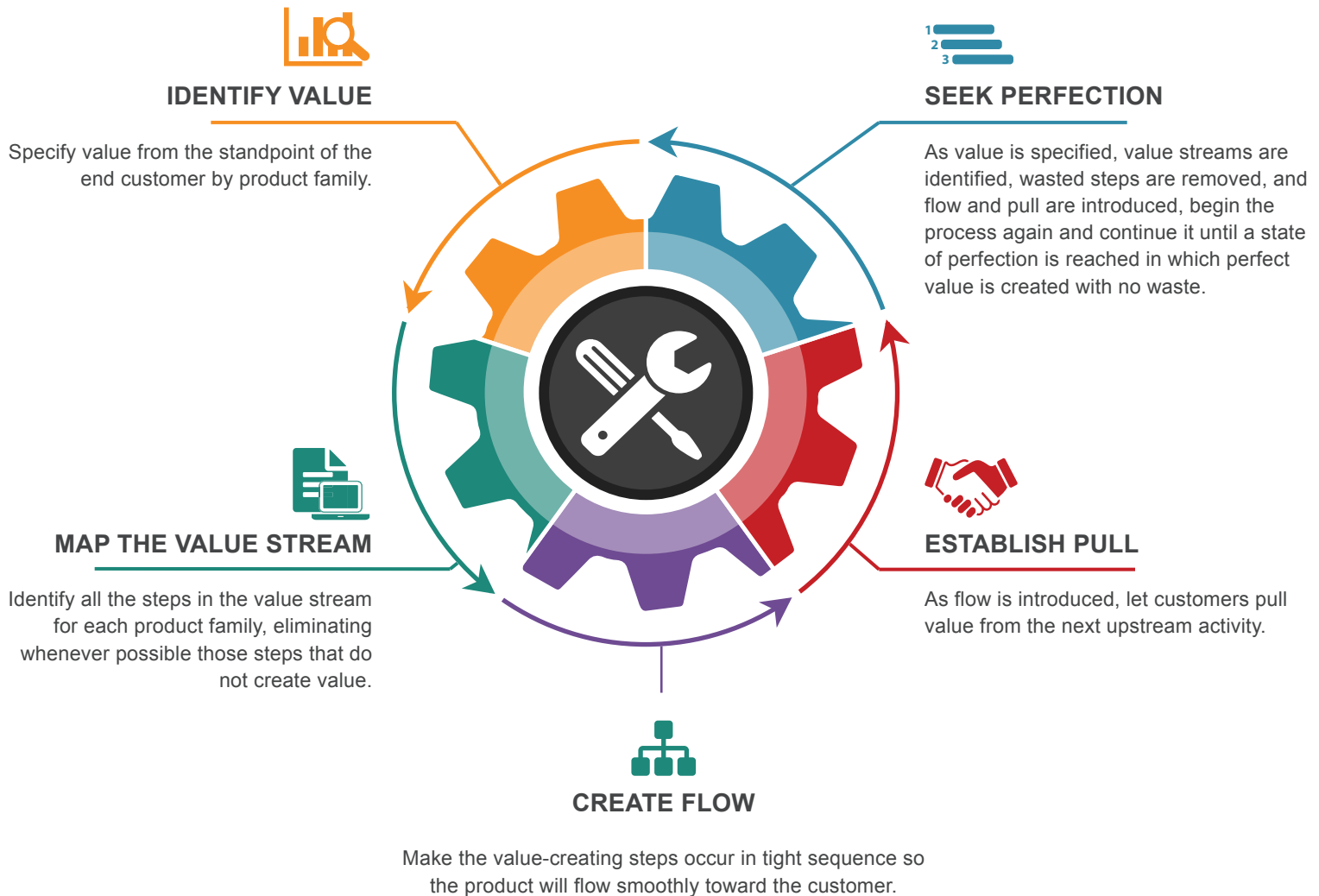


# 5 NECESSARY LEAN MANUFACTURING TOOLS

Sometimes, it's easy to forget that history is often made within our lifetime. Lean manufacturing is a movement established by Toyota Production Systems and is centered on clarifying what brings value by reducing everything else. The company, which transformed from a modest enterprise to the world's largest automotive manufacturer, forced business leaders to wonder about the secret of Toyota's success.

In 1988, engineer John Krafcik gave the west a better understanding of the Lean way after working with Toyota. His watershed article opened a floodgate of new ideas for the world's managers. While Lean features many sub-processes, the following are five essential tools to help managers with an overall understanding of the idea, posited by one of the movement's leaders, James P. Womack, who founded [www.lean.org](http://www.lean.org):



The five principles above are a brief introduction to Lean. To delve deeper into the subject, see CMTC'S Guide to Six Sigma.