The Royal Academy of Engineering

Senior Research Fellowship

Sensors University Innovation Centre

Co-funded by Syngenta Agribusiness

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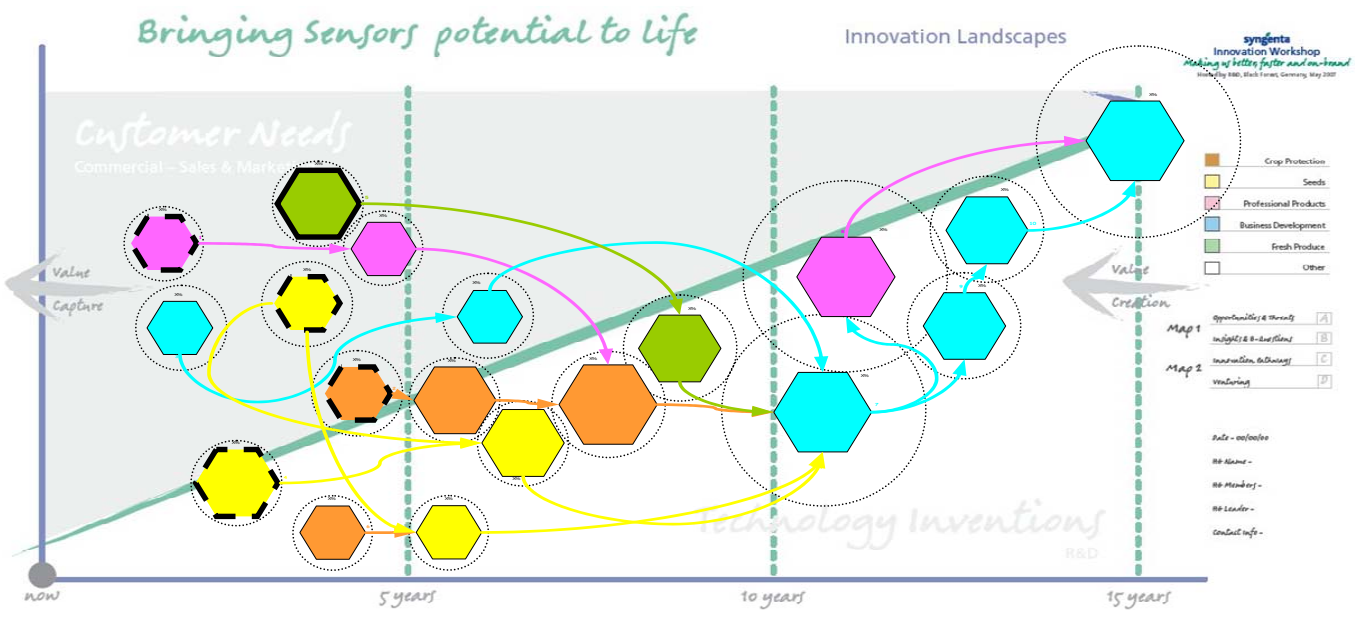
Sensors: "Changing the Rules of the Game"

- Motivation
  - ***"World population will grow from 6.5bn (2006) to 8bn by 2025 and 9.3bn in 2050. By 2020 many governments intend that substantial volumes of transport fuel must be derived from agriculture."*** - US Census Bureau estimates (July 2006)
  - ***"Our ability to deliver the purpose of R&D, 'Powering Growth through Innovation', resides in being able to reach beyond what is known today and grasp the must-have technologies, disruptive discoveries and breakthrough products of tomorrow."*** – Syngenta Biotech Landscape (January 2007)
- Objective
  - Create innovative business and customer solutions by embedding sensors and related technologies alongside Syngenta's existing products
- Why the UIC model?
  - Accelerate knowledge transfer from academic groups to integrate with Syngenta commercial development
  - Deliver proof-of-concept systems for field and market trials
  - Be a mechanism to access public research & incubation funds
  - Create new technology supply chains to globally source the sensor products
- Why Manchester for the first Syngenta UIC?
  - An enthusiastic environment for interdisciplinary research partnering following 2005 merger of Manchester and UMIST
  - An appropriate, but not complete, portfolio of affiliated research activities
  - An infrastructure to house critical mass & create the technology pipelines
- Landscaping
  - Living maps that are augmented by re-applying breakthrough questions
  - A dozen themes, including Sensors, investigated in 2007 leading to Syngenta SEC meeting September 07



Where we are now: Launched January 07, Initially 5 people, Formal opening November 07

syngenta
Sensors UIC

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