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Food Manufacturing Engineering Group

Food Factory of the Future

4th September

Media City

Salford.

Introduction

- Introduction.
- Virtual tour of the NCFM.
- ***Food Factory of the Future***
 - ***Data, Information, Supply Chain Integration and Industry 4.0***
 - ***Manufacturing Technology***
 - ***Automation and Robotics***
- Questions / Panel Debate.

Holbeach Campus

- The specialist site to support the Food Industry in the UK and Europe.
- Recently renamed the National Centre for Food Manufacturing.



Expertise

- Food Industry
 - Technical
 - New Product Development
 - Manufacturing
 - Training / CPD
- Other University Departments, Schools and Research Groups.
 - Engineering
 - Computer Vision
 - Biological Science



Food Factory and Innovation Centre



Facilities



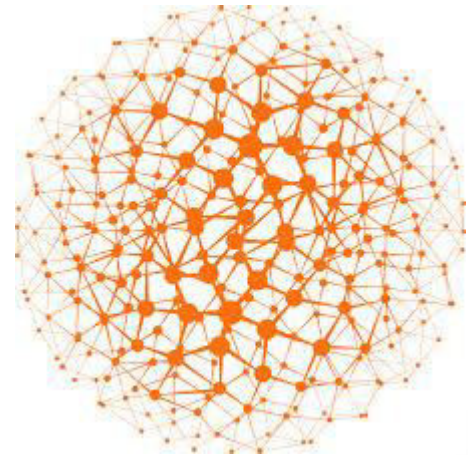
Food Factory of the Future

- **Data, Information, Supply Chain Integration and Industry 4.0**
 - Automatic data collection networks
 - Improved informatics and visualisation
 - Integrated supply chain information flows



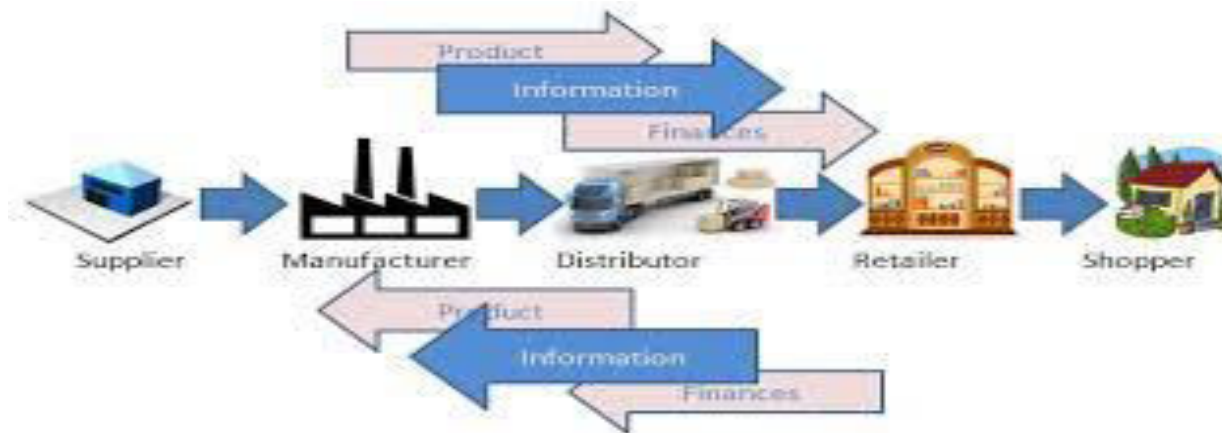
Improved informatics and visualisation

- Conversion of Big Data into useful information
 - Linking and analysis of data from all sources
 - Automatic responses from the process
 - Manual responses based on real information and not “gut feel”
 - Improved forecasting of demand
- Data storage in data banks
- Data sharing and analysis
- Strategic uses of Food Industry Information by regulators, politicians and industry groups



Integrated supply chain information flows

- Linking all of the supply chain
 - Supply chain optimisation and not local optimisation
 - Automation of decision making
 - Raw material supply
 - Labour supply
 - Harvesting, delivery and production scheduling
 - Vendor Managed Inventory (VMI)



Manufacturing and Processing Technology

- Improved processes and control
 - Lower energy
 - More flexible and responsive
 - Less waste more resource efficient
 - Higher Overall Equipment Effectiveness (OEE)
 - Easy to maintain and clean
 - Online support for operators and local staff
 - “Plug and Play” compatibility
 - Links to MES and ERP systems.



Automation and Robotics

- Moving towards a “factory in a tube”
 - Fully automated process and packing operations
 - Controlled processing and packing environment
 - Lights Out operation
- Robotic assistants
 - “soft robots” working around people
- Warehouse Automation
 - Self directed robotic picking



Contact Details

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- Or Via FMEG

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