## MAWATARI LAB.

## [Intelligent Technology for Highly-Skilled Handwork]

Department of Mechanical and Biofunctional Systems

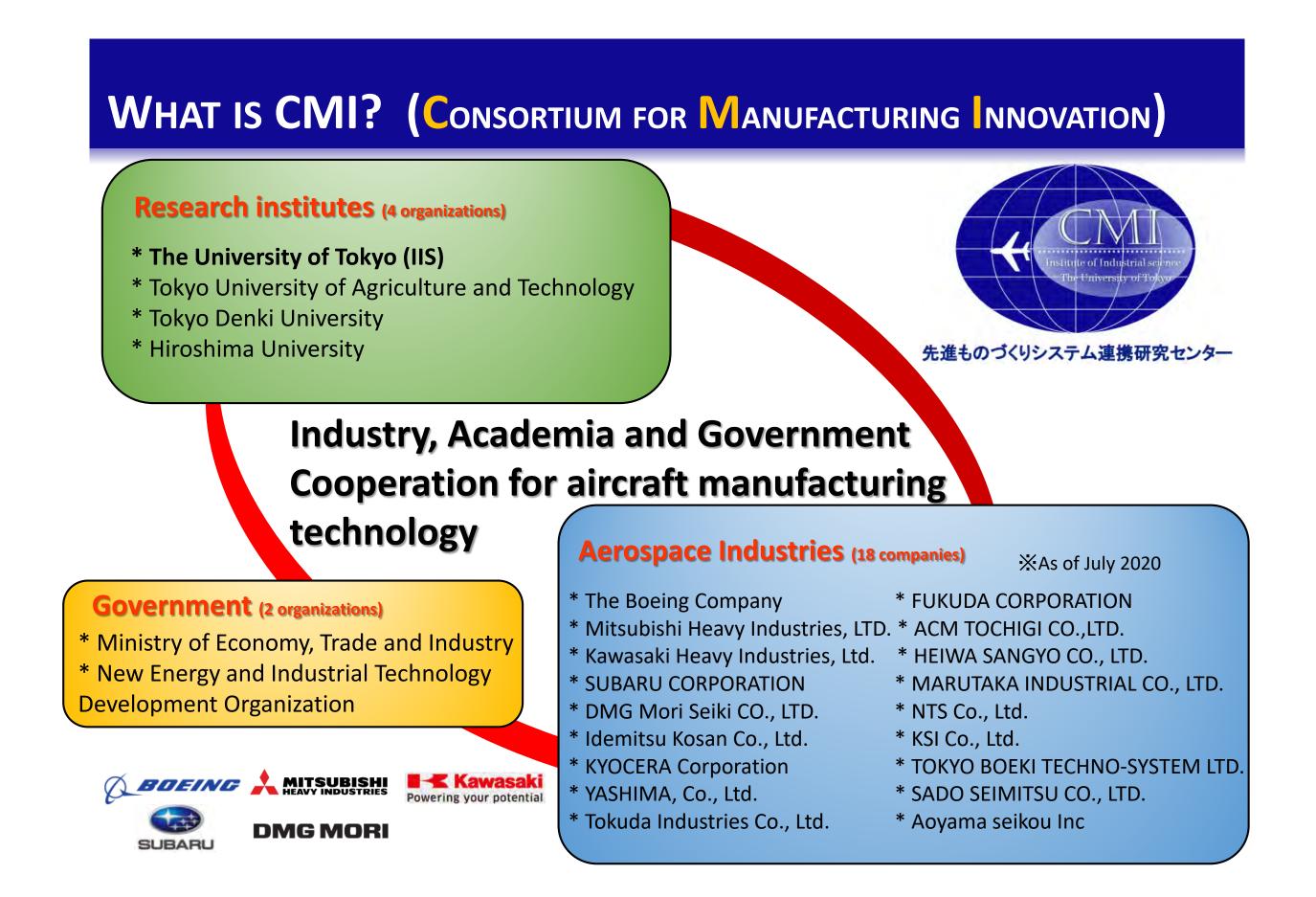
Intelligent Manufacturing System

Department of Mechanical Engineering

https://www.cmi.iis.u-tokyo.ac.jp

Mawatari Lab belongs to the Consortium for Manufacturing Innovation (CMI) established in April 2013. Through Industry, Academia, and Government Cooperation, CMI will proceed progressive and innovative R&D of manufacturing and contribute to rapid and high value manufacturing, environmentally conscious manufacturing, and manufacturing with minimum natural resources and less amount of rare metals.





In CMI, Mawatari Lab especially focuses on developing intelligent technologies for highly-skilled handwork in industry. There is an increasing need to automate handwork by skilled workers in industry. However, that handwork is usually difficult to express clearly in words. Furthermore, human's motion contains time and spatial perturbations, and this makes the automation even more difficult. Mawatari lab is constructing mathematical methodologies to quantitatively evaluate highly-skilled handwork, and to establish principles for automation by robots and for workers learning the handwork.

