Transferring Technology Transfer

Ramping Knowledge Transfer

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Introduction

- The National Context and Our Consortium
- Our Partners Needs
- How we do our job
- What works and what doesn't
- Examples of how it has worked so far
- The Future …

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The Irish National Context

- Technology Transfer Strengthening Initiative (TTSI) 1 and 2
    - State funded TT system hosted by the Universities.
    - Initiated in 2007-2012 (€30m) and renewed in 2013-2016 (€22m)

- National IP Protocol
    - Developed by a broad cross-section of stakeholders
    - Introduced in 2012 to cover the use of IP from state funded research
    - Bring clarity to all stakeholders as to who owns and how access is granted

- Department of Jobs and Innovation
    - Post downturn into recovery: emphasis on Impact through Job Creation.

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TTSI 1 to TTSI 2 to …

- TTSI 1 programme delivered through Enterprise Ireland was to build TT capacity and capability within the HEI sector

- TTSI 2 aims to develop of a fast, flexible response to industry's requests for access to intellectual property and give spin-out companies the best possible start.
  - Formation of regional clusters of RPO's sharing of resources, expertise and broadening capability
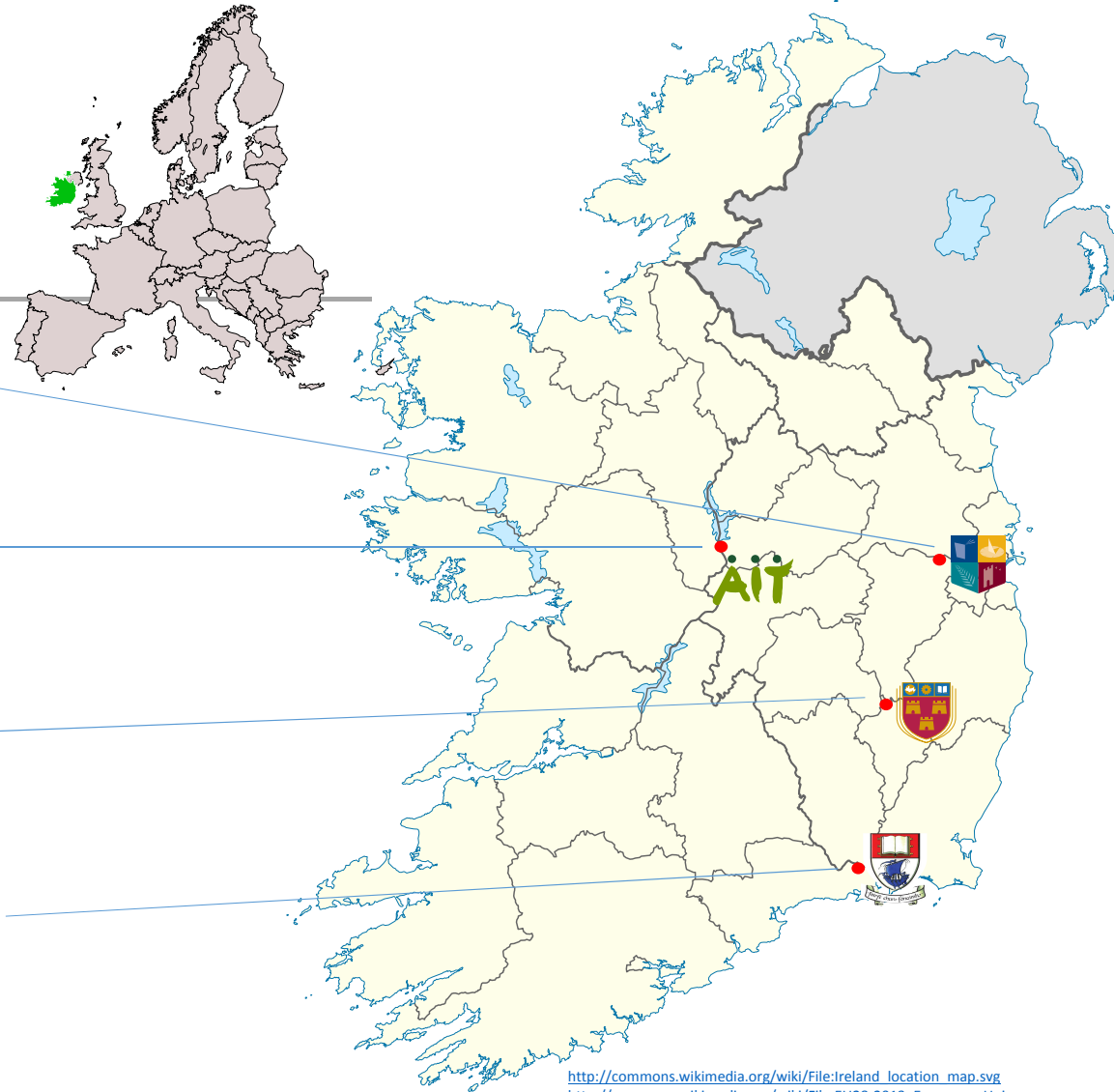
- Post TTSI 2 is currently being reviewed.

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Our Consortium

Maynooth University (lead)

Athlone Institute of Technology

Institute of Technology Carlow

Waterford Institute of Technology

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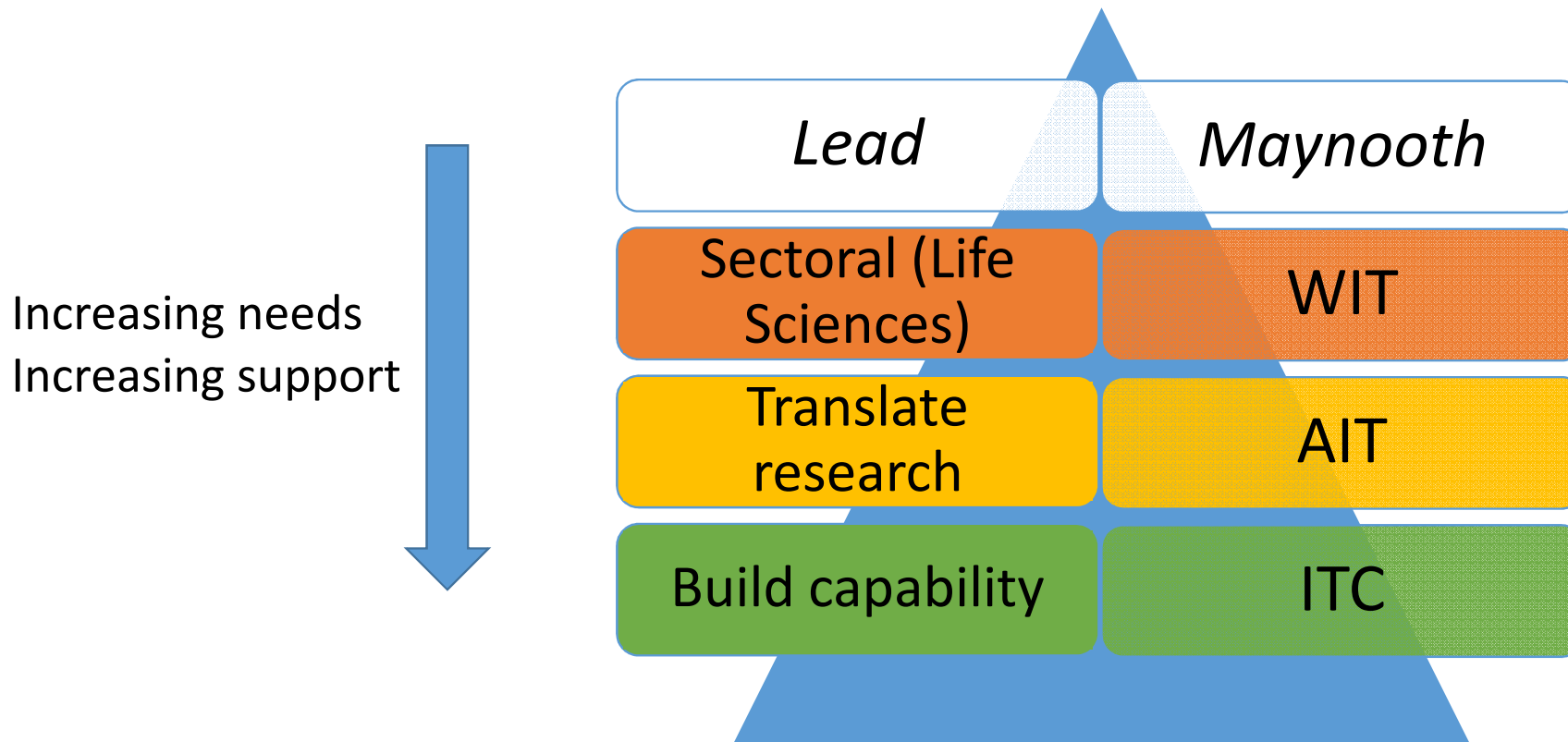
Institute of Technology

- Key focus on Teaching
  - Closely match the needs of local/national employers
- Staff employed to teach
  - Research could be seen as a hobby.
- "Research" responds to needs rather than driving innovation

- Change is happening
  - Focus on building research capability

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Hierarchy of Needs

Increasing needs
Increasing support

Lead	Maynooth
Sectoral (Life Sciences)	WIT
Translate research	AIT
Build capability	ITC

Roles and Responsibilities

- Governed SLA developed through clear understanding of needs
  - WIT - 1 day pw
  - AIT – 2 days pw
  - ITC – 1.5 days pw

- Case managers assigned by institution not area of expertise
  - Expertise can be leveraged

- Constrained by absorptive capacity
  - Can't move too fast!

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Case Management Support - outbound

- Defining the technology

- Shaping the Commercial Case

- IDF review

- Project strategy – start with clear goals

- Patenting Strategy

- Contract Negotiations

- Post-deal management

- Clinics, seminars delivered on site

Find the "low hanging fruit"
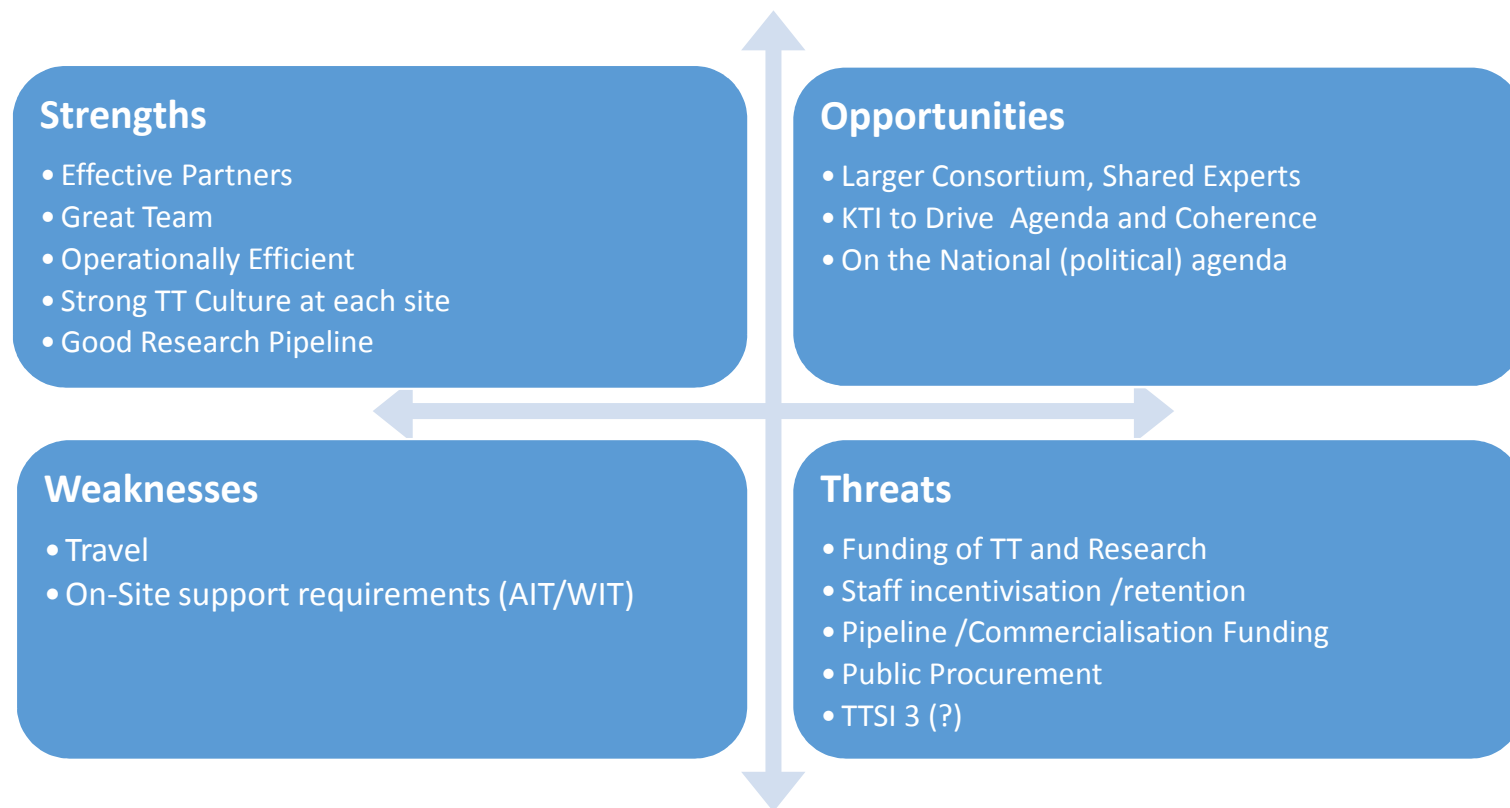
What Works …

- Know your customer
  - What works for them?
  - Establish strong relationships
  - Know what makes the researchers successful; know what will make the business successful
  - Being an outside resource can be politically more honest
- Find project "sponsors"
- Be non-competitive
- Create a cluster of opportunities
  - Build capacity and capability
  - Create/Hire full time researchers

... and What Doesn't

- Not agreeing up front what SLA should be
  - Learn from a long 'engagement'
- Driving TT only by reaching metric targets
- Driving a level of activity that can't be sustained
  - What is the absorptive capacity of the cluster members?
- Not carefully managing expectations

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SWOT – How we think we are performing

Strengths

- Effective Partners
- Great Team
- Operationally Efficient
- Strong TT Culture at each site
- Good Research Pipeline

Opportunities

- Larger Consortium, Shared Experts
- KTI to Drive Agenda and Coherence
- On the National (political) agenda

Weaknesses

- Travel
- On-Site support requirements (AIT/WIT)

Threats

- Funding of TT and Research
- Staff incentivisation /retention
- Pipeline /Commercialisation Funding
- Public Procurement
- TTSI 3 (?)

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Some Examples

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Example 1 – Medical Device (ITC)

- Start-up needed innovative product design
  - ITC DesignCORE
  - Enhancement to existing Sleep Apnea devices (CPAP/BiPAP)
    - Added patient monitoring etc.
- What is actually required -> Design, electronics and software
- Construct Innovation Project that leverages existing skills
  - ITC Dean of Teaching Quality -> experience of developing and implementing Med Dev QMS
  - Plastics/materials available in AIT
- Key aim: "Learn how to deliver a med dev project"

Example 2 – Establish Baseline (WIT)

- Convergent Technologies Research Group (CTRG)
  - multi-disciplinary research cluster within the School of Engineering,
- Research activities include:
  - infrastructural technologies (water, energy and the environment),
  - materials development (polymer processing and super-critical fluid technologies)
  - passive and active medical devices (mock cardiovascular loops, catheter technologies and implantable platforms).
- Good at research funding but also good at missing commercial opportunities!
- Aim: Teach/Mentor all CTRG engineers to use patent searching and analysis to baseline all commercial research projects at inception.

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Example 3 – Near failure (ITC)

- Proof of concept research project on how to deal with "dairy washings" from farms
  - Building swales inoculated with bacteria to clean the runoff.
- Project stalled because the researchers hit an engineering roadblock
- Aim: Serendipity. Know the researchers and their projects. Engage with them frequently for a "friendly chat".
  - Discover "success" in project – overcome engineering problems to show POC at a small scale.

The Future

- Funding to 2016 but what happens next…?

- Consortium here to stay
  - May grow to incorporate more institutions
  - May take on specific sectoral expertise based on national priorities

- Funding model will change
  - Institutions will have to step up – 50:50 or 70:30 funding proposed
  - System must be more self sustaining (not necessarily profitable!)

Thank you

Any Questions?

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