



Innovate UK Workshop: Collaboration with Industry

WELCOME

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@Createinf #NapRes19

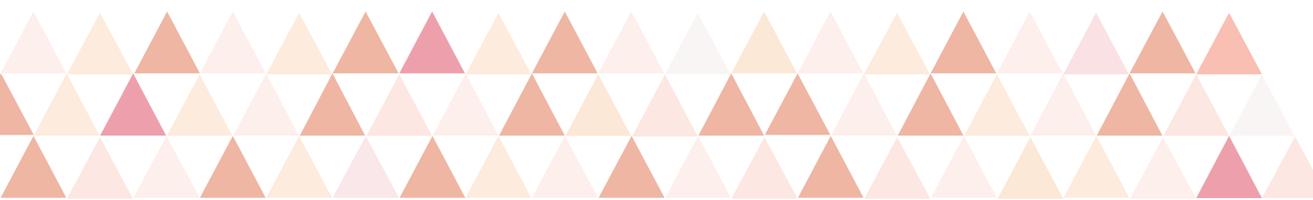
Workshop Overview

- **Innovate UK Introduction**
- **Knowledge Transfer Partnerships (KTPs):**
Judy Brown (East of Scotland KTP Centre Manager)
- **Industrial Strategy Challenge Fund (ISCF):**
Georgina Jamieson (Knowledge Exchange Manager, RIO)
- **ISCF Success Story From Edinburgh Napier:**
Ingi Helgason (Creative Informatics Project Senior Research Fellow)

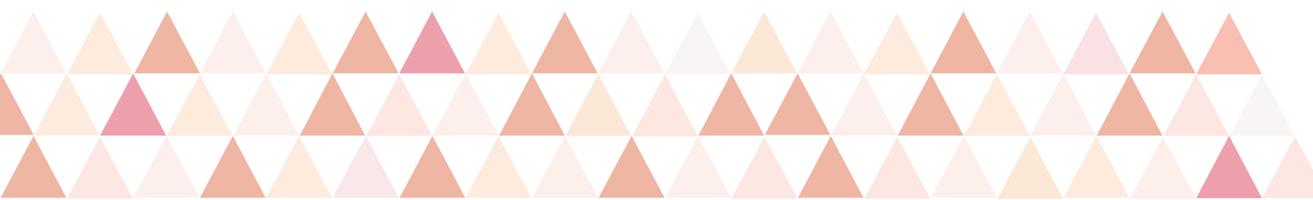
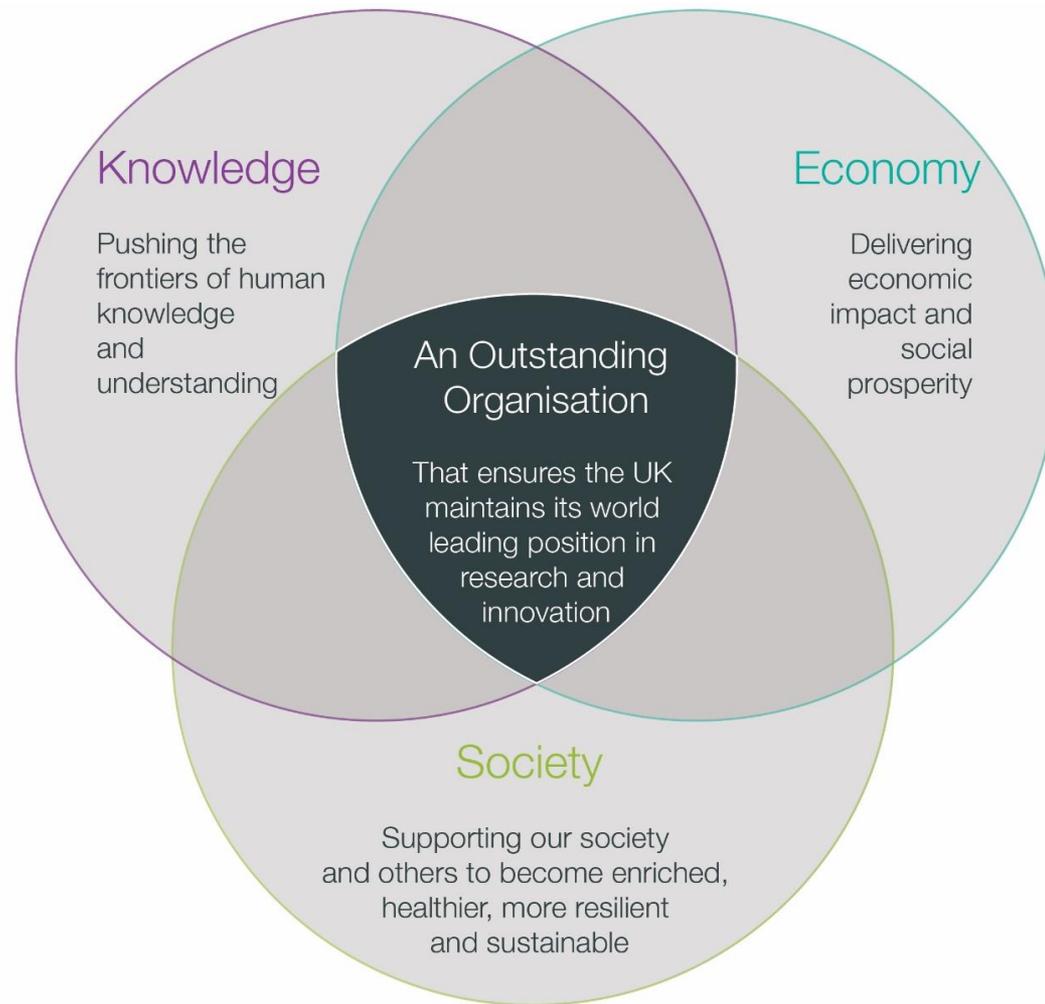
Innovate UK Funding

- Innovate UK: Part of **UK Research and Innovation (UKRI)**.
- Provides various funding competitions that support innovation projects and promote **collaborations with industry!**
- Total Investment: **2.4% of GDP by 2027**

....keeping the UK globally competitive in the race for future prosperity.

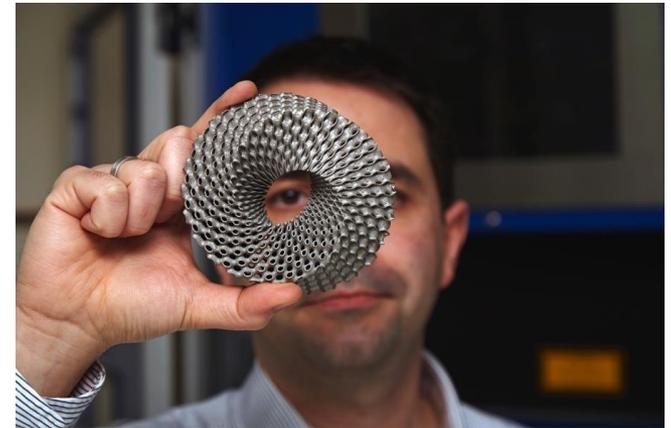


UKRI Focus



Innovation: A Key Driver of Productivity

- Innovation contributes up to **50% of all labour productivity growth**
- Firms that **persistently invest in R&D** have:
 - **Higher productivity** (13% higher than those who don't invest at all)
 - **Better value-added** per employee
 - More **exports**



Key Pillars of Innovation

Innovation happens as a consequence of **collaboration**

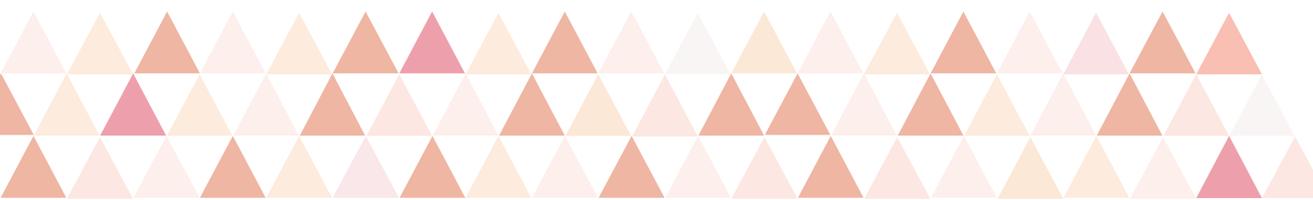
- Business
- Government
- Research



Innovate UK Funding can help this happen

Learn More ...

- Speak to RIM or Business Engagement Team
- Website www.innovateuk.gov.uk
- Follow @innovateuk on Twitter
- Success stories on YouTube
- Monthly newsletter
- LinkedIn, Facebook and Google+ too



KNOWLEDGE TRANSFER PARTNERSHIPS

Introduction to KTP

Judy Brown
East of Scotland KTP Centre

Innovate UK
Technology Strategy Board



KTP Mission

To strengthen the competitiveness, wealth creation and economic performance of the UK by the enhancement of knowledge and skills and the stimulation of innovation through collaborative projects between business and the knowledge base.

Funding Organisations

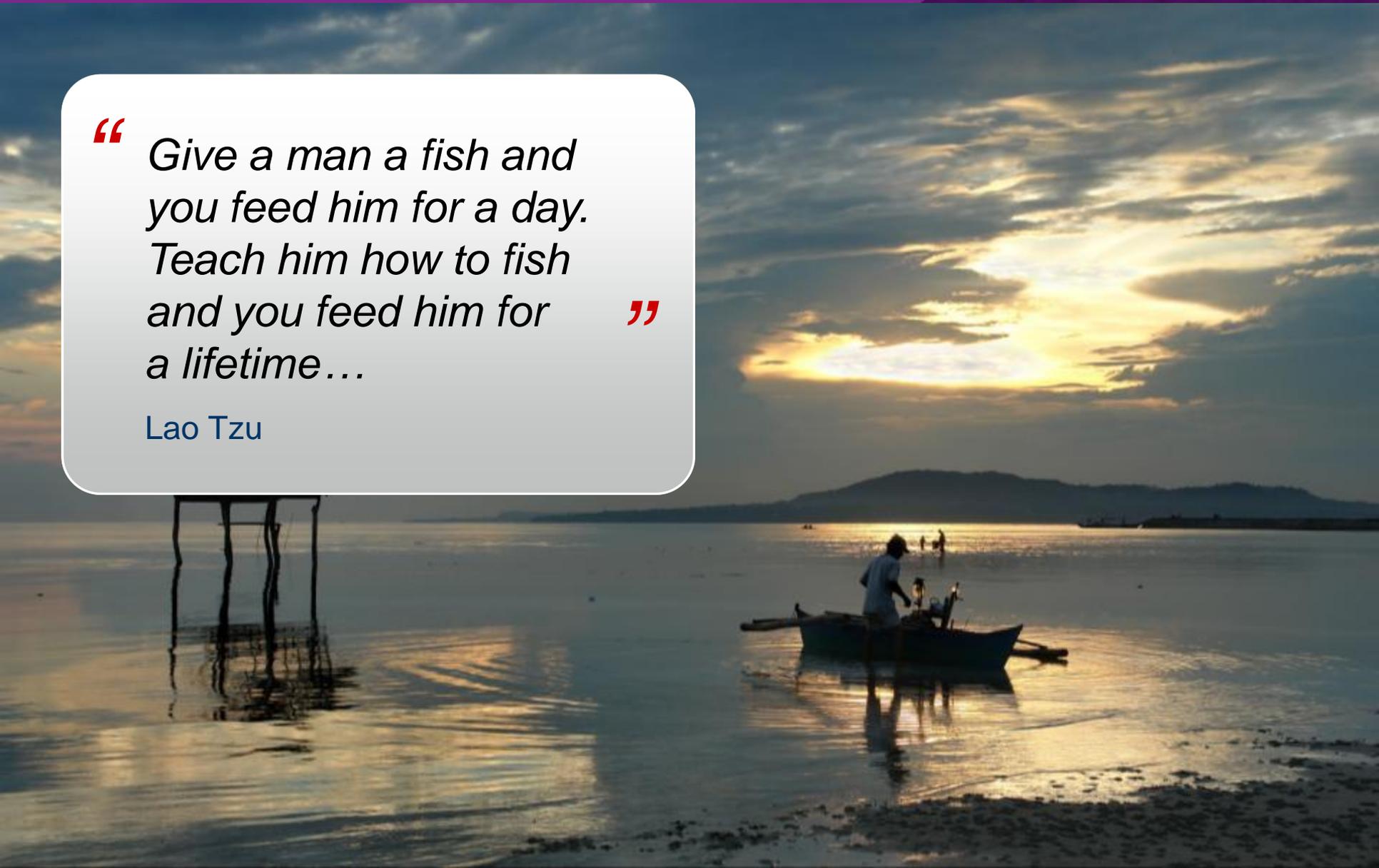
Funded by the InnovateUK with 12 other funding organisations:



What is KTP?

*“ Give a man a fish and
you feed him for a day.
Teach him how to fish
and you feed him for
a lifetime... ”*

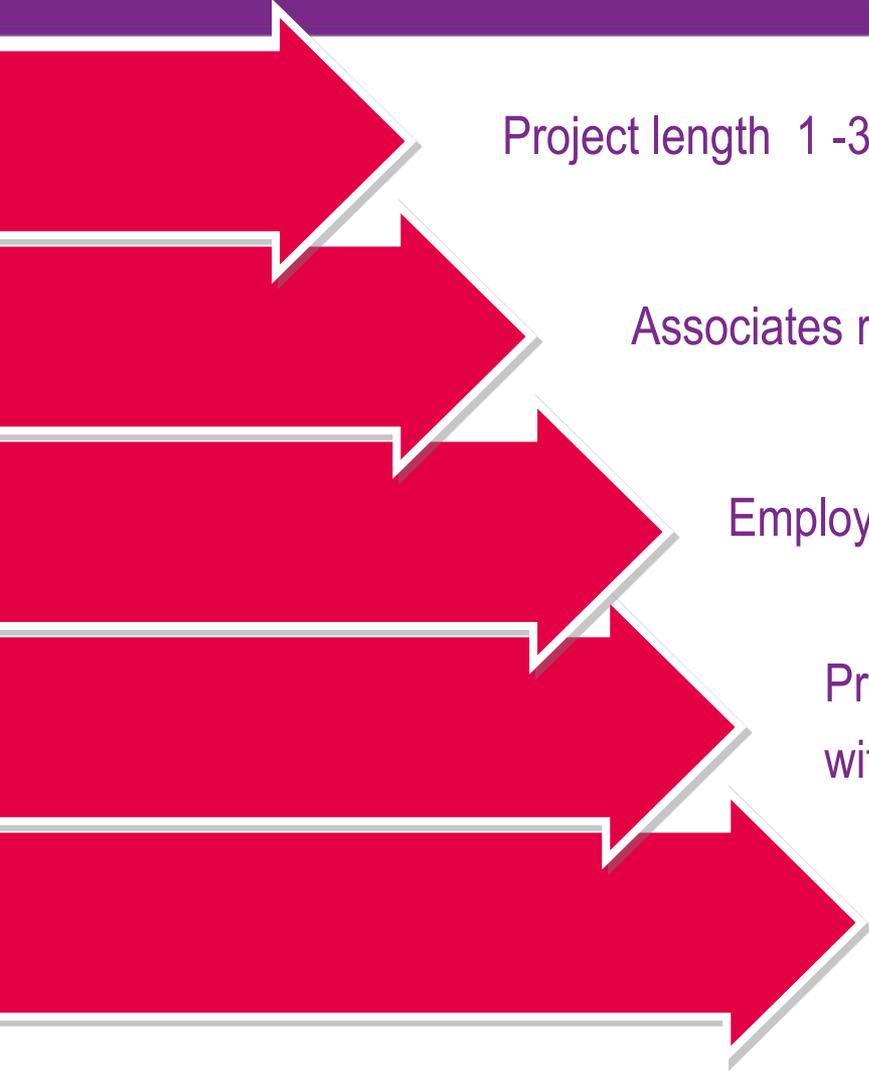
Lao Tzu



Partnership Structure



The Features: KTP



Project length 1 -3 years

Associates recruited by KB and Business partners

Employed by KB partner

Project located at business premises
with business supervisor

KB Supervisor spends ~ half day per
week at business premises

Typical Projects

- improving existing products or developing new products
- developing new systems and frameworks to improve efficiencies in staff or processes
- streamlining a design, manufacturing or logistics process
- Development of Diagnostic/analytical tools
- Introduction of new capabilities
- New strategy development - management, HR, marketing

Concept generation....to full commercial implementation / commercialisation

Project Criteria



Strategic relevance to the business

Stimulating and challenging for the academic team

Intellectually challenging for the Associate

Sound business case – Wealth creation/ Economic development

Clear knowledge transfer

Clear additionality

Benefits likely to accrue

Criteria

- **Innovation**

- Significant step change in company , create capability to do something new. At least at company level and ideally at sector level. Not available off the shelf, needs university expertise
- At academic level – not necessarily leading-edge but at least a bespoke development/application
- Difficult for non-tech projects

- **Challenge**

- Not routine for academic but stretches ability in some way
- Requirement for research
- Element of risk
- KT required throughout

- **Impact**

- Quantifiable business case –new commercial opportunity , short to longterm
- Beyond the company – sector/Scotland/UK/ societal/ cultural/environmental
- Increase academic knowledge/enhances reputation of dept/university. Publication and teaching

Project Budget

- FEC effective from 1 January 2006
- Available to HEIs and RTOs
- Annual budget ~£90k
- Includes T&S, consumables and training
- SMEs contribute 33%
- Large businesses contribute 50%

Knowledge Base Benefits

- Income
- REF impact
- Published papers
- Teaching materials, case studies and projects
- New research themes – commercial relevance
- Staff development – commercial awareness
- Higher degree registrations
- Graduate career opportunities
- Exploitation of IP developed during project
- Strategic relationship with business – developing industry links



Some of the Past and Current Projects

School of Life Sciences	GlaxoSmithKline Research & Development Limited	To increase the understanding of how the physicochemical properties of inhaled drug candidates affect pulmonary macrophages in vitro and in vivo and decrease attrition during development.
School of Engineering & the Built Environment	Icopal Limited	To develop building membranes for acoustic isolation in sustainable homes and embed the capability to design and test further acoustic products.
Scottish Energy Centre	City of Edinburgh Council	To develop an energy benchmarking, management and implementation strategy for a diverse building estate to meet the Council's overarching sustainability strategy – 'Sustainable Edinburgh 2020' and beyond.
School of Engineering & the Built Environment	Pyroguard UK Limited	To evaluate and understand the rheological behaviour of Pyroguard technologies to inform new product development and appropriately measure current production.
Business School	Voluntary Action Fund	To design and establish a grant-making and development support platform that connects and aligns the CSR activities of Scottish Businesses and the real and emerging needs in Scotland and the Third Sector.
Centre for Interaction Design	Soluis Group Limited	To explore, understand and develop intuitive interaction technologies for simultaneous multi-user collaborative experiences in immersive digital domes.
School of Computing	Satisnet Ltd	To automate both cyber-attack and defence techniques, with built in pedagogic learning, within a Virtualised Security Operations Centre (vSoC) to support advanced cyber security training.
Employment Research Institute & Computing	Standard Life plc	To develop enhanced data analytics capabilities to enable the modelling, analysis and presentation of complex data to improve Group Internal Audit's assessment and insight into business risks and performance

The Process

Discussion with company to ascertain needs.
Identification of relevant academics
Scoping project

Prepare outline
proposal

6 submission points a year
Typically 4-6 weeks to prepare proposal from
outline approval

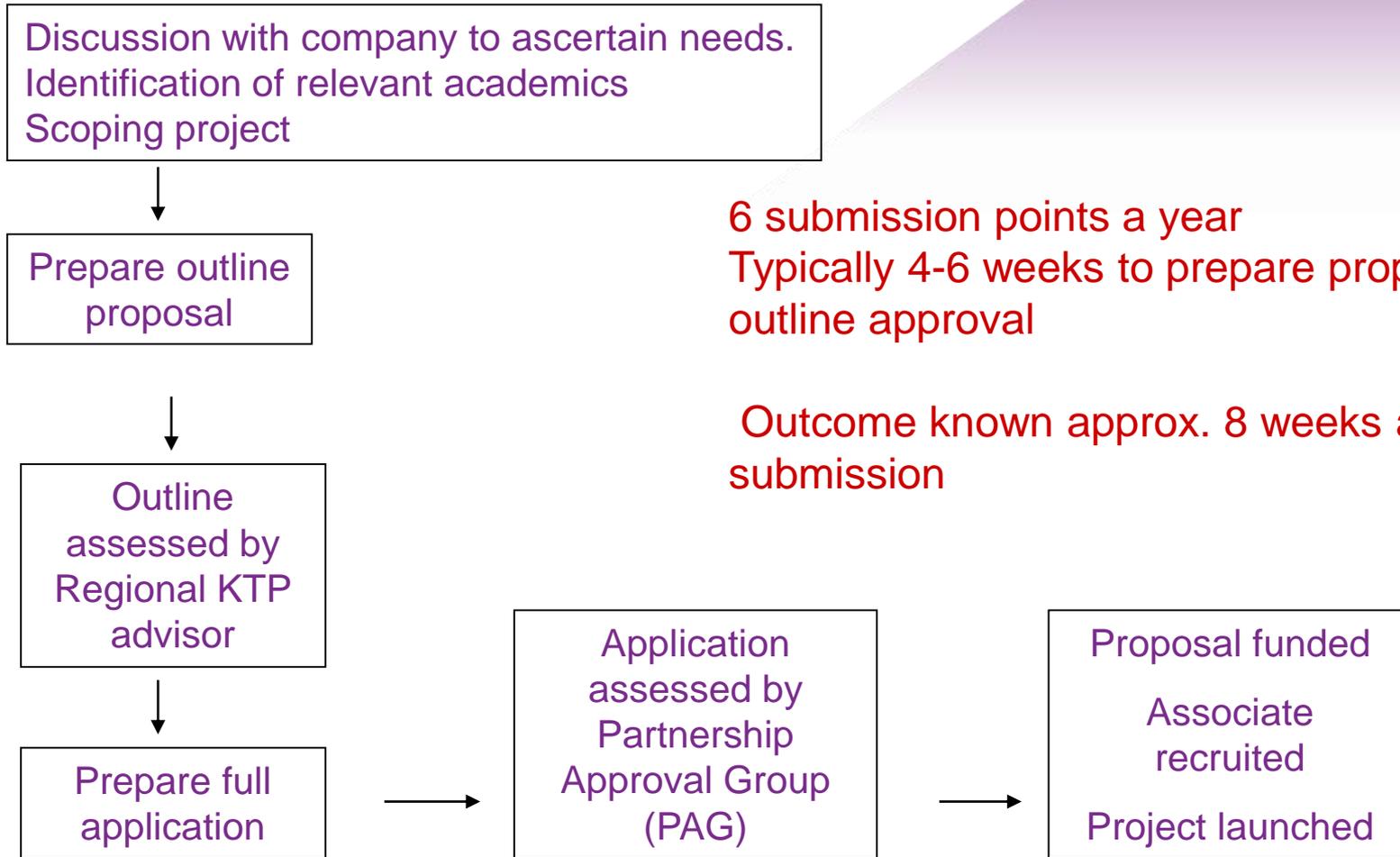
Outcome known approx. 8 weeks after
submission

Outline
assessed by
Regional KTP
advisor

Prepare full
application

Application
assessed by
Partnership
Approval Group
(PAG)

Proposal funded
Associate
recruited
Project launched



"Facilitating Knowledge Transfer Partnerships with industry for the Universities of Edinburgh, Stirling & St Andrews; Edinburgh Napier & Heriot Watt and Queen Margaret Universities"

Central aim:

**.....to make the KTP development experience as
'seamless' as possible for company and academic
project partners**

KNOWLEDGE
TRANSFER PARTNERSHIPS

Thank You

Innovate UK

Technology Strategy Board

Contacts

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Manager

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10 Colinton Road

Edinburgh

EH10 5LF

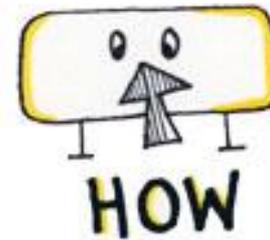
0131 455 2702

judybrown@ktpcentre.com

www.ktpcentre.com

<http://ktp.innovateuk.org>

Industrial Strategy Challenge Fund (ISCF)





Why?

£4.7billion investment !

Not business as usual, ISCF funds exciting and innovative projects and promotes genuine collaboration with industry.



Main Aims

- ✓ Deliver the **science that business** needs to transform existing industries and create new ones
- ✓ Accelerate **commercial exploitation** of the most exciting technologies the UK has to offer the world
- ✓ Ensure that scientific investment truly delivers **economic impact, jobs and growth right across the country**
- ✓ Industry-led and powered by **multi-disciplinary research** and business-academic collaboration

What?



Our five foundations



Ideas

the world's most innovative economy



People

good jobs and greater earning power for all



Infrastructure

a major upgrade to the UK's infrastructure



Business Environment

the best place to start and grow a business



Places

prosperous communities across the UK



AI & Data Economy

We will put the UK at the forefront of the artificial intelligence and data revolution



Future of Mobility

We will become a world leader in the way people, goods and services move



Clean Growth

We will maximise the advantages for UK industry from the global shift to clean growth



Ageing Society

We will harness the power of innovation to help meet the needs of an ageing society

UK Research
and Innovation



Objectives

- Increased UK business **investment** in R&D and improved R&D capability and capacity
- Increased multi- and **interdisciplinary research**
- Increased **business-academic engagement** on innovation activities
- Increased **collaboration** between younger, smaller companies and larger more established companies, connecting up value chains (or networks)
- Increased **overseas** investment in R&D in the UK

Wave 2 Challenges (up to £729.5m)

Audience of the future
(up to £33m)



Early diagnosis & precision
med (up to £196m)



Energy revolution
(up to £102.5m)



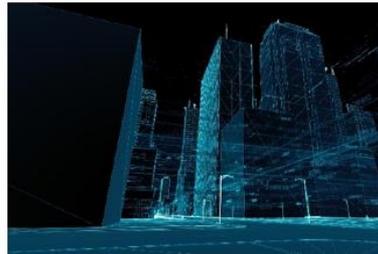
Healthy ageing
(up to £98m)



Next generation
services (up to £20m)



Quantum technology
(up to £20m)



Transforming construction
(up to £170m)



Transforming food
production (up to £90m)



Wave 3 Challenges (TBC)



Accelerating
Detection of
Disease (up
to £79m)



Digital Security
by Design (up to
£70m)



Manufacturing
Made Smarter
(up to £121m)



Commercialising
Quantum
Technologies
(up to £70m)



Future Flight
(up to £125m)



Smart Sustainable
Plastic Packaging
(up to £60m)



Driving the
Electric
Revolution (up
to £78m)



Industrial Deca
rbonisation (up
to £170m)



Transforming
Foundation
Industries (up to
£66m)

How ?

- **Challenge Area:** Identify Grand Challenge and Sub-Challenge
- Can you develop an **Expression of Interest?**
- Start to prepare your applications **early**

Business Engagement is key across all challenges!



Exercise – Industry Collaborators

- Identify the Grand Challenge most relevant to you and identify any companies you work with in this area and / or any companies you would like to work with?

RIO Support

- Scoping **meeting** to identify areas of interest
- Providing **intel** on upcoming calls
- Supporting **business engagement**
- Supporting **Applications**

****INTERNAL FUNDING****

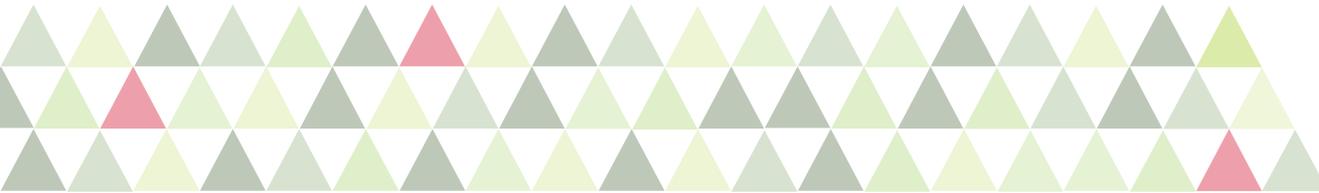
ISCF Partnership Development Fund:

Deadline 1st July 2019

Please Get In Touch!

g.jamieson@napier.ac.uk

Thank You





CREATIVE INFORMATICS

SHAPING THE
FUTURE OF
THE CREATIVE
INDUSTRIES



@CreateInf



@CreativeInformatics

creativeinformatics.org





£80 million Creative Industries Clusters Programme

9 Research and Development (R&D) partnerships, funded by the Industrial Strategy and delivered by the Arts and Humanities Research Council on behalf of UKRI.

The programme brings together world-class research talent from across the UK in a first-of-its kind R&D investment.

The partnerships will accelerate growth in a range of creative sectors and aim to create jobs and drive the creation of companies, products and experiences that can be marketed around the world.



#Createinf



WHAT IS A CREATIVE INDUSTRY IN A DATA- DRIVEN SOCIETY?



PROJECT VIDEO

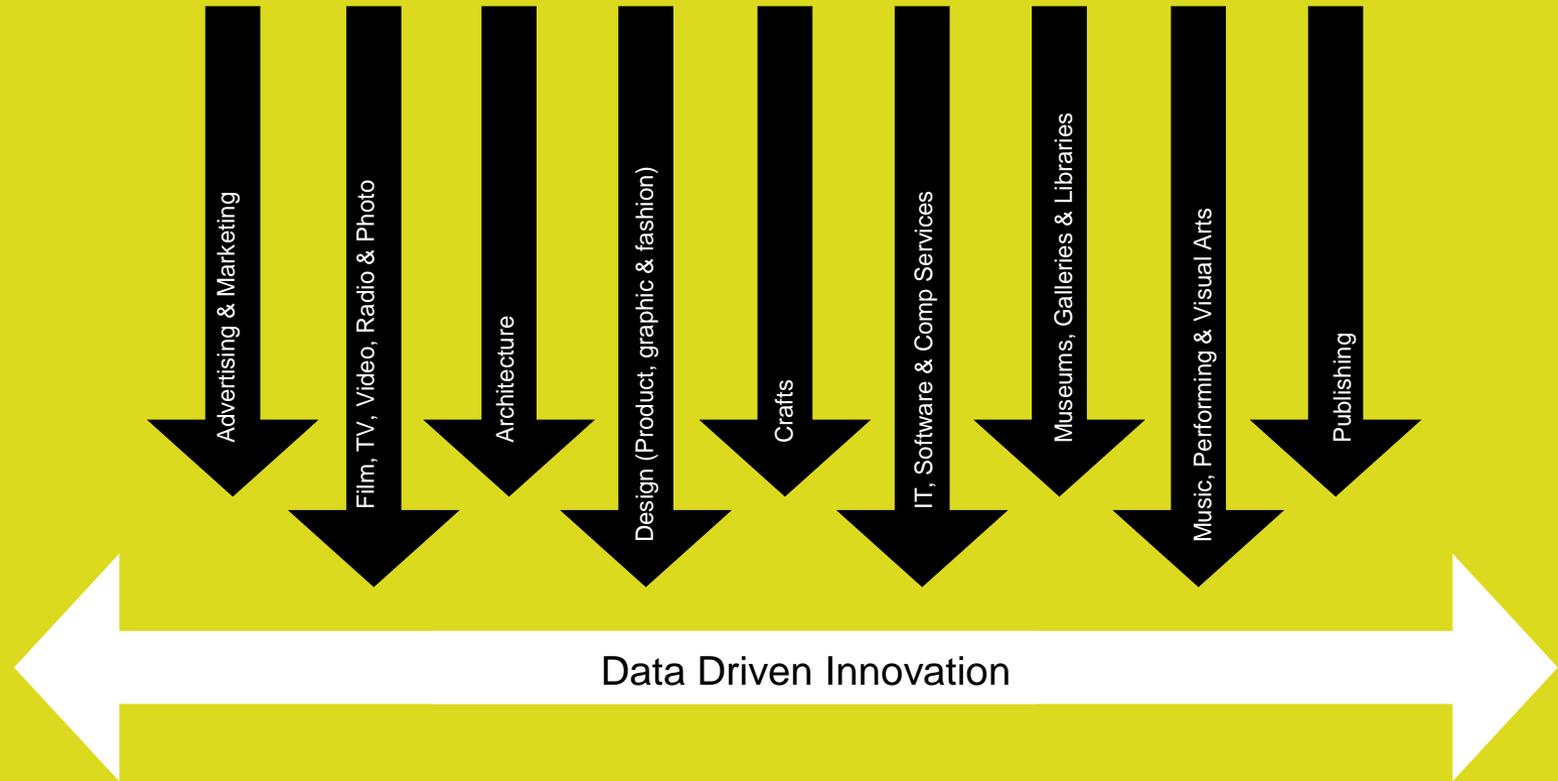


Watch the project's introductory video here:

<https://creativeinformatics.org/>

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CREATIVE INDUSTRIES



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4 CHALLENGES



How can Data Driven Innovation...

Support access and engagement to new audiences and markets?

Support the development of new modalities of experience?

Unlock hidden value in archives and data sets?

Reveal new business models for the creative industries?



6 VEHICLES

£5K VOUCHER
10 WEEK COURSE
PRE-ACCELERATOR

TWO CALLS A YEAR
5 AWARDS PER CALL
£12-£18K FOR MVP

72 OVER 4 YEARS
£12K STIPEND
HOSTED AT ORG

MONTHLY
EVENING SOCIAL
AFTERNOON WORKSHOP

ONE CALL PER YEAR
1 AWARD PER CALL
£12-£18K FOR MVP

24 OVER 3 YEARS
8 PER YEAR
£10K GRANTS

Leading to start-ups, products and services in the creative industries

DIRECTORS



CHRIS SPEED / DESIGN INFORMATICS, UoE

MELISSA TERRAS / DIGITAL CULTURAL HERITAGE, UoE

MICHAEL ROVATSOS / BAYES CENTRE, UoE

MICHAEL SMYTH / CENTRE FOR INTERACTION DESIGN, ENU

STEPHEN COLEMAN / CODEBASE

YASMIN SULAIMAN / CREATIVE EDINBURGH

DELIVERY TEAM



NICOLA OSBORNE / PROGRAMME MANAGER

MICHAELA TURNER / BUSINESS DEVELOPMENT MANAGER

LIAM UPTON / COMMS AND ENGAGEMENT OFFICER

ANNA ORME / EVALUATION OFFICER

KAM CHAN / FINANCE ADMINISTRATOR

RESEARCHERS



CHRIS ELSDEN / DESIGN FOR CREATIVE TRANSACTIONS

INGI HELGASON / MAKING CREATIVE CHOICES IN A DATA-DRIVEN WORLD

SUSAN LEHELDT / PERSONAL STORIES FOR SCOTLANDS DIVERSITY

INGE PANNEELS / DIGITAL TOOLS FOR SMALL CREATIVE BUSINESSES

PIP THORNTON / TOWARDS A DIGITAL ÉCRITURE FÉMININE



CREATIVE INFORMATICS STUDIOS AND LABS

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#01 / DANCING WITH DATA

1.30-1.45	Thomas Dance & UK @thomasthomas	1.45-2.00	James @jamesjames
2.00-2.15	Dance & UK Workshop	2.15-2.30	James @jamesjames
2.30-2.45	James @jamesjames	2.45-3.00	James @jamesjames
3.00-3.15	James @jamesjames	3.15-3.30	James @jamesjames



CREATIVE
INFORMATICS
SHAPING THE
FUTURE OF
THE CREATIVE
INDUSTRIES

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PHOTO: ROSS FRASER MCLEAN / STUDIO RORO





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INFORMATICS

Edinburgh Napier
UNIVERSITY



THE UNIVERSITY
of EDINBURGH



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CODEBASE



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Questions and Answers?

