Aston University
Birmingham

Innovation Vouchers

(formerly known as INDEX - *Innovation Delivers Expansion*)

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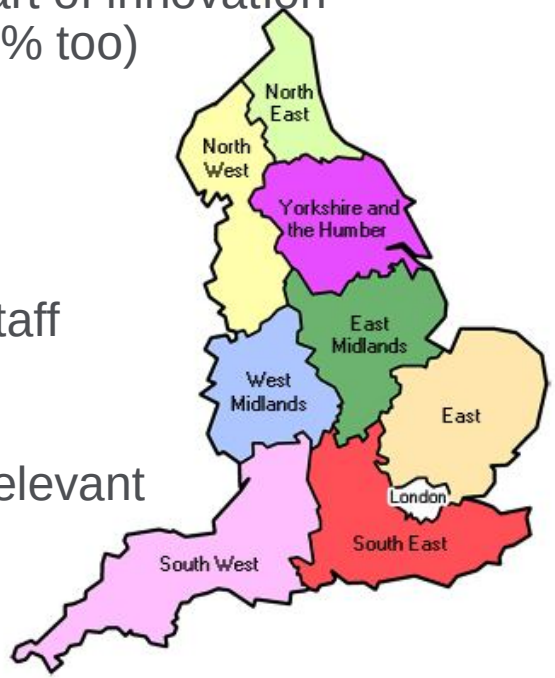
Business Partnerships and Knowledge Transfer

Perceived gap in the West Midlands between universities and small businesses

- Relatively low level of small business–university interaction in the UK. 10% of UK firms collaborate with universities as part of innovation activity – Finland, 33%, Denmark, 18% (Ireland 10% too)

- Supply side Issues (academic)
  - Motivation and contracts
  - Language and timescales
  - Difficulty of identifying appropriate academic staff

- Demand side
  - Universities seen as inaccessible and often irrelevant
  - University staff seen as ‘expensive’
  - Lack of time to engage



- Innovation Voucher approach born from SME consultation events

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What do innovation vouchers offer?

- Vouchers – simplicity of concept ..
  - £3000 to spend on work in a university
  - Innovation vouchers provide a low cost way of stimulating innovation and regional connectivity
- Overcome the incentive problems on both sides of the university - SME divide:
  - It empowers small firms to seek support from universities
  - It motivates academics to engage with smaller companies

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Innovation Vouchers – a Knowledge Exchange “taster”

- Scheme is a Knowledge Exchange “taster” for SMEs to tap into the research knowledge base of the universities and enabling universities to understand priorities and working styles of SMEs
- The focus of the scheme was to build relationships between West Midlands businesses and universities
- Aston University is the facilitator between SMEs and the13 Universities in the West Midlands
- Funding bodies AWM, ESRC, EPSRC, ERDF and recently HEFCE, through Economic Challenge Investment Fund

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How do they work?

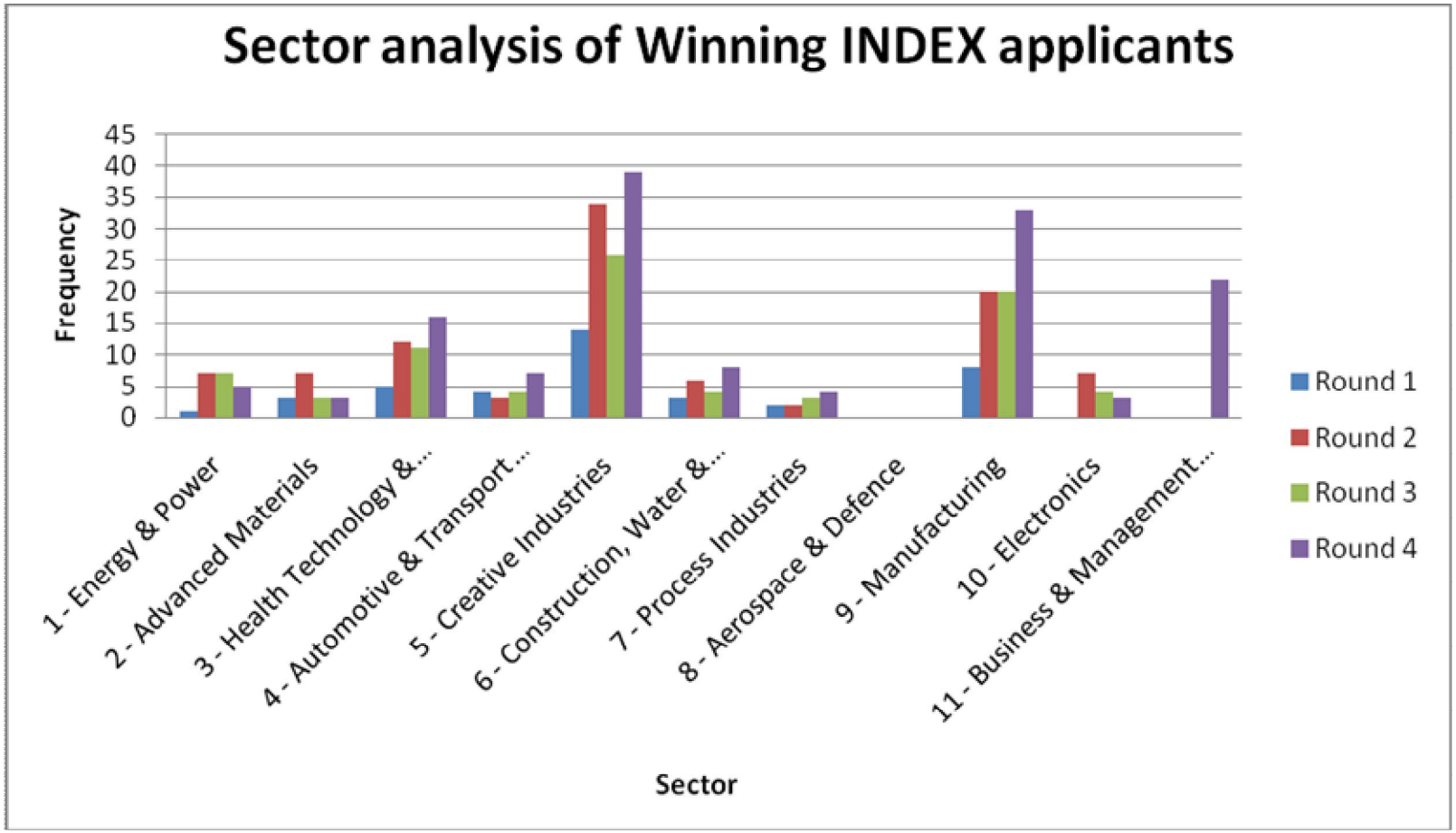
- Innovation Voucher Advice Centre
- On-line application form when call open
- Demand-led with SMEs defining innovation needs
- If demand exceeds supply – random selection of winners
- Applicants notified of results/successful and unsuccessful
- Voucher winners details sent to all participating HEIs
- Identification of academics willing to tackle the SME need received from HEIs
- Information sent to SMEs
- SME chooses the preferred academic to work with
- Work undertaken
- Voucher claimed
- Simple concept but some challenges do occur!

Some restriction to sectors

- Energy and Power
- Advanced Materials
- Health Technology and Healthcare
- Automotive, Transport and Transport Systems
- Creative Industries, Digital Media, Software, Media and Communications
- Construction, Water and Environment
- Process Industries
- Aerospace and Defence -
- Manufacturing
- Electronics

(also some ERDF restrictions for one call and have tried Business School vouchers)

Manufacturing, Creative and Health are strongest



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Demand-led / Supply limited

		Funder	Vouchers available	Number of applications	Number of eligible applications
Pilot phase	June 2007	AWM / ESRC / EPSRC	40	212	165
Phase 2	January 2008	AWM	100	196	159
Phase 3	April 2008	ERDF	80	192	168
Phase 4	March 2009	AWM	140	425	352
		Total	360	1025	844
Phase 5	May 2009	HEFCE	104		

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Best Practice Case Studies
www.indexvouchers.org

Examples

- Development of optical fibres for use in the telecommunications industry
- Production of bio-diesel
- Stomach content analysis for crime solving
- Device aimed at preventing fuel theft from vehicles
- Reduction of CO_2 emissions from vehicles
- Improved wigs for cancer patients
- Digital health and safety learning support for rural business
- Aid to enable disabled people to take part in canoeing
- Improved consistency of concrete mix to save power
- Improved computer interface for older people

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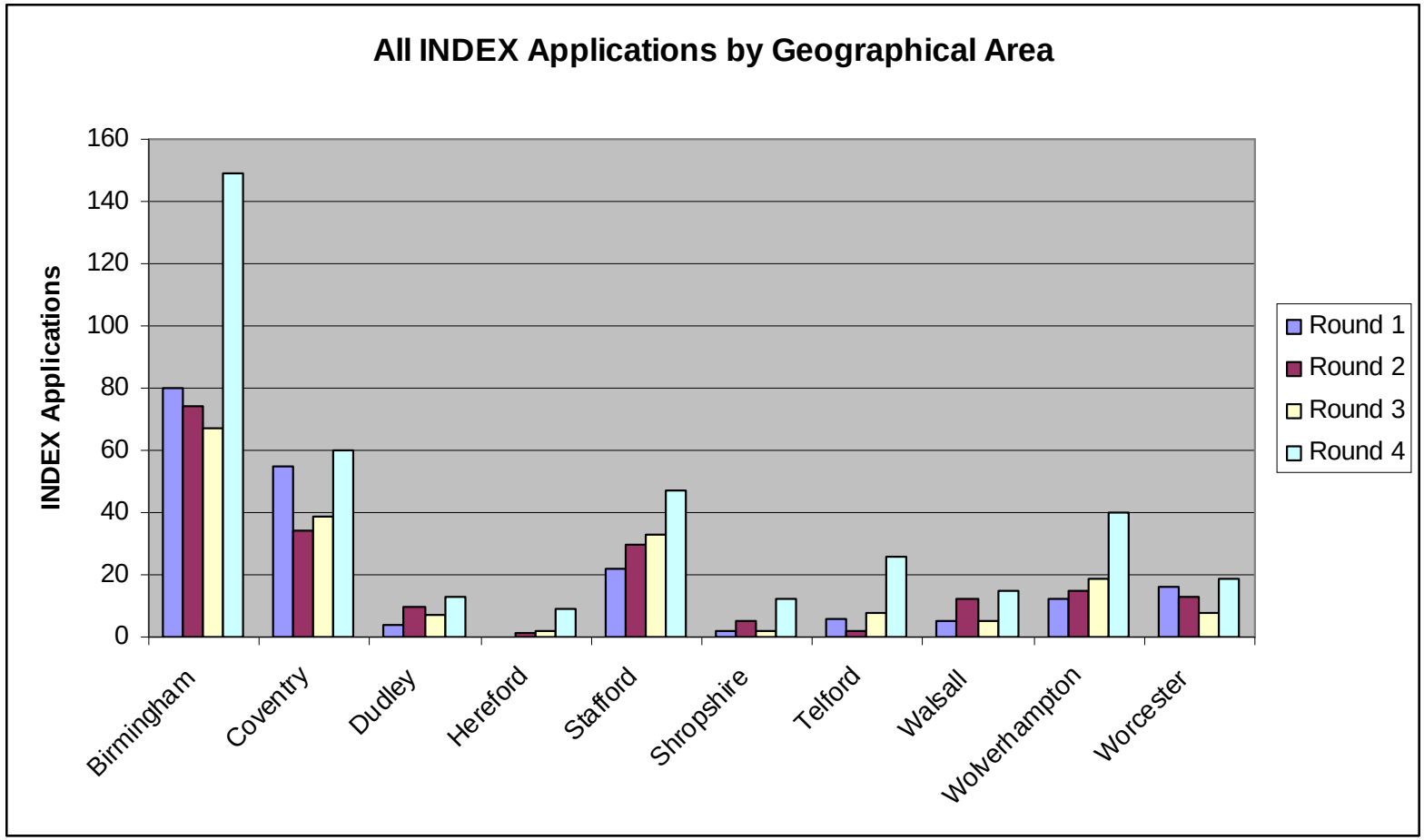
Governance

- Governance by Steering Committee
- Very much a working group helping to shape the scheme
- Meeting every couple of months
- Chaired by Birmingham Chamber of Commerce
- Representatives from funders, universities, business representative organisations, Business Link, user-involvement

Lessons learnt

- Improved on-line application form - more information about problem to be addressed
- Information about whether or not the SME had worked with a university before
- Some SMEs change their minds about the innovation they want!
- Must have expiry date on voucher
- Press advertising does not work as well as recruiting SMEs from networks or going out to SME communities- e.g. science parks
- Breakfast launch event for each call after vouchers awarded highly valued

Greater regional participation….



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External Evaluation/Audit

- Ecotec conducted interim external evaluation which was very positive overall
  - SMEs are satisfied with the work undertaken and would work with a university again
  - Approximately half of the companies had worked previously with a university but of those 70% of those worked with a new university using the innovation voucher
  - Need to recruit more SMEs in the rural Shropshire area - more targeted marketing
- A further Ecotec evaluation of the first 220 vouchers will be conducted in May/June
- ERDF Article 4 Inspection – excellent

The outcomes so far…

- Some - job done
- Knowledge Transfer Partnerships
- CASE awards
- Secure further funding e.g. Dept. of Health
- Proof of Concept funding …..

- AWM/ERDF funding - 2009/2012 - being applied for
  860 Voucher comprising of 620 general innovation vouchers and 240 specialised vouchers:
  - High Technology Corridors
  - Environmental Cluster
  - Central Technology Belt
  - Wolverhampton Corridor ITC Technology Themes
  - Coventry Technology Belt

The Future

- West Midlands scheme used to demonstrate value
- Ministerial support, two White Papers, CBI support ….
- Included as pilot in Business Support Simplification
- Regional pilot schemes developing
- INDEX will be rebranded “Innovation Vouchers” under the National Solutions for Business framework.
- Many questions arise –
  - Who can service the vouchers?
  - “Out of region” issues
  - How much should they be worth?
  - How many can you have?
  - …..?

Solutions for Business

Funded by government

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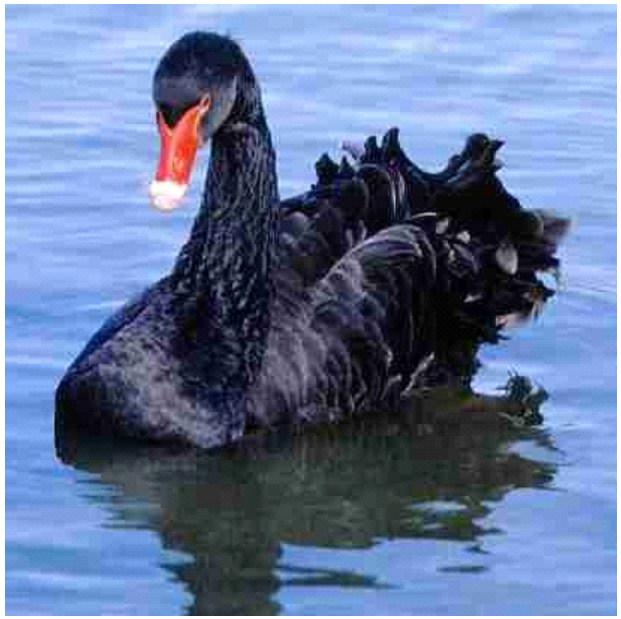
Innovation Vouchers
...the unpredicted Black Swans?

- Not possible to guarantee outcomes
- “Black swans" — any event that is rare, has an extreme impact, and is explainable and predictable - but only in hindsight. (Taleb 2007)
- Cannot predict Black Swan events, but you should build robustness to the negative ones, while being able to exploit positive ones
- At Aston, the discovery of Temozolomide, a brain cancer treatment, now with over $1bn of sales, lay in an instruction to an Aston PhD student to ‘make some interesting molecules’
- A voucher may well be the catalyst!



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Innovation Vouchers – a working collaboration!

Coventry University

University of Wolverhampton

University of Birmingham

UCB University College Birmingham

Staffordshire University

Aston University Birmingham

INDEX: iNnovation DElivers EXpansion

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