

Service Innovation and Performance in UK Manufacturing

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AIM event for Social Science Week
Woburn House, London, 17th March, 2010



Motivation and Background

Goods are tradable at distance.

UK based manufacturers face increasing competition on price and quality from lower cost countries like China

Meanwhile, large installed base of equipment requires servicing, repair, etc.

Provides business to third party service firms

Manufacturers urged to servitise – provides revenue and moves company closer to its customers

(Rolls Royce as exemplar – over ½ revenues from services)

Our Study ...

Looks at investment in innovation and performance impacts

Three Steps:

1. (Simultaneous) Decision to Invest (in innovation)

- In knowledge (R&D)
- In people (training)
- In capital (equipment)

2. Innovation outputs

- Goods, Services, Processes

3. Impact on performance

- Innovative sales, total sales, value added

Data

UK 'Community Innovation Surveys' (CIS) 4 and 5

CIS4 (2002 - 04): 4,923 Manufacturing enterprises

CIS5 (2004 – 06): 4,664 Manufacturing enterprises

2,272 enterprises in both surveys

Pooled sample of 7315 (i.e., $4923 + 4664 - 2272$)

	CIS4	CIS5	Pooled
Goods Innovation	37%	34%	35%
Service Innovation	15%	14%	15%
Process Innovation	28%	24%	26%

All Combinations of Goods, Service & Process Innovation ...

	CIS4 & CIS 5 Pooled (N)	CIS4 & CIS 5 Pooled (%)
None of these	3976	54%
Goods Only	972	13%
Service Only	117	2%
Process Only	497	7%
Goods & Service	318	4%
Goods & Process	816	11%
Process & Service	121	2%
All three types	518	7%

Some findings ...

Different Innovation Outputs draw on different investments

e.g. Investments in Knowledge + for Goods

Investments in Equipment + for Process

Investments in People + for all three types

Performance relates to different Innovation activities

Innovative Sales per Employee

Goods and Services = greatest impact, followed by Goods only

Service only and Service and Process = low and neg. impact

Total Sales per Employee & VA per Emp.

Indicate Goods only is the strongest strategy

What does it mean for business and policy?

For Business

Service innovation is worth taking seriously

... but, needs a different investments (approach & possibly culture)

Best done in combination with goods &/or process innovation

... i.e., don't neglect goods and processes to focus on services

Indeed, it may be better to retain focus on (high quality) goods

For Policy

'Servitization' is no panacea for UK manufacturing

Continue to emphasise high quality goods manufacturing.

Complement this with innovation policy emphasis on management and 'soft' capabilities – e.g., relational capabilities

Next Steps

Business Structures Database ...

- Office for National Statistics dataset

- Combines 'local units' into Enterprises

- Some enterprises have multiple local units,

 - Some in both manufacturing and services

- Will look at patterns of diversification & performance (i.e. growth)

Survey of Firms ...

- Direct survey of firms re engagement in servitization
& open innovation

- Looking for help with piloting / testing – **Please help if you can!**