

Good practices for innovation: Case studies with Irish food industries

Shivani Pathania, Ph.D. Food Formulation Scientist Teagasc Food Research Centre, Ashtown, Dublin 15, Ireland



Shivani.pathania@teagasc.ie



Content

- Introduction
- Innovation drivers
- Why Innovate together?
- Case studies
- Lessons learnt







- Process of creating and putting into use combinations of knowledge from many different sources
- Knowledge may be brand new, but usually it is new combinations of existing knowledge





Innovation requires...

- Government policy to support collaborations
- Money from Industry and "brain" from academics
- Funding from both sides
 - To solve real life and technological issues
- Identification of
 - Relationships
 - Common goals
 - Resources



"Building collaborative relationships with universities...is by far the best way to ensure they are responding to industry needs"





Why innovate together?

Advantage for research organisations

- Money/funding for the group
- Access to industry resources, knowledge and contacts

Advantage for industry

- Access to world class researchers
- Access to state of the art knowledge of the field
- Access to innovative findings

Consortium

- To solve common issues
- Generalized results
- Less costs























DPTC research programme





SCORE CARD									
G	0	6	S.No.	Technology	INTEREST	RANK	COMMENTS		
			1	Technology 1					
			2	Technology 2					
	F	Proje outlin	3	Technology 3					Get to work
			4	Technology 4					
			5	Technology 5					
			6	Technology 6					
			7	Technology 7					
			8	Technology 8					

SCORE CARD

Please rank from a scale of 1 to 5.

1 = Least preferred to 5= strongly preferred













Lease ->

Rent →

The way we did it!!

Case study I: Application of Hydrodynamic cavitation (HC) on instant rehydration of dairy powders

Food for thought

- Industry comments
 - Ireland manufacture ingredients, this is secondary processing
 - Powder functionality does not concern Irish manufacturers
- Rebuttal
 - Saves processor's 16h in one process
 - Could significantly improve sales of difficult to rehydrate powders



Results:

Industry outcome

- Innovation in dairy sector
- Cause and effect study
- TRL >8

13

 Companies adapting the technology

Project output

- Research article
- Technology demonstration
- Further research on chemical effects of HC on product matrix





Table 1: Viscosity, total solids, density and particle size distribution of MPC 80

AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY

Case study II:

Novel Application of forward osmosis (FO) in concentrating protein concentrates .

Industry comments

- Already using commercial membrane filtration systems, interested in novel applications of FO
- Interested in knowing the concentration potential
- Response
 - Positive





Results:

Potential industry outcome

- Ability to concentrate dairy streams by non thermal process
- Scalable unit available

Project output

- To be published
- Technology demonstration
- Novel non-thermal technology scouted, application analysis performed



EvapEO forward osmosis unit



Seven best practices

- 1) Define the project's strategic context as part of the selection process
- 2) Select *boundary spanning* project managers
- 3) Share, with your team, the vision for how the collaboration can help the company
- 4) Invest in long-term relationship



Pertuze, J., Calder, E., Greitzer, E., Lucas, W. "Best Practices for Industry- University Research Collaborations," *MIT Sloan Management Review*, Forthcoming July 2010.



Contd..

- 5) Establish a strong communication linkage with the research team
- 6) Build broad awareness of project within the company
- 7) Support the work internally both *during* the actual contract and *afterwards*, until the research can be exploited



Pertuze, J., Calder, E., Greitzer, E., Lucas, W. "Best Practices for Industry- University Research Collaborations," *MIT Sloan Management Review*, Forthcoming July 2010.



Lessons learnt

- Lessons Learnt
- Move towards open innovation paradigm
 Go beyond the recognition of problem: prov
- Go beyond the recognition of problem: provide actionable solutions
- Project outcomes must be aligned with company's interests
- ✓ No result is also a result, record it





много вам хвала



