

Service Innovation within Supply Chain Networks

Mr. Javier Yáñez-Arenas

Second Year PhD Student, Doctoral Researcher in Business and Management Department of Management, Business School, University of Glasgow

Assistant Professor

Universidad de los Andes School of Management, Bogotá, COLOMBIA j.yanez.1@research.gla.ac.uk; jyanez@uniandes.edu.co



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Structure for the Presentation

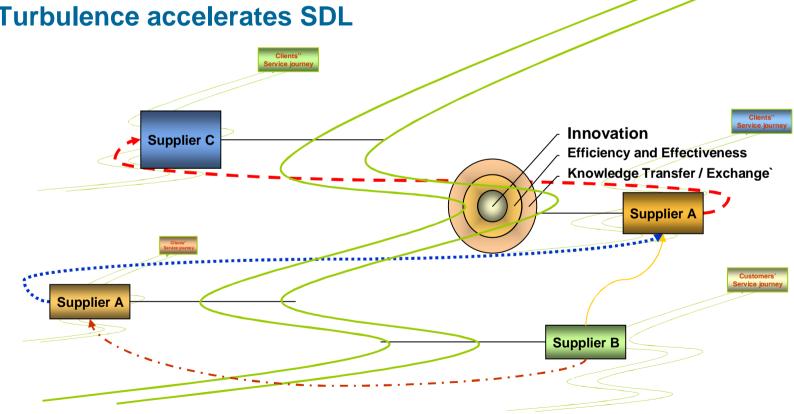
- Introduction
- Literature review
- Research questions
- Research design
- Expected contributions





My research journey

- **Servitization**
- **Turbulent environments**
- **Turbulence accelerates SDL**



STAFFC

Clients'

Service journey



Business School Introductio

Introduction - Research Interest

- Understanding the innovation processes associated with service within supply chain networks;
- Exploring the SI process at the network level not just at the dyadic relationship point; and
- Studying if unstable business conditions affect the SI process.





Introduction – Key definitions

Service

"The application of competences through deeds, processes and performances for the benefit of another entity or the entity itself" (Lusch and Vargo, 2008, p.89)

Innovation

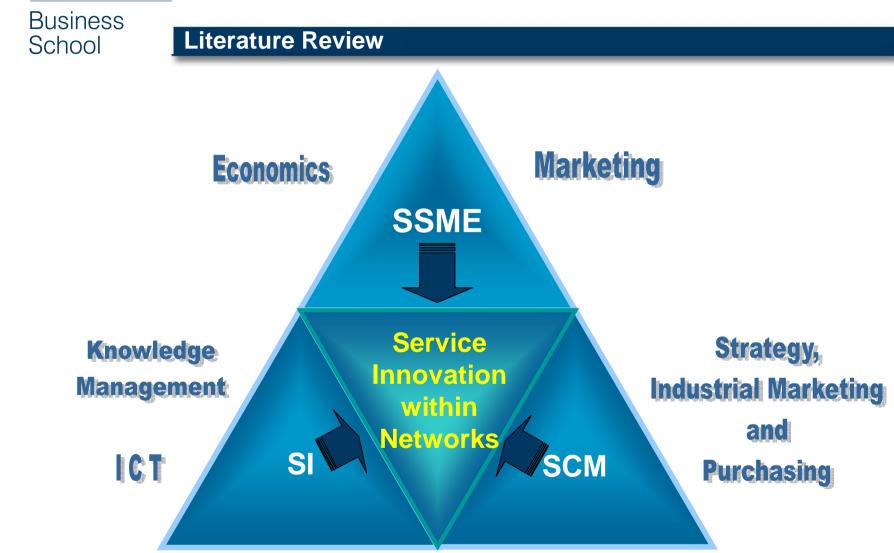
"The successful exploitation of new ideas" (Paton and McLaughlin, 2008, p.78)

• Service system

"A dynamic value co-creation configuration of resources, including people, organizations, shared information (language, laws, measures, methods), and technology, all connected internally and externally to other systems by value propositions" (Spohrer et al., 2008, p.108)











Business

School

Research questions

- How does service innovation (SI) take place in a supply chain network (SCN)?
- What enables SI within a SCN?
- Does the level of analysis (dyad, triad or network) hide or highlight elements related to the innovation of services within the SCN?





General approach to the research design

- The research sits on the social constructionism paradigm in which reality is determined by people and the meanings they give to their experiences
- The researcher is willing to approach the study under the critical realism ontology
- When following a social constructionism epistemology it is required to:
 - Look for the evolution of new theories
 - Formulate theoretical propositions linked to the SCM, SI, and SSME disciplines
 - Design instruments that show the researcher's effects
 - Privilege conversations and story telling
- The method is a qualitative case study research
 - Unstructured interviews
 - Documents' analysis (policy documents, contracts, memos of understanding, service level agreements, meetings' memories)
 - Triangulate





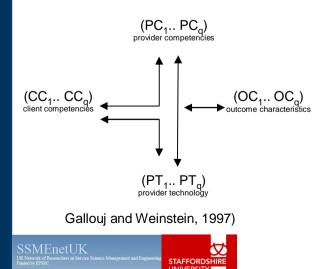
Research design – theories

THEORETICAL UMBRELLA

 Resource Based View – extend it to operant resources as presented in the SDL debate

SERVICE INNOVATION

 Synthesis/integrative approach – build on de Vries (2006) work on Innovation in services in networks of organizations

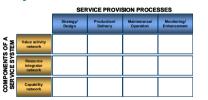


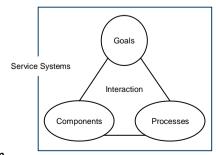


SUPPLY CHAIN MANAGEMENT

The Services Supply Chain Model – enrich Ellram et al (2004) work on understanding an managing the services supply chain SERVICE SCIENCE

Theory of service systems – considering Kim and Nam (2009) the framework for understanding service systems





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Case study research design

STUDY QUESTIONS 1. The main research question is a

how question, complemented with a **what** and a **how much**.

PROPOSITIONS

2. The theoretical proposition is to take the **RBV** to the network level, and to develop bridges between SCM and SSME in the concepts of integration, cocreation, collaboration and operant resources

UNIT OF ANALYSIS

3. **Sub-networks** within a supply chain network

LOGIC LINKING DATA AND PROPOSITIONS

4. The main research question is a how question, complemented with a what and a how much. Therefore, **pattern matching**, **identifying differences** between official and un-official discourses, and **explanation building** are the analytic techniques the researcher anticipates to use.

CRITERIA FOR INTERPRETING

5. Rival explanations to the findings.

(Yin R.F., 2009)





Expected contributions

 Building theoretical bridges between SCM and SSME on the subject of service innovation, by using service-dominant logic arguments.

SERVICE INNOVATION

• SCM

• SSME

- Collaboration
- Integration of the supply chain
 - Focused on the flow of goods
 - Optimization
- Dyadic analysis

- Value co-creation
- Service system
 - Focused on operant resources
 - New business opportunities
- Network analysis





Expected contributions

- By doing so, I also expect to bring:
 - A better understanding on how service innovation takes place within a supply chain network.
 - Light on the enablers of service innovation within a supply chain network
 - A comparison that will show if the level of analysis (dyad, triad or network) generates, in terms of its results, something different either on the process (service) or the enablers related to service innovation within the SCN
- By looking at the operand and operant resources among the network.
 - May move the RBV discussion on strategy from the firm's competitive advantage level to the network's (service system) competitive advantage level.





References (1)

- BARRINGER, B. R. & BLUEDORN, A. C. (1999) The relationship between corporate entrepreneurship and strategic management. Strategic Management Journal, 20, 421-444.
- BRYMAN, A. (2008) Social Research Methods, Oxford, Oxford University Press.
- CHESBROUGH, H. (2004) Managing open innovation: in uncertain markets, new metrics can help companies to play poker as well as chess. *Research Technology Management*, 47, 23-26.
- CHOI, T. Y. & WU, Z. (2009) Triads in supply networks: theorizing buyer-supplier-supplier relationships. *Journal of Supply Chain Management*, 45, 8-25.
- CROOM, S., ROMANO, P. & GIANNAKIS, M. (2000) Supply chain management: an analytical framework for critical literature review. *European Journal of Purchasing and Supply Management*, 67-83.
- EASTERBY-SMITH, M., THORPE, R. & JACKSON, P. R. (2008) Management Research, London, SAGE.
- ELLRAM, L. M., TATE, W. L. & BILLINGTON, C. (2004) Understanding and Managing the Services Supply Chain. *The Journal of Supply Chain Management*, 40, 17-32.
- GIUNIPERO, L. C., HOOKER, R. E., JOSEPH-MATTHEWS, S., YOON, T. E. & BRUDVIG, S. (2008) A decade of SCM literature: past, present and future implications. *Journal of Supply Chain Management*, 44, 66-86.
- KNIGHT, L. & HARLAND, C. (2005) Managing Supply Networks:: Organizational Roles in Network Management. *European Management Journal*, 23, 281-292.
- LAMBERT, D. M. & COOPER, M. C. (2000) Issues in Supply Chain Management. Industrial Marketing Management, 29, 65-83.
- LUSCH, R. F. & VARGO, S. L. (2006) Service-dominant logic: reactions, reflections and refinements. *Marketing Theory*, 6, 281-288.
- MAGLIO, P. P. & SPOHRER, J. (2008) Fundamentals of service science. *Journal of the Academy of Marketing Science*, 36, 18-20.
- MILES, I. (2008) Patterns of innovation in service industries. IBM Systems Journal, 47, 115-128.
- MÖLLER, K., RAJALA, R. & WESTERLUND, M. (2008) Service Innovation Myopia? A new recipe for client-provider value creation. *California Management Review*, 50, 31-48.
- NEELY, A. (2007) The Servitization of Manufacturing: An analysis of global trends. *14th European Operations Management Association Conference*. Ankara, Turkey.
- PATON, R. A. & MCLAUGHLIN, S. (2008) Services innovation: knowledge transfer and supply chain. *European Management Journal*, 26, 77-83.
- SCHUMPETER, J. A. (1939) Business Cycles: A Theoretical, Historical, and Statistical Analysis of the Capital Process, New York, McGraw-Hill Book Company, Inc.
- SPOHRER, J., MAGLIO, P. P., BAILEY, J. & GRUHL, D. (2007) Steps Toward a Science of Service Systems. *Computer,* 40, 71-77.
- TAN, K. C. (2001) A framework of supply chain management literature. *European Journal of Pruchasing and Supply Management*, 39-48.
- TODEVA, E. (2006) Business Networks: Strategy and Structure, London, Routledge.



References (2)

- VALÉRY, N. (1999) Survey: Innovation in Industry. *The Economist (US),* 350, 5-19.
- VAN DER HAVE, R., TOIVONEN, M. & TUOMINEN, T. (2008) Dimensions of Service Innovation. *SSRN*. Espoo, Finland, Helsinki University of Technology.
- VARGO, S. L. & AKAKA, M. A. (2009) Service-Dominant Logic as a Foundation for Service Science: Clarifications. *Service Science*, 1, 32-41.
- VARGO, S. L. & LUSCH, R. F. (2004a) Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, 68, 1-17.
- VARGO, S. L. & LUSCH, R. F. (2004b) The Four Service Marketing Myths: Remnants of a Goods-Based, Manufacturing Model. *Journal of Service Research*, 6, 324-335.
- VARGO, S. L., LUSCH, R. F. & MORGAN, F. W. (2006) Historical Perspectives on Service-Dominant Logic. IN LUSCH, R. F. & VARGO, S. L. (Eds.) *The Service-Dominant Logic of Marketing: Dialog, Debate, and Directions.* Armonk, New York, M.E. Sharpe.
- VARGO, S. L., MAGLIO, P. P. & AKAKA, M. A. (2008) On value and value co-creation: A service systems and service logic perspective. *European Management Journal,* 26, 145-152.
- WU, Z., CHOI, T. Y. & RUNGTUSANATHAM, M. J. (2010) Supplier-supplier relationships in buyer-supplier-supplier triads: Implications for supplier performance. *Journal of Operations Management*, 28, 115-123.
- ZAHRA, S. A., DHARWADKAR, R. & GEORGE, G. (2000) Entrepreneurship in multinational subsidiaries: The effects of corporate and local environmental contexts. *Extraído el.* CIBER Georgia State University.
- ZHENG, J., KNIGHT, L., HARLAND, C., HUMBY, S. & JAMES, K. (2007) An analysis of research into the future of purchasing and supply management. *Journal of Purchasing and Supply Management*, 13, 69-83.









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