



# Schumpeter meets Homer Simpson meets Catch 22

Can creative sector projects survive  
HEI KT and Tech Transfer?

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Chair, WestFocus PARK Seed Funds

- Big numbers
- R&D definitions
- PARK
- Summary
- Discussion

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# DCMS definition

'Those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property.'

# 13 creative industries

Advertising

Film & video

Architecture

Music

Art & antiques  
markets

Computer & video  
games

Performing arts

Publishing

Crafts

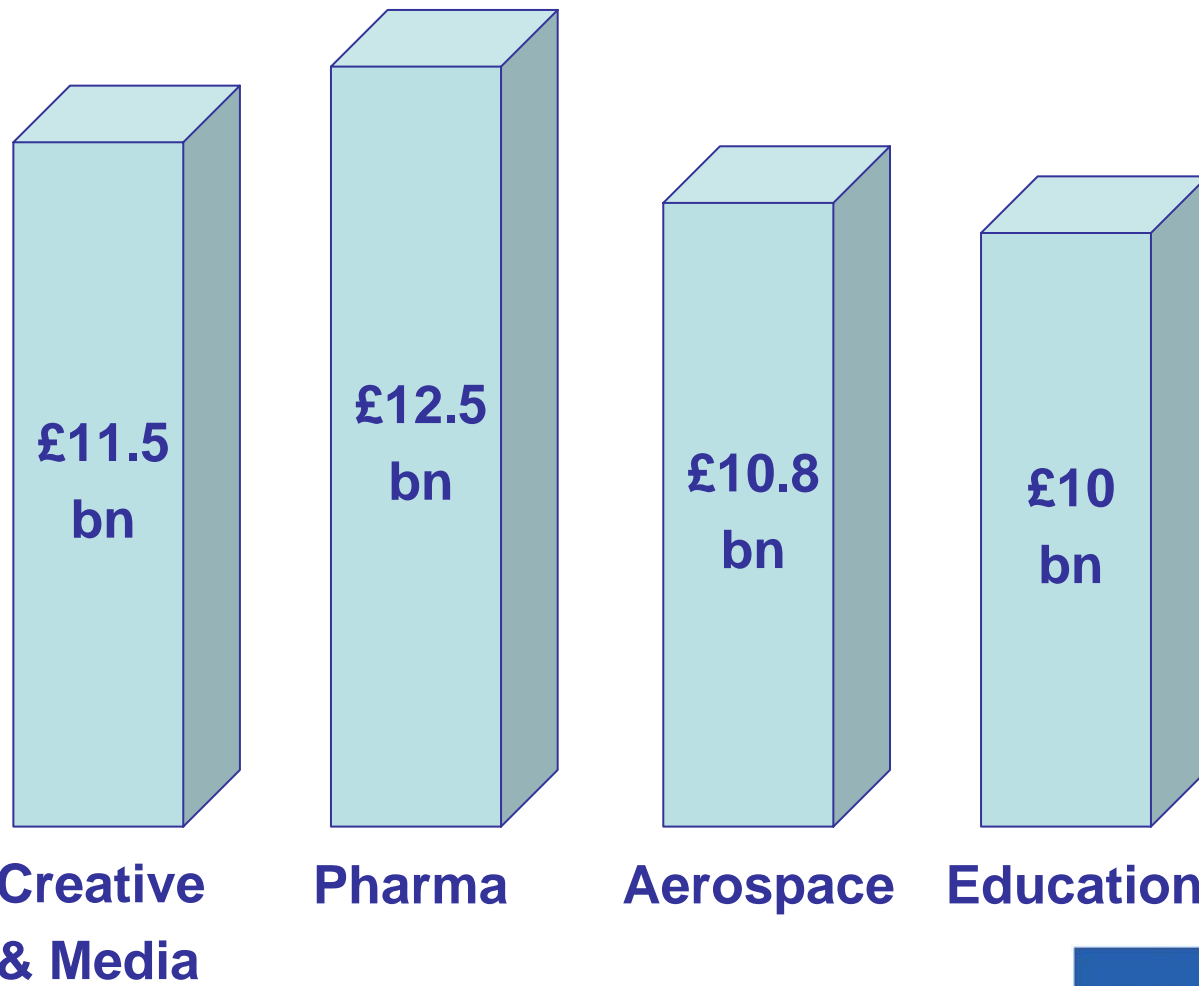
Software

Design

Television & radio

Designer fashion

# Export value\*



# Creative Industries

## National economic impact\*

- 8.2% of GVA in 2001
- grew by an average of 8% pa between 1997 and 2001
- Exports grew at around 15% pa between 1997-2001.
- 1.9 million jobs
- 122,000 companies

# Creative industries - Big in London

- £21 billion contribution
- 16% of London GVA
- over 400,000 jobs
- 2<sup>nd</sup> largest industry after business services
- 2<sup>nd</sup> biggest source of job growth, contributing roughly 1 in 5 new jobs.\*

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# “Unweaving the Rainbow”\*

“The definitions of R&D and innovation that underpin UK government support instruments for these activities are derived from the OECD Frascati and Oslo manuals”\*

# OECD definitions underpin UK support \*



## Frascati Manual 1963

*“R&D comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications”.*

# OECD definitions underpin UK support \*



## Oslo Manual 1992

Innovation = *“Technological Product and Process Innovation...with changes that involve a significant degree of novelty at the level of the firm”*

“a narrow definition of innovation based on a partial borrowing from the neo-Schumpeterian model”\*



1962



1992



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[Alphabetical Indexes](#)  
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## Detailed structure and explanatory notes

[Profile](#)

### ISIC Rev.3.1

Click on any code to see more detail. Click [here](#) for top level only.

- ◆ [A](#) - Agriculture, hunting and forestry
  - ◆ [01](#) - Agriculture, hunting and related service activities
  - ◆ [02](#) - Forestry, logging and related service activities
- ◆ [B](#) - Fishing
  - ◆ [05](#) - Fishing, aquaculture and service activities incidental to fishing
- ◆ [C](#) - Mining and quarrying
  - ◆ [10](#) - Mining of coal and lignite; extraction of peat
  - ◆ [11](#) - Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying
  - ◆ [12](#) - Mining of uranium and thorium ores
  - ◆ [13](#) - Mining of metal ores
  - ◆ [14](#) - Other mining and quarrying
- ◆ [D](#) - Manufacturing
  - ◆ [15](#) - Manufacture of food products and beverages
  - ◆ [16](#) - Manufacture of tobacco products
  - ◆ [17](#) - Manufacture of textiles
  - ◆ [18](#) - Manufacture of wearing apparel; dressing and dyeing of fur
  - ◆ [19](#) - Tanning and dressing of leather; manufacture of luggage, handbags, saddlery,

- household goods
- ◆ H - Hotels and restaurants
  - ◆ 55 - Hotels and restaurants
- ◆ I - Transport, storage and communications
  - ◆ 60 - Land transport; transport via pipelines
  - ◆ 61 - Water transport
  - ◆ 62 - Air transport
  - ◆ 63 - Supporting and auxiliary transport activities; activities of travel agencies
  - ◆ 64 - Post and telecommunications
- ◆ J - Financial intermediation
  - ◆ 65 - Financial intermediation, except insurance and pension funding
  - ◆ 66 - Insurance and pension funding, except compulsory social security
  - ◆ 67 - Activities auxiliary to financial intermediation
- ◆ K - Real estate, renting and business activities
  - ◆ 70 - Real estate activities
  - ◆ 71 - Renting of machinery and equipment without operator and of personal and household goods
  - ◆ 72 - Computer and related activities
  - ◆ 73 - Research and development
  - ◆ 74 - Other business activities
- ◆ L - Public administration and defence; compulsory social security
  - ◆ 75 - Public administration and defence; compulsory social security
- ◆ M - Education
  - ◆ 80 - Education
- ◆ N - Health and social work
  - ◆ 85 - Health and social work
- ◆ O - Other community, social and personal service activities
  - ◆ 90 - Sewage and refuse disposal, sanitation and similar activities
  - ◆ 91 - Activities of membership organizations n.e.c.
  - ◆ 92 - Recreational, cultural and sporting activities
  - ◆ 93 - Other service activities
- ◆ S - Activities of private households as employers and undifferentiated production activities of private households
  - ◆ 95 - Activities of private households as employers of domestic staff
  - ◆ 96 - Undifferentiated goods-producing activities of private households for own use
  - ◆ 97 - Undifferentiated service-producing activities of private households for own use
- ◆ Q - Extraterritorial organizations and bodies
  - ◆ 99 - Extraterritorial organizations and bodies

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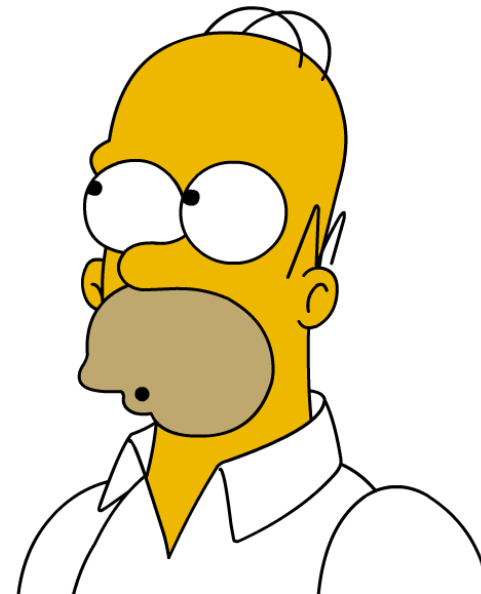
“Experimental development...has little or no meaning for the humanities”\*



*“Identifying R&D is more **difficult** in the service industries than in manufacturing because it is not necessarily **specialised**. It covers several areas: technology-related R&D and R&D in the social sciences and humanities.” \**

# *“Identifying R&D is more **difficult** in the service industries\*”*

“If something’s hard to do, it’s not worth doing!”♦



\*Frascati Manual – OECD

♦“Collected Wisdom” – Homer Simpson



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## Detailed structure and explanatory notes

[Profile](#) [Notes](#)

### ISIC Rev.4 (draft)

Click on any code to see more detail. Click [here](#) for top level only.

- ◆ [A](#) - Agriculture, forestry and fishing
  - ◆ [01](#) - Crop and animal production, hunting and related service activities
  - ◆ [02](#) - Forestry and logging
  - ◆ [03](#) - Fishing and aquaculture
- ◆ [88](#) - Social work activities without accommodation
- ◆ [R](#) - Arts, entertainment and recreation
  - ◆ [90](#) - Creative, arts and entertainment activities
  - ◆ [91](#) - Libraries, archives, museums and other cultural activities
  - ◆ [92](#) - Gambling and betting activities
  - ◆ [93](#) - Sports activities and amusement and recreation activities
- ◆ [S](#) - Other service activities
  - ◆ [94](#) - Activities of membership organizations
  - ◆ [95](#) - Repair of computers and personal and household goods
  - ◆ [96](#) - Other personal service activities



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# “R&D Tax Credits are the biggest single Government funding mechanism for business R&D.”\*

**BERR**

“R&D helps companies improve profits and grow by creating new high value-added products, processes and services.

The R&D tax credits help companies to invest more in R&D. The tax credit can either reduce a company's tax bill or, for some SMEs not in profit, provide a cash sum.

The R&D tax credits are available to companies throughout the UK.”\*

\*<http://www.berr.gov.uk/dius/innovation/randd/randd-tax-credits/page11350.html>

# But...Frascati strikes again

**BERR**

“R&D for tax purposes takes place when a project seeks to achieve an advance in science or technology.”\*

[Science is] “...the systematic study of the nature of the physical and material universe. Work in the arts, humanities and social sciences is not science for the purpose of these guidelines.”\*

As a rule of thumb, developing information or other 'content' is not R&D, but developing the means to deliver 'content' can be R&D.

# DCMS definition

'Those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property.'

# Catch 22



“There is a danger in entering into this debate of becoming caught in a circular trap of being situated outside of an existing definition of R&D and innovation and therefore being unable to demonstrate activities as being R&D and innovation because they do not fit the available criteria of definition or measurement.”\*

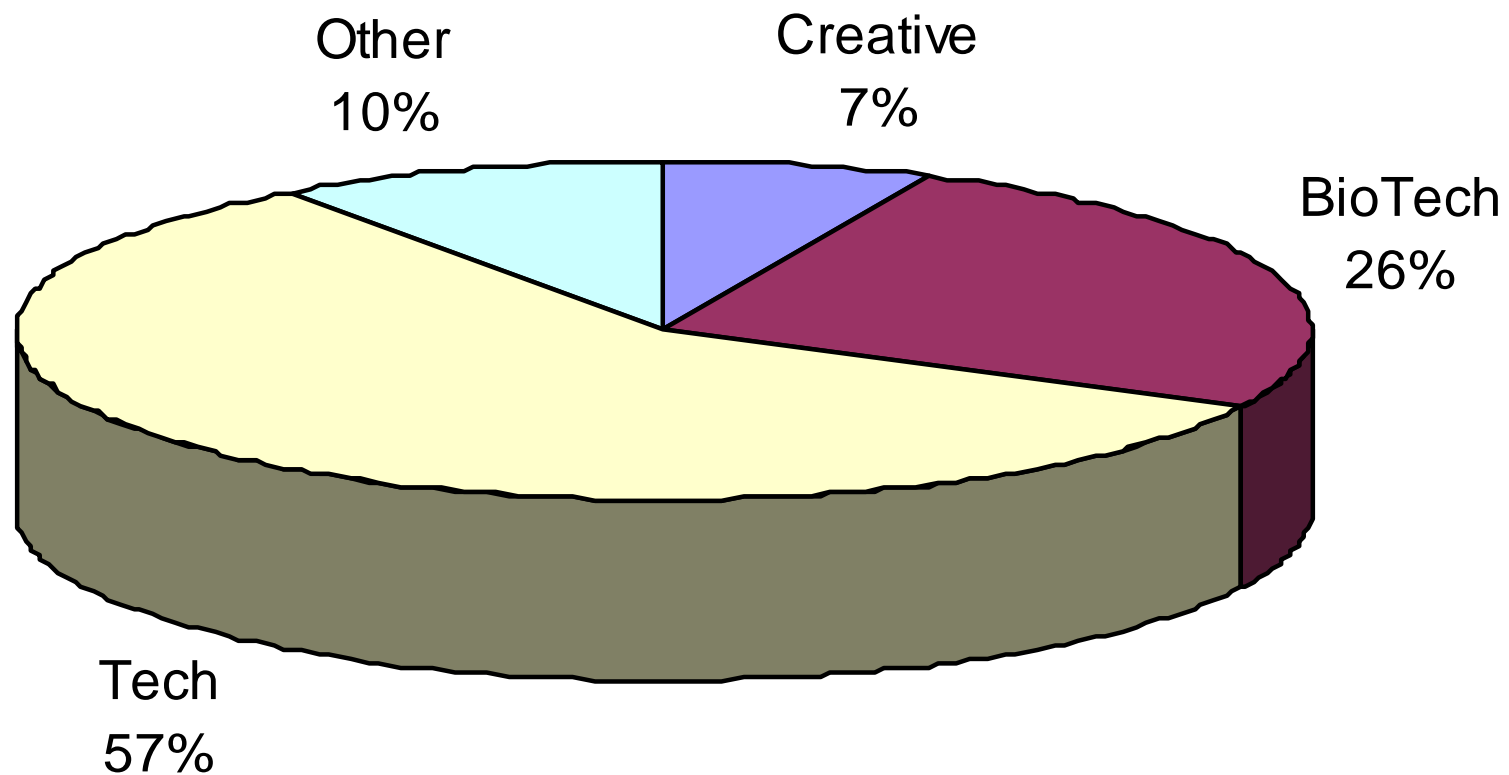
# Institutional isomorphism

“Isomorphism happens through a gradual development of patterns and structures in communication and interaction among stakeholders...The more interaction, the more likely those interactions will become pattern forming; and thereby, more likely that information will flow along those patterns and structures...

These patterns and structures become institutionalised as norms, standards and ideals, not necessarily because they are efficient or effective but because they are seen as legitimising.”

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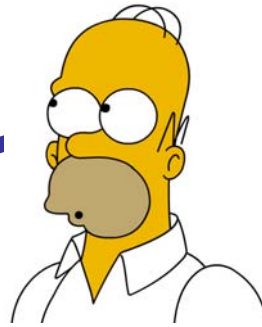
# PARK Seed Fund



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Industry

Industry



HEI Creative  
Sector  
Research

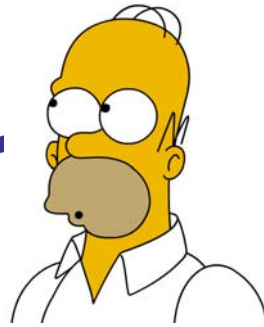


Industry

Industry

Industry

Industry



HEI Creative Sector Research

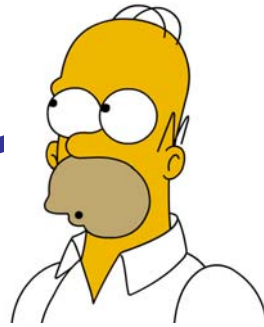
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Industry

Industry



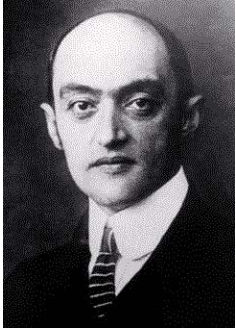
HEI/Industry  
People Exchange



Industry

Industry

# Policy based evidence\*?



“There is no correlation between investment in R&D and GDP and economic growth”



*Professor David Edgerton*

*Hans Rausing Professor of the History of Science,  
Imperial College*

\*” I sometimes think this country is driven not by evidence based policy but by policy based evidence” Dr Ian Gibson MP, former Chair of the Science and Technology Select Committee