



PICK-A-FUTURE

Next Generation Fresh Fish Picking System and Spectral Quality Control

EIT-M Summit 2020







Project & consortium



• The Vision

- Develop and deploy a unique Next Generation Fresh Fish Picking System and Spectral Quality Control based on the Human-Robot Collaboration (HRC) mindset;
- Redesign the current whole fresh fish process within one of the Sonae's Warehouses to a new and novelty HRC process, including mainly two new disruptive solutions:
 - A ground-breaking and kindly fresh fish picking system;
 - 100% check system, traceable and constant quality inspection.
- The consortium
 - Sonae MC as the activity leader, including Siemens, KUKA, CEA







Market needs & opportunities









AS IS vs. TO BE scenarios















- New & novelty integrated solution for fresh fish market (7 other sectors)
- Increased yields and outputs (↗ ergonomics, health & safety)
- Spectral quality control (from sampling to 100% checks | additional safety)
- Kindly Picking System (7 food sector and others)
- Migration of some operators to other needed & new processes
- European innovation culture







Try to set the bar higher with innovative solutions

- As fresh fishes present diverse sizes, shapes, appearance and deformable nature...
 - The challenges for the technology and innovative solutions that will be developed through the PICK-A-FUTURE project are highly challenging;
 - Human-Robot Collaboration approach along all the (re)design process that is being developed and deployed, including several side investments along the line but mainly at the end of it.





AS IS Scenario, details



Moment zero: Quality control is done at reception by sampling

Operators bin pick big white trays to green smaller trays due to store needs. Visual inspection of size and weight is done for correct split



 Ice

 Ice

 Dispenser

 2

 Shipping

 out





TO BE Scenario, details



Grasp & Spectral Quality control evolves and learns over time.





Societal & Manufacturing challenges

- Societal Challenges
 - Food Security
 - Health
 - Wellbeing
- Manufacturing Challenges
 - Faster and better production
 - Safety & health & ergonomics solutions
 - Productivity based on integrated and disruptive solutions
 - Attractiveness for young people







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