

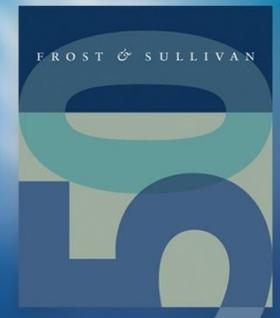
Advanced Manufacturing Technology (TechVision)

Robots as Next-Generation Chefs

“Robot Chefs Capable of Cooking Food”

D718-TV

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Innovations—Robot Chef to Prepare Food

Moley Robotics–MK1 The Robotic Kitchen

Robotic arms programmed to cook meals and then clean the cooking station

The MK1 is a robotic kitchen which consists of two robotic arms and hands, an oven, a dishwasher, a cooking unit and a touchscreen. ...

Technology Readiness Level

1 2 3 4 5 6 7 8 9

Moley Robotics is currently working on optimizing the prototype of MK1 kitchen. Future version are expected to have motion capture cameras...

Attributes of Innovation

This robotic kitchen is capable of cooking pre-loaded meals and then cleaning up the cooking station afterwards. ...

Market Readiness and Commercialization Strategy

✓ Moley Robotics is currently in discussion with housing developers and builders...

Commercialization/Wide-scale Adoption Year

Moley Robotics has decided to launch MK1 for sale by the fourth quarter of 2017. Particularly with expanding capabilities such as vision, it has opportunities to gain market presence or traction around 2020.

Impact on Industries/Specific Applications

This novel technology has opportunities to impact the food and construction industries. Many restaurants and households could adopt this technology for cooking purposes. The construction industry has potential to install these robotic kitchens instead of modular kitchens in the future.

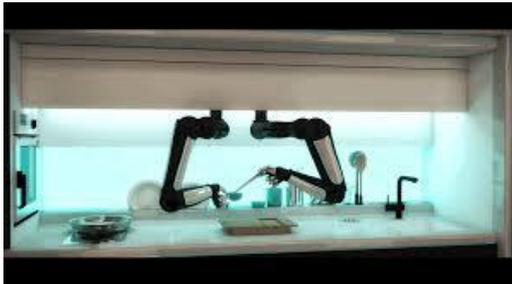
Market Opportunity

- ✓ Food
- ✓ Construction
- ✓ Space
- ✓ Military
- ✓ Consumer/household

Technology Convergence

The robotic arm and hands, new software interface and system, new programming platform, and the kitchen unit on the whole can open up new application opportunities in the above industries.

Impact & Opportunities



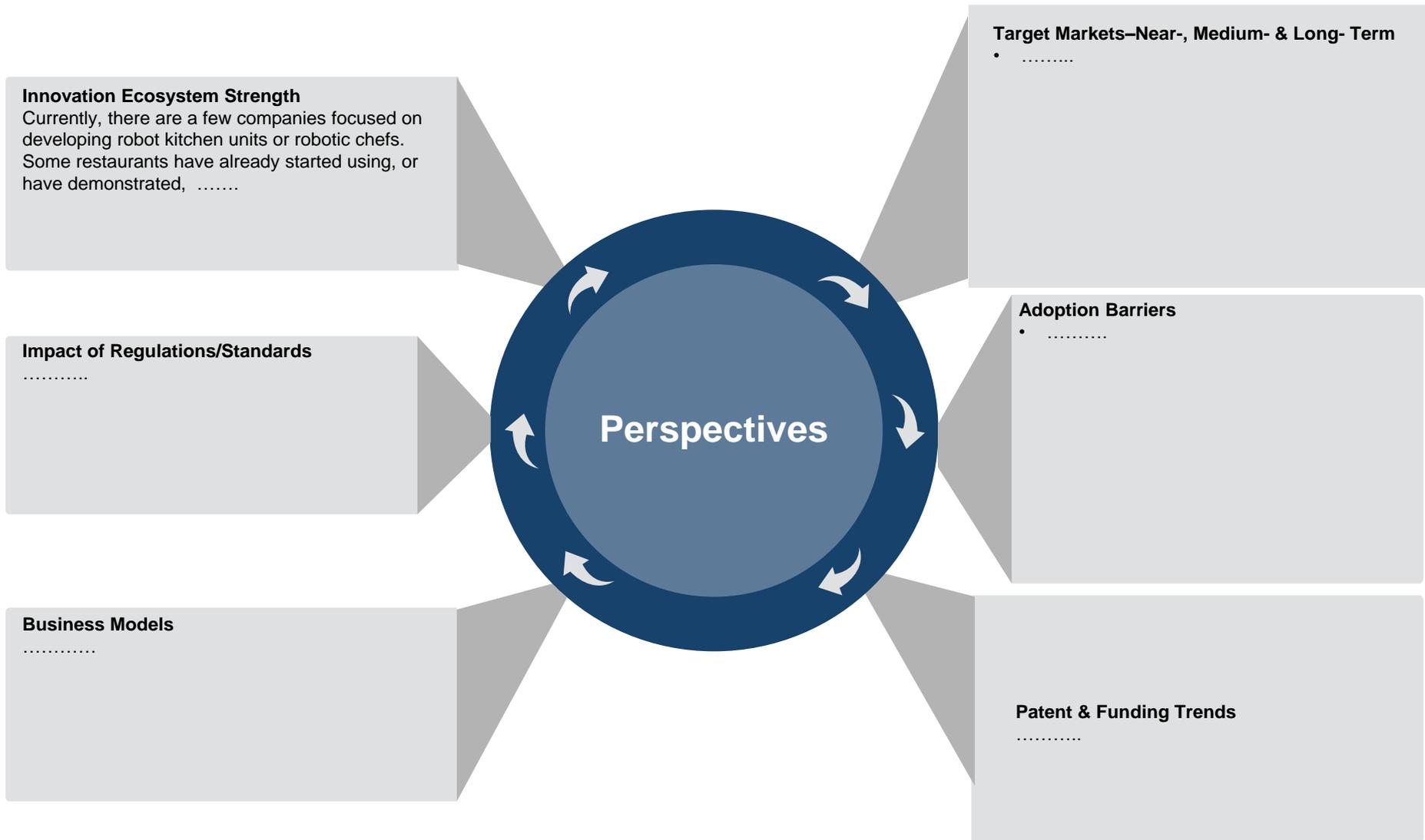
Competing Aspects

- ✓ Integrated and easy cooking.
- ✓ ...
- ✓

Strategic Perspectives

Analyst Perspectives

Robot Chefs to Enter the Food Industry



Key Patents

No.	Patent No.	Publication Date	Title	Assignee
1	CN104433829	March 25, 2015	Cooking robot	Nanjing Dawu Education And Technology Co., Ltd.
	<p>The invention relates to a robot which is composed of a seasoning rotating device (1), a food material rotating device (2), a rotating main shaft (3), a weighing sensor (4), a material taking device (5), a material outlet (6), a data transmission device (7), a special cooking pan (8), a temperature sensor (9), a stir-fry tool (10) and an industrial control device (11). According to the working principle, movement of the whole machine is controlled by the industrial control device (11); when vegetables needing to be dried are selected by a user, the cooking robot begins to work, the standard ingredient and the standard mass will be selected by the cooking robot according to menus; the rotating main shaft (3) rotates to drive the seasoning rotating device (1) and the food material rotating device (2) to conduct multi-angle position conversion; and only food materials and seasonings in given transmission masses can be added by the material taking device (5) according to pressure transmission of the weighing sensor (4). The material taking intelligence is achieved.</p>			

Industry Contacts