



## Knowledge Exchange Seminar Series (KESS)

*...is a forum that encourages debate on a wide range of research findings, with the overall aim of promoting evidence-based policy and law-making within Northern Ireland*



Benefiting a regional economy with societal-driven innovation adoption in high-tech small firms

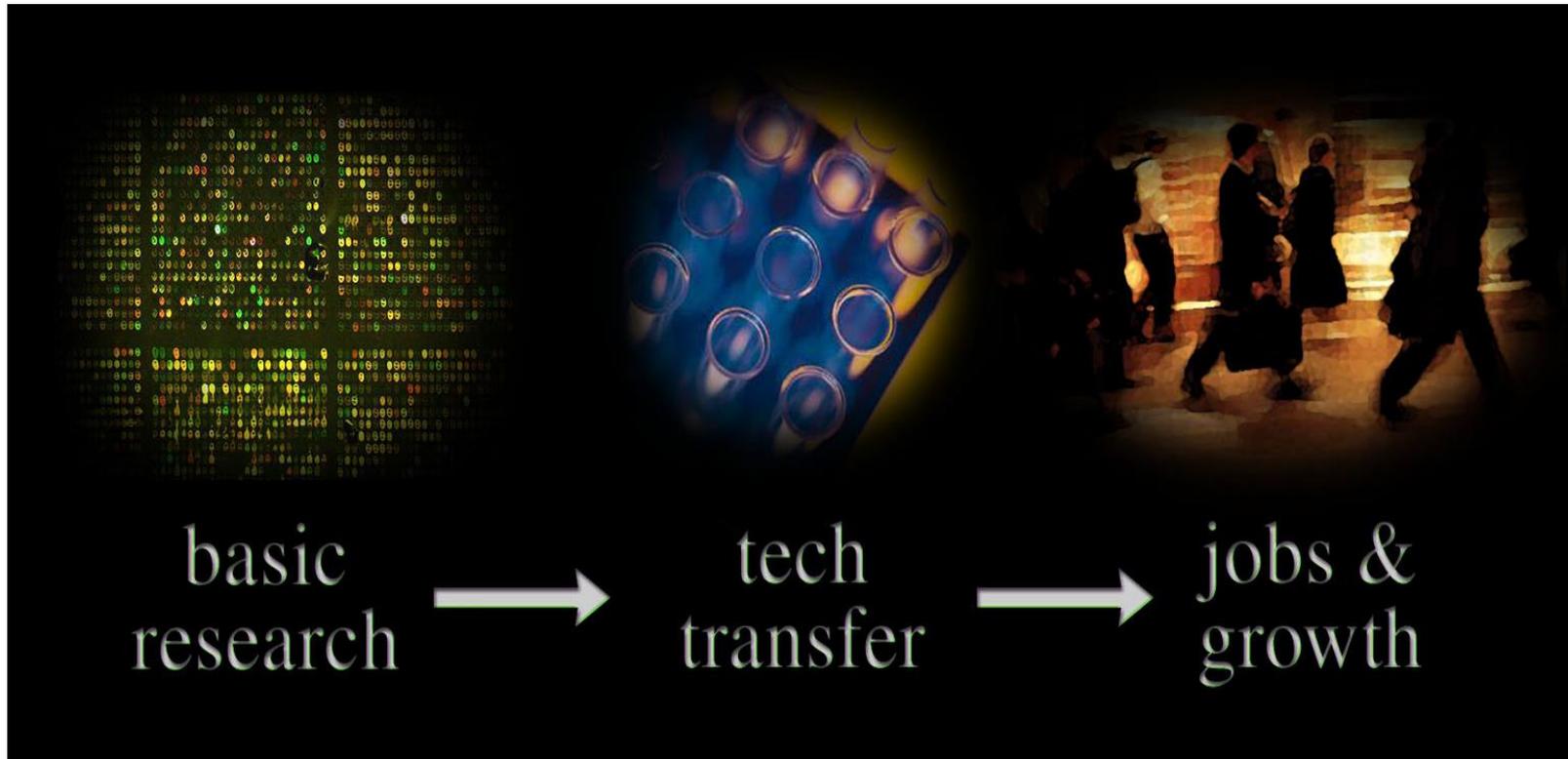
Dr Brendan Galbraith, Senior Lecturer  
Kirsty McManus, Director Centre for SME Development  
Ulster University Business School

# Overview:

- Rethinking Innovation
- The Big Societal Challenges
- Rethinking the Start-up Model
- Societal Innovation Models
- Innovation adoption in the social sector
- Policy and future developments



# The Linear View of Innovation



- Policy emphasis on inputs & outputs. Easy to measure
- Accepted wisdom of RBV of firm & large internal R&D capabilities
- European Paradox. Lack of innovative SMEs & collaboration
- Linear view too simplistic – does not capture complexity of innovation
- Line between R&D is blurred, 1:1000 ideas = commercial success

# The Big Societal Innovation Challenges

Europe 2020 strategy - €29 billion allocation for societal challenges

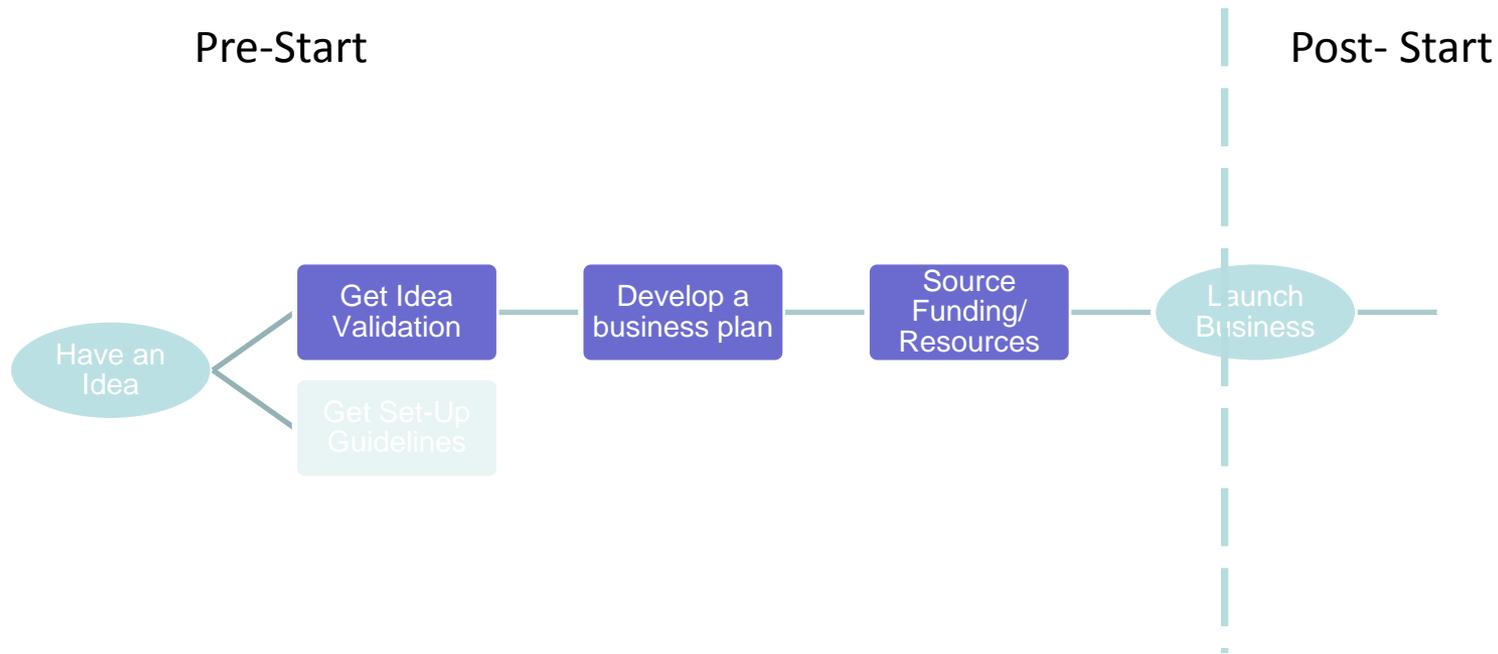
**Complex & risky** problems call for diverse types of knowledge, resource, participation and collaboration.

Behaviour change requires the motivation of millions of individuals and their communities; solutions cannot be pushed. **Eg Nokia SMS**

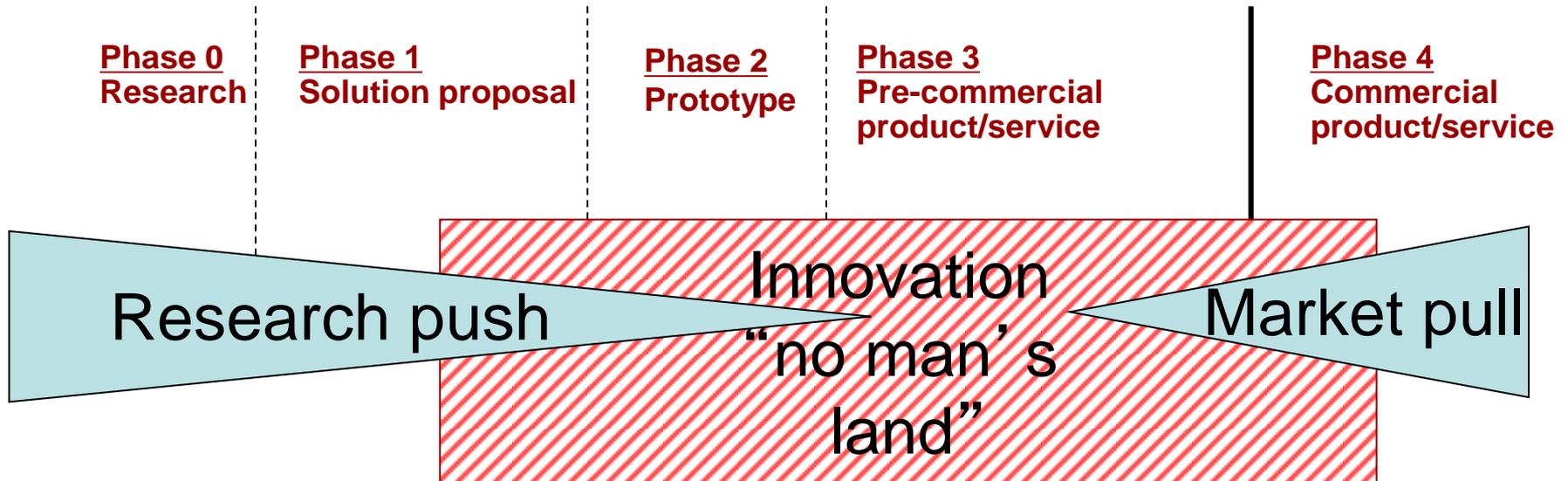
No matter what functionality a product offers its the ***ease of use that is the key differentiator*** particularly in relation to technology-based products and services.

New, distributed and highly participatory systems imply new roles for public and private spheres: demand/user/citizen driven open RDI enabled by ICT for service creation.

# Re-thinking the Traditional Start-Up Model



# Rethinking innovation: European Paradox

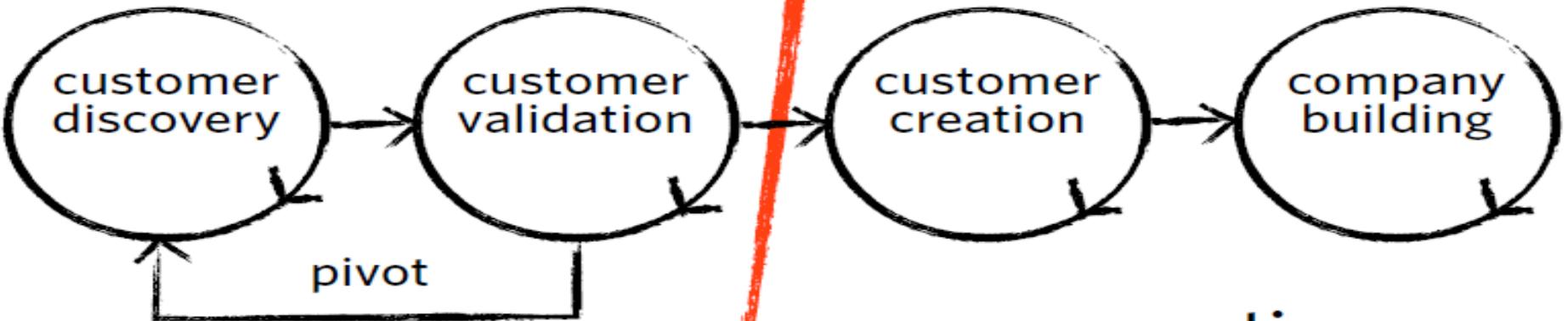


# New Start-up Model

Attempts to prematurely scale is No 1 reason that ambitious business start-ups fail (Source: Start-up Genome)

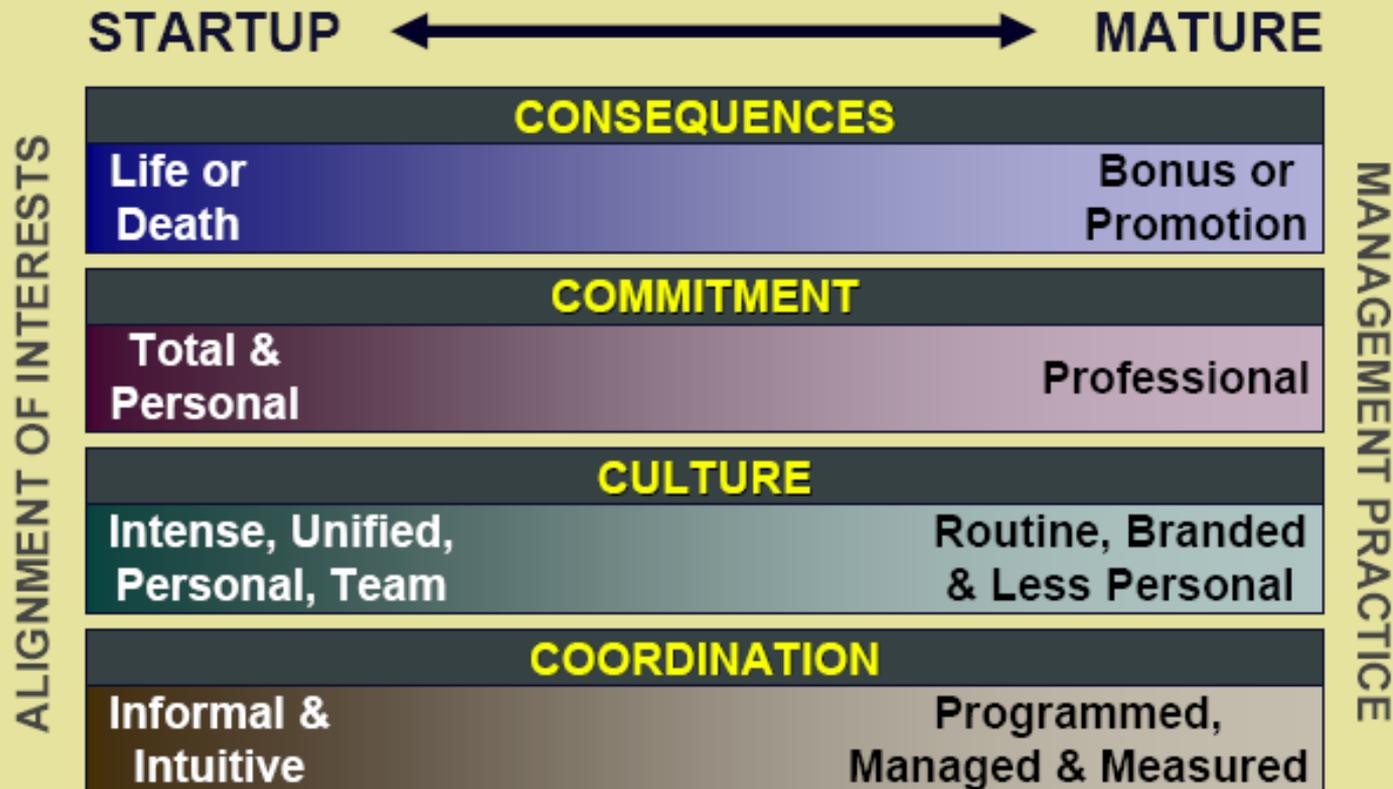
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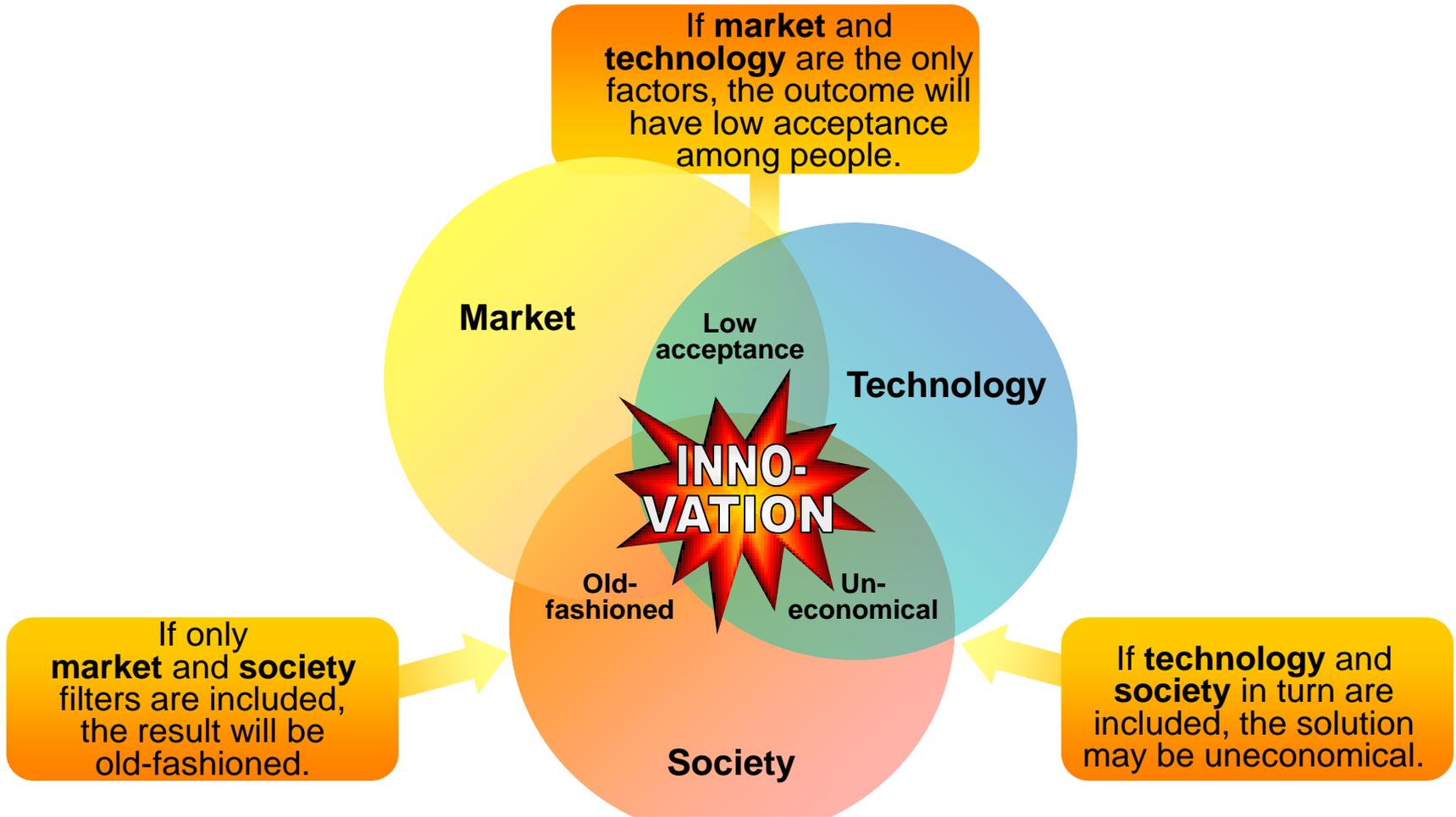


# Start up culture helps innovation adoption

## Alignment vs. Management Organizational Attributes

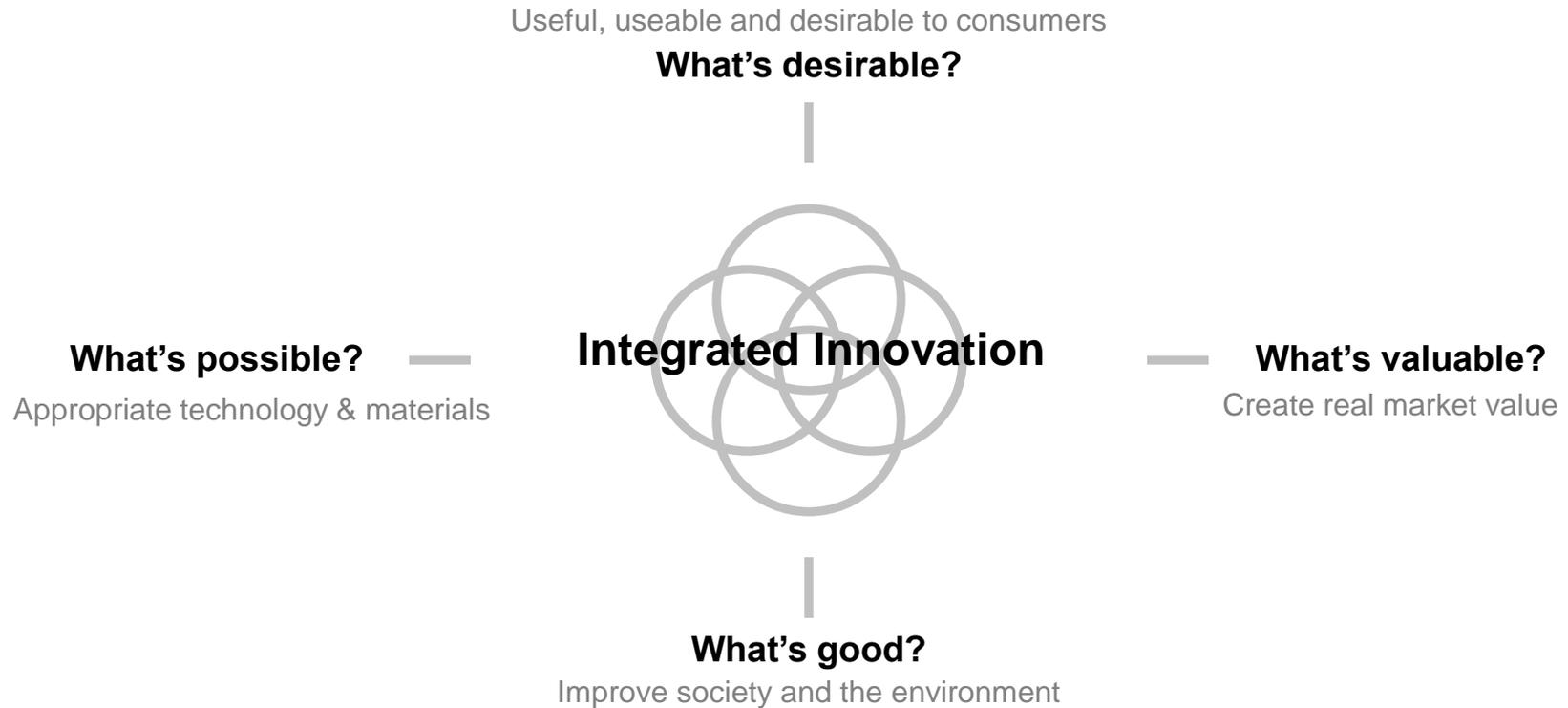


# Societal Innovation: Users, Technology & Market



# Societal Innovation Business Model

## Innovation Space Program: Arizona State University



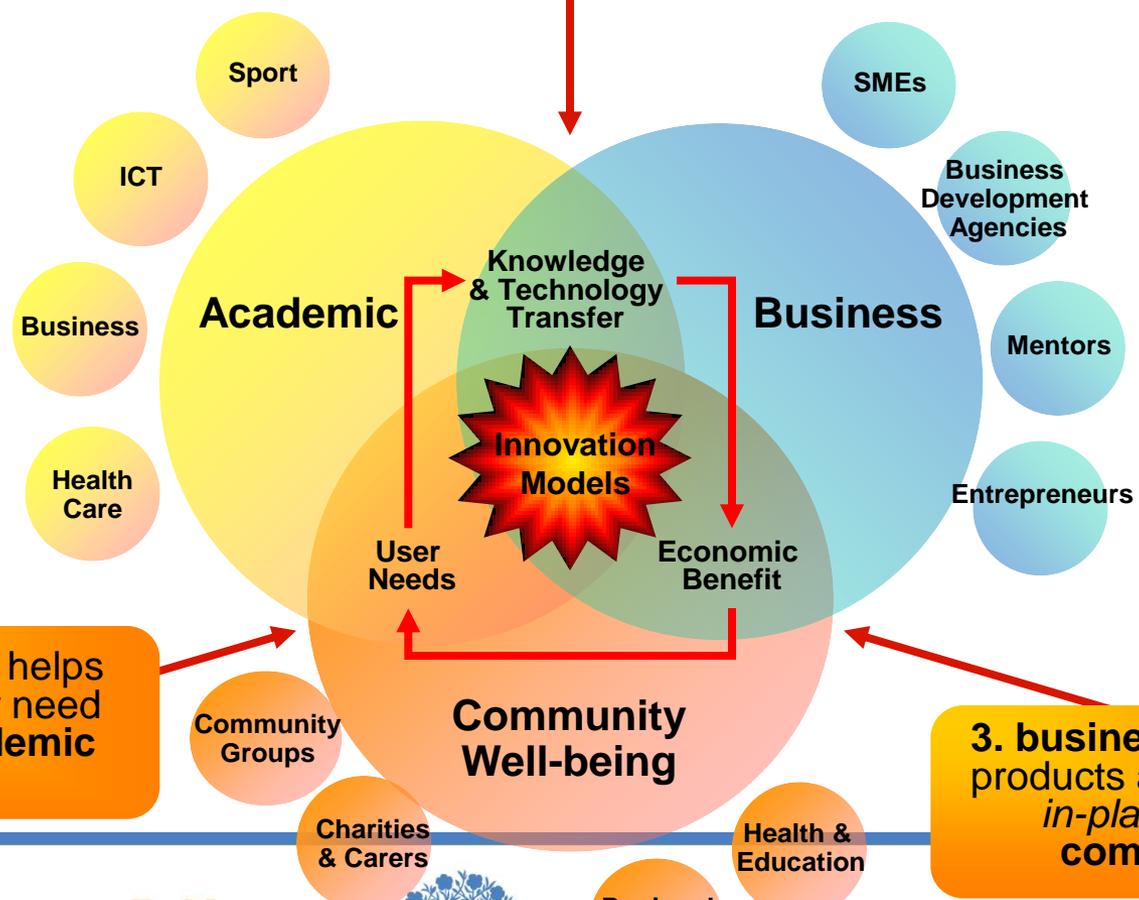
## Example: Ulster Living Lab

### Quadruple Helix

-State-Bus-Acad-Users

- User-driven
- Users are the **subject**
- Appropriation
- Bottom up seed project

2. academics can facilitate knowledge transfer preparatory activities



1. community helps to identify user need to inform academic activities

3. business develops products and services *in-place* in the community



# Innovation Adoption in the Social Sector

More than \$1 trillion annually flows through nonprofit organizations in the US

An important intermediary between firms and government

***Source of innovative ideas and policies***

Source of alternative delivery mechanisms

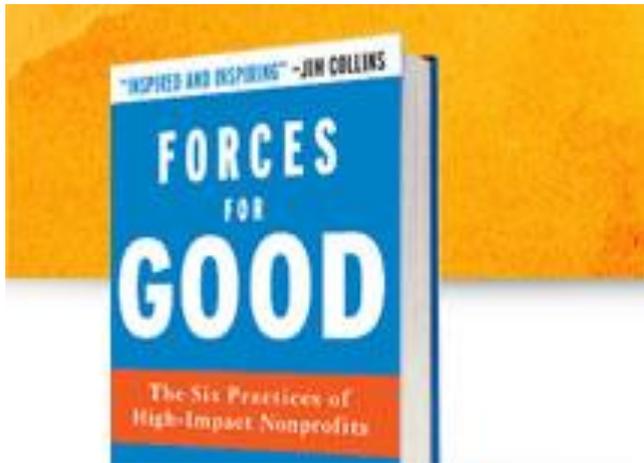
Bottom up, vs. top-down

What distinguishes effective nonprofits/social enterprises?



# What distinguishes effective social enterprises?

“The secret to **success...[in nonprofits]** **has more to do with how nonprofits work outside the boundaries** of their organizations than how they manage their own internal operations”



Grow with authenticity” by:

“Remaining focused on your core mission”

“Be on purpose, stay on purpose”

“Spend a lot of time on how you measure social impact”

“Do what you are good at & partner the rest”

“Clear criteria on who you partner with... baby steps”

*(International social franchise service providers, Emerge 2014)*

# What distinguishes effective social enterprises?



## FP7 Project: MAPEER SME (Making Progress & Economic Enhancement a Reality for SMEs)

- 15 partners covering EU27 & Bosnia & Herzegovina
- Total Project value @ €1.5 million
- How to pave the way for SME-friendly R+D+I programmes?
- To identify, map and analyze all those programmes and initiatives that assist the collaboration between science and SMEs
- **Inputs:** 185 R&D programmes, @800 SMEs surveyed, 30+ round table meetings, 4 x EEP meetings

[www.mapeer-sme.eu](http://www.mapeer-sme.eu)



# MAPEER SME Policies & NI Context

## 10 Open innovation – orientated policy recommendations voiced by SMEs

- Policies can promote quadruple-helix collaboration & seed bottom-up projects
- SME-SME collaborations have significant impact
- Universities perceived as of major importance for SME collaboration
- OI policies can recognise **process** of R&D&I not just linear – *‘inputs & outputs’*
- Policy can help **integrate** & **protect** the tailored involvement of SMEs in R&D&I projects
- Spin research into existing SMEs (eg. Special Effects)
- UK University REF increasing emphasis on impact (economic and/or social)



# 21st ICE & IEEE International Technology Management Conference 22<sup>nd</sup> - 24<sup>th</sup> June 2015, Belfast, Northern Ireland

**“Engineering Solutions for Societal Challenges”**



Local organiser/Chair: Dr. Brendan Galbraith  
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Circa 400

of our undergraduate students go on placement each year

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- Number 1 in the UK for Management Studies
- Number 2 in the UK for Economics
- Number 2 in the UK for Food and Beverage Studies



We are Northern Ireland's leading business School for research (Research Excellence Framework 2014)

The world leading economic and societal impact of the School's research places us...



...in the UK out of 101 business schools



# SME CENTRE AT ULSTER UNIVERSITY BUSINESS SCHOOL

## Vision:

“The Centre for SME Development (CSMED) is a trusted source of business growth expertise and support. We deliver leading practical knowledge and skills and develop long-lasting business networks through the active involvement of successful entrepreneurs and internationally recognised academics. CSMED will advance an agenda around innovation, competitiveness and other business values on behalf of the SME community”

## Strategic Aims:

- Create and promoting flagship management and leadership programmes for growth orientated SMEs;
- Support innovation, capability building and competitiveness amongst SMEs;
- Become a thought leader and source of best practice for SMEs via our events, research and knowledge transfer activities and publications.

2015

1975

40  
YEARS  
OF  
SUCCESS



## Advocacy and lobbying

- On issues of relevance for SMEs by influencing relevant areas of public policy and resourcing and with the Centre position informed by relevant and credible research and monitoring of such issues.
- Developing the profile of the CSMED in influencing political agendas throughout Northern Ireland in order to help achieve benefits for SMEs in relevant strategic areas.

## Communication

- Internal communication: engaging with key academics and advisory board members to maximise the effectiveness of the Centre, in particular with winning the support of local SME businesses.
- External communication: communicating effectively with the wider business community and policy makers, Government and relevant state agencies and advisory board members

## Networking

- providing an effective network for SMEs in partnership with our advisory board members.

## Collaboration

- The CSMED has a number of important partners, in particular Invest NI, InterTradeIreland, Enterprise NI, Department for Employment & Learning and other relevant state agencies.

## Thought Leadership

- Providing strategic leadership thinking around SMEs and become a think tank for addressing the challenging environment in which SMEs currently operate.

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Northern Ireland  
Assembly



Queen's University  
Belfast



The Open  
University



Ulster  
University

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