

Robotics supports the food industry sector in its transition towards Industry 4.0

Product Watch: Robotics for food processing and preparation

Industrial robotics for food processing and preparation, including collaborative robots for repetitive tasks in food preparation, may help tackle challenges within the natural (e.g. climate change) or socio-economic (e.g. globalisation) environment, as they enable the flexibilisation and automation of food production processes.

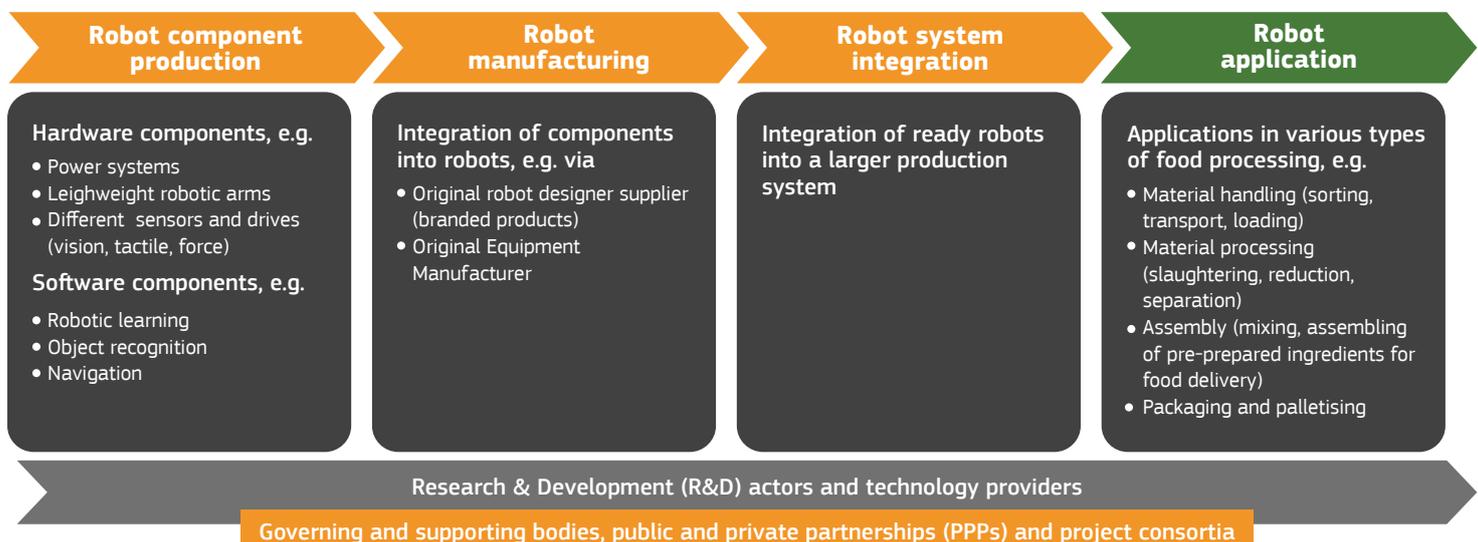
The most significant industrial robot capabilities and their possible benefits to food manufacturers are to:



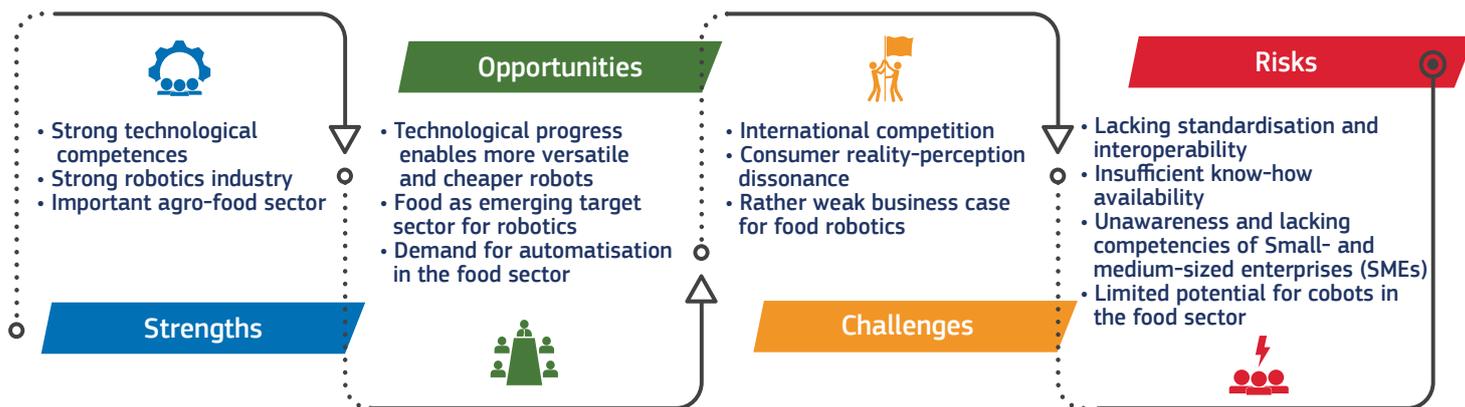
The robotics value chain comprises of four core steps. Depending on the specific robot type different aspects of the chain are important.

Food robots are industrial robots which are used for food processing activities, like sorting, handling and packing. They may either work without immediate human presence or alongside human workers with varying degrees of human-robot cooperation. Robots characterised by an advanced degree of collaboration capabilities are sometimes referred to as "cobots". Since food robots have typically originally not been developed for this sector, the supply chain below depicts the generic robotics value chain.

Generic food robotics value chain



EU competitive positioning for industrial robotics value chain



The EU robotics value chain seems well-equipped to enter further markets such as food processing



About the Advanced Technologies for Industry (ATI) project

The ATI project – funded by the European Commission – supports the **implementation** of Europe's new growth strategy with a systematic monitoring of **technological trends** and reliable, **up-to-date data** on advanced technologies.



The **Product Watch** analyses novel products that are based on advanced technologies for the development of goods and services – enhancing their overall commercial and social value. It supports cluster organisations and S3 partnerships, providing intelligence on innovation areas where European regions could team up and invest together.

For more information, read the full Product Watch report on Robotics for food processing and preparation here: <https://ati.ec.europa.eu/reports/product-watch/robotics-food-processing-and-preparation>

