

# Services Science Doctoral Colloquium, 2010

# Complex Service Innovation Research Network Professor Robert Paton





#### So how far down the road?

#### Overcoming our 'own' barriers ...

Breaking down the silos Finding the funding Accessing the 'outlets'

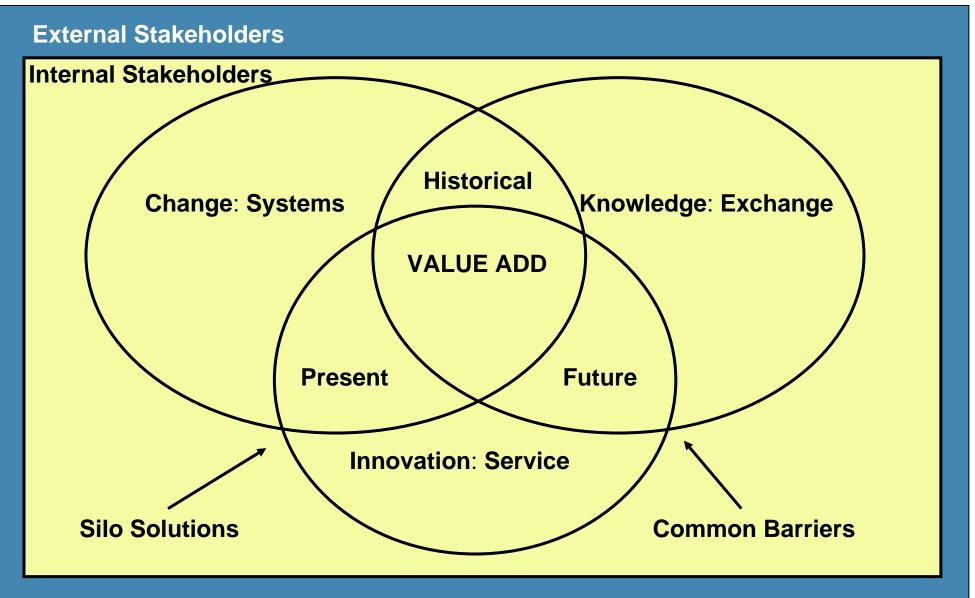
Making friends and influencing others. AIM, Royal Society, BAM, NESTA, CBI etc Electives, degrees Workshops, industry groups, seminars and networks Publishing, encouraging (today) and succeeding

**Grabbing the opportunity ...** Services Science: is it new? Services Innovation: a rebranding exercise? The smarter planet: another gimmick?

Some examples of progress and success ...



#### The Current, but emerging, Glasgow Research Map: CSIRN



**Professor Robert Paton, 2010** 



# The common barriers

Source	Description
	Cross category barriers
Barson et al.	Existing Resources (money, time technology, skills, data transfer)
Barson et al./ Kluge et al.	Rewards (Individual rewards for sharing, creating knowledge)
Szulanski	Arduous relationship
Barson et al. / Kluge et al.	Culture (knowledge Strategy)
	Technology barriers
Barson et al.	Availible Technology (Does IT support knowledge Requirement)
Barson et al.	Legacy Systems (Are legacy systems impacting knowledge transfer)
	Organizational Barriers
Gupta and Michailova	Knowledge Strategy Implementation
Szulanski	Causal ambiguity
Barson et al.	Poor targeting of knowledge
Barson et al.	Knowledge Cost
Barson et al. / Pawar et al.	Proprietary knowledge
Barson et al. / Pawar et al.	Distance (geographical, culture, language, legal)
Szulanski	Unproveness (Is the knowledge valuable?)
Szulanski	Organizational context
Szulanski	Info not percieved as relliable
Szulanski / Kluge et al.	Lack of motivation (knowledge as power syndrome)

	People Barriers
Barson et al. / Kluge et al.	Internal Resistance (protects interests of organization/ business unit)
Barson et al.	Self Interest (expose knowledge to competition)
Barson et al.	Trust (trust for individuals sharing knowledge with)
Barson et al.	Risk (Fear of Penalty, losing profit)
Barson et al. / Pawar et al.	Fear of exploitation
Szulanski	lack of motivation (not invented here)
Kluge et al.	Fear of contamination
Szulanski / Gupta and Michailova	lack of retentive capacity
Szulanski	Lack of absorbtive capacity

**Doople Barriers** 



## So what's exactly going on?

**Stephen McLaughlin** Service system design and innovation **Robbie Paton** Silo crossing to effect change Sean Wise Knowledge stickiness and performance Samer Jan Service innovation with banking **Javier Yanez** Network innovation and value with supply chains **Alan Aitken** Industrial buying behavior – the reality + service orientated value **Richard Wagner** Cross silo education – impact upon performa **Dahlia El Manstrly** Switching costs within service industries

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> Service Innovation Supply Chain Management Services Science Management and Engineering Strategy Industrial Marketing and Purchasing Management Education for Technologists Systems design and change Knowledge Transfer/Exchange Barriers to growth, innovation, knowledge and change Stickiness and lag Innovative capacity Services Dominant Logic Value – co-created



### SDL and Shariah: Samer and Vargo

	S-D logic	Shariah Modes of Finance
Value driver	Value-in-use or value-in-context	Value creation to all parties is the principle in which Islamic banking was established
Creator of value	Firm, network partners, and customers	Value is created through a joint agreement between the bank and the business customer
Process of value creation	Firms propose value through market offerings, customers continue value- creation process through use	Both the bank and the business client agree on a specific ration and payment process for the finance arrangement
Purpose of value	Increase adaptability, survivability and systems wellbeing through service (applied knowledge and skills) of others	The purpose of Islamic banking and Shariah finance models is to ensure fair and just to all parties as well as ensuring moral and socio-economic wellbeing
Measurement of value	Primarily operant resources, sometimes transferred by embedding them in operand resource-goods	Stronger relationship, consultancy and new business opportunities
Resources used	Propose and co-create value, provide service	Both the bank and the client share resources and expertise
Role of firm	Vehicle for operand resources, enables access to benefits of firm competences	Uses the banks finance also benefits from the banks involvement in board and decision making especially in the mudaraba agreement
Role of goods	Co-create value through the integration of firm provided resources with other private and public resources	The Shariah finance requires an element of resource or assets integration between the bank and the corporate client

Sean Wise hopes to 'contribute' by:

•Adapt and Expand on the empirical methodology of stickiness to include organizational barriers to knowledge exchange represented by an objective quantitative measure (i.e. Drag).

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> •Successfully gauge the degree to which each barrier can impact the performance of the firm and the degree to which aggregates of those barriers (Drag) impact the overall performance of the firm.

•Identify the barriers to knowledge transfer which can be visualized through Social-Network-Analysis and establish a correlation between those barriers and firm performance.

"Put another way, if we can quantify Drag, as Szulanski did with Stickiness, we could be able to create a standardized scale to measure the degree to which barriers to knowledge transfer impact knowledge flow. " Sean Wise

#### Oniversity Business of Glasgow School Javier Yanez hopes to spread the word ...

The servitisation of the developed economies continues apace with macro (knowledge economy) and micro (service) dominant logic - SDL) impacts. This has led to new business opportunities, models and challenges that are shaping both the developed and developing economies This taken with the phenomena of enhanced entrepreneurial activity that occurs in turbulent times: encourages researchers to consider what will be the outcome when servitisation meets turbulence? This initiative aims to explore: from the UK perspective servitisation/co-created value and from the LA perspective service innovation in turbulent times. Aim being to test the validity of emerging SDL theory/models within turbulent supply chain environments. T turbulence will accelerate SDL activity.



Richard Wagner recommends that German engineering ...

- Offer mandatory elective or elective courses in strategic management in engineering faculties.
- Address the necessity of strategic management education in engineering faculties to policy makers and stakeholders in the higher education of engineers.
- Optimise the mix of academic and practical strategic management education and pedagogy at German universities (case studies on real existing companies; assignments of students in real existing companies, add experienced managers with academic background to the teaching body).
- Publish a model "strategic management made easy".
- Develop and publish a "leader's licence for students, upcoming managers and executives".
- Continue research in the area of strategic management education and performance.

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## Some SS outputs to date ...

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