

Opening the black box of innovation capabilities  
Porto Alegre, 13-14 April 2021, Webinar  
NITEC UFRGS, The George Washington University



# **Which advances in Service Innovation Studies?**

## **An overview of four decades of research**

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# Introduction

- SIS: a field of research that emerged in the mid-80s and early 90s
- Convergence of
  - *service studies* and
  - *innovation studies*
- Increasing literature

# Introduction

| General surveys   |  |
|---|--|
| - Droege et al. (2009)<br>- Bryson and Monnoyer (2004)<br>- Coombs and Miles (2000)<br>- Gallouj (1994, 2002a, 2010)<br>- Gallouj and Savona (2009, 2010)<br>- Gallouj and Windrum (2009)<br>- Miles (2002, 2005) | - Gallouj and Djellal (2010)<br>- Howells (2007, 2010)<br>- Windrum (2007)<br>- Pilat (2001)<br>- Drejer (2004)<br>- Rubalcaba et al. (2012)<br>- Carlborg et al. (2014)<br>- Djellal and Gallouj (2015) |
| Specific (sectoral) surveys   |  |
| - <i>Innovation in hospitals</i><br>- <i>Diffusion of innovation in health services</i>   | - Djellal and Gallouj (2007a)<br>- Greenhalgh et al. (2004)  |
| - <i>Innovation in public services</i>  | - Djellal et al. (2013)<br>- Windrum and Koch (2008)<br>- Gallouj and Zanfei (2013)<br>- Miles (2013)<br>- Arduini and Zanfei (2014)   |
| - <i>Innovation in Tourism</i>  | - Hjalager (2010),   |
| - <i>Innovation in logistic services</i>  | - Chapman et al. (2003)  |
| Specific (thematic) surveys   |  |
| - <i>Typologies of innovation in services</i>   | - Snyder et al. (2016)   |
| - <i>The servitization of manufacturing</i>   | - Baines et al. (2009)   |
| - <i>New service development</i>  | - De Jong and Vermeulen (2003),<br>- Johnes and Storey (1998)  |
| - <i>Innovation indicators</i>  | - Djellal and Gallouj (1999)<br>- Drejer (2004)<br>- Gault (1998)<br>- Evangelista and Sirilli (1995)  |
| - <i>Innovation and employment</i>  | - Djellal and Gallouj (2007b)  |

# Introduction

- *Advances in the recognition of SIS, in the general theoretical perspectives and the understanding of the nature of innovation*

1. From non-innovative services to services as simple adopters of technological innovations
2. From services as simple passive adopters to services as active adopters or even producers of technological innovations
3. From services as adopters/producers of technological innovation to services as producers of specific innovation forms
4. From innovation in some specific service sub-sectors to innovation in all service activities
5. From innovation *in* services to innovation *through* services
6. From innovation *in* services to service innovation (everywhere)
7. From publications in existing journals to the creation of specialized journals

- *Advances in innovation operating modes and institutional and regulation arrangements*

8. From Oslo Manual 1992 edition to Oslo Manual 2018 edition
9. From assimilation surveys to demarcation and integration surveys
10. From assimilation policies to demarcation and integration policies
11. From the search for productivity to the search for performance
12. From natural interactivity to linearization and back to a claimed interactivity
13. From services industrialization to goods servitization
14. Balancing the intrinsic tension between service standardization and service customization
15. Balancing the intrinsic tension between service extension and service regression


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## 1. The advances in the recognition of SIS and in the general theoretical perspectives

- ***Advance 1. From non-innovative services to services as simple adopters of technological innovations***
- **Ignorance or denial**
- **(Passive) adoption of technology** produced by manufacturing
- **Technologist**, industrialist, assimilationist view
- **Exogeneity** (technology as a production factor)
- **Subordination** vis-a-vis manufacturing (*supplier-dominated trajectory*)



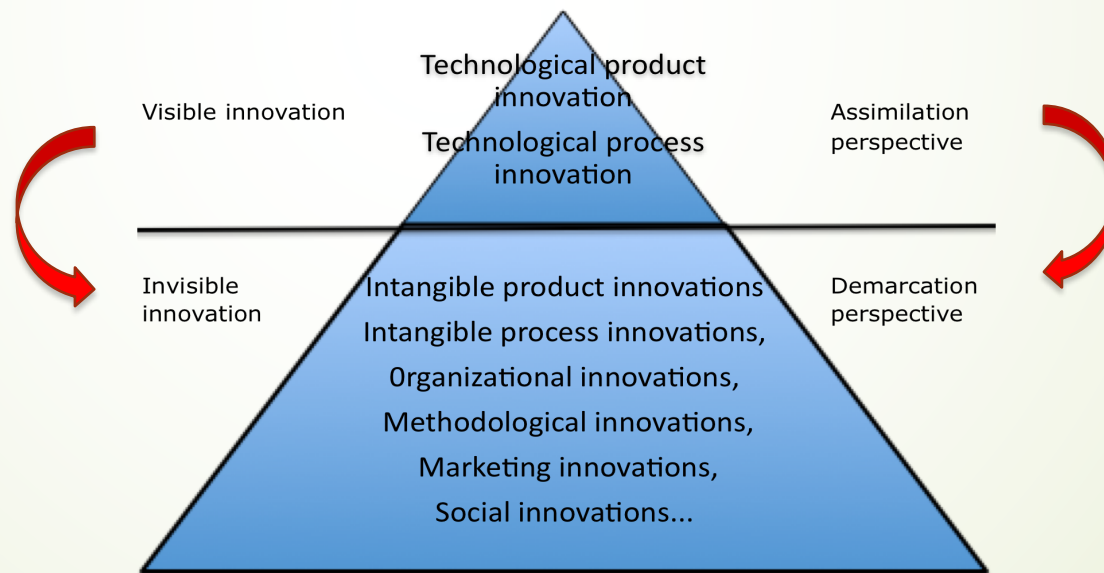


# 1. The advances in the recognition of SIS and in the general theoretical perspectives

- ***Advance 2. From services as simple passive adopters to services as active adopters or even producers of technological innovations***
- **Still technologist**, industrialist, assimilationist view: focus on **technology**
- **Endogenization**
  - Innovative service = a *hybrid category* mixing ICTs and organizational engineering
- **Autonomization**
  - *Production* of their own technology
  - *Orientation* of suppliers technological trajectories (*Customer-dominated* trajectories)

1. The advances in the recognition of SIS and in the general theoretical perspectives

➤ ***Advance 3. From services as adopters/producers of technological innovations to services as producers of specific forms of innovation***





# 1. The advances in the recognition of SIS and in the general theoretical perspectives

## ➤ *Advance 4. From innovation in some specific sectors to innovation in all service activities*

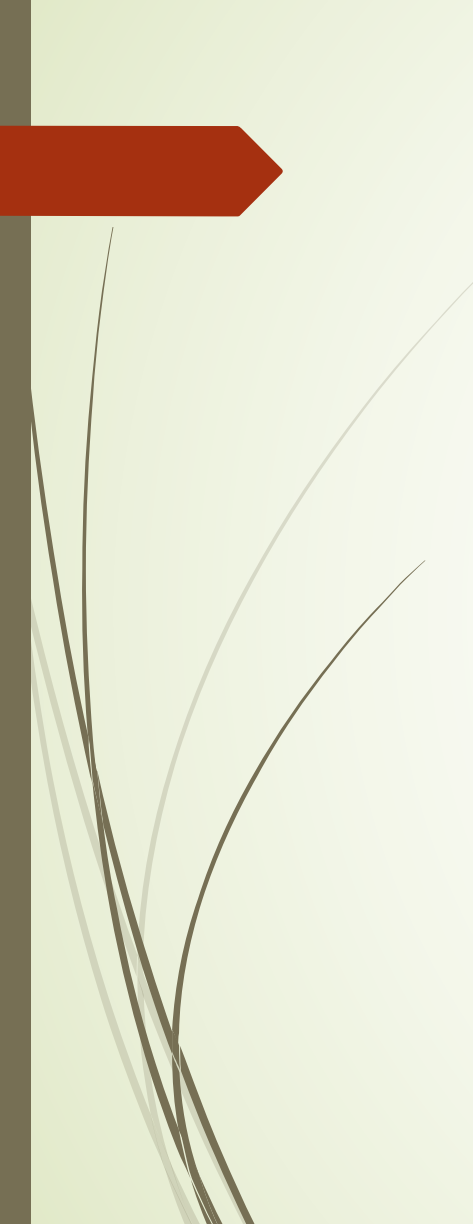
**a) KIS (KIBS + informational services)**

- The purest services (IHIP paradigm)
- The most sensitive to innovation

**b) Proliferation of areas of empirical investigation:**  
From KIS to less KIS

**c) Public services**

*Non-technological forms of innovation identified everywhere*



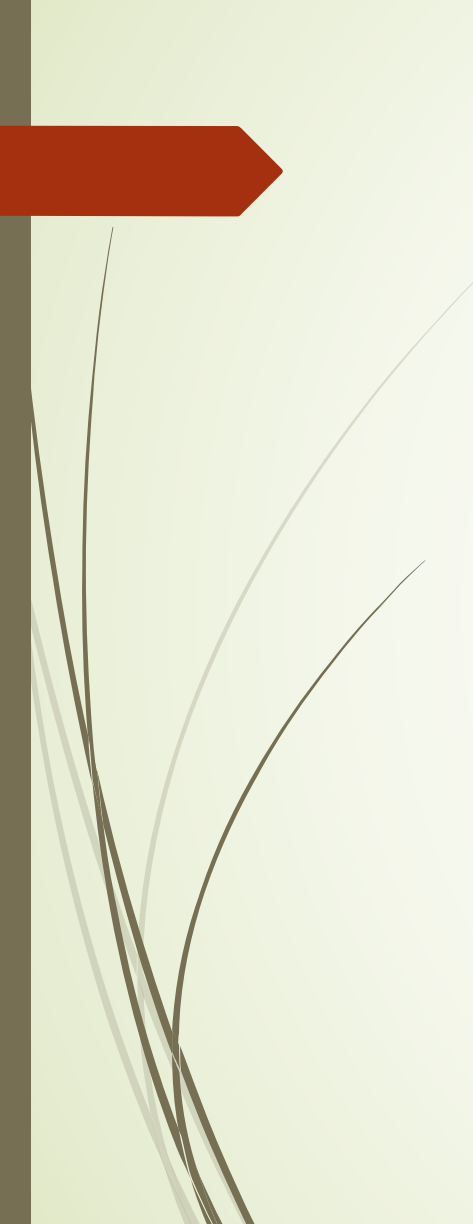
1. The advances in the recognition of SIS and in the general theoretical perspectives

■ *Advance 5. From innovation in services to innovation through services*

■ Recognition of the role of KIBS in their clients' innovation

■ KIBS-aided innovation model/Schumpeter mark 3

■ **Inversion** of the balance of power between manufacturing and services



## 1. The advances in the recognition of SIS and in the general theoretical perspectives

- ***Advance 6. From innovation in services to service innovation (everywhere)***
- From goods/services dichotomy to **all is service... and service innovation**
- From assimilation/demarcation perspectives to integration perspective
- Integrative theoretical models: *functional economy, experience economy, characteristics-based approach, SDL, service science*

# 1. The advances in the recognition of SIS and in the general theoretical perspectives

## ► *Advance 7. From publications in existing reviews to the creation of specialized reviews*

- Early important works published in
  - general management or innovation management journals
  - industrial and innovation economics journals
  - e.g. *Research Policy*



# 1. The advances in the recognition of SIS and in the general theoretical perspectives

*Advance 7. From publications in existing reviews to the creation of specialized reviews*



| Journal  | Creation date | Publisher   |
|--|---------------|---|
| Economia dei Servizi: Mercati, Istituzioni e Management  | 2006          | Il Muliano  |
| European Review of Services Economics and Management (ERSEM) (replacing Economies et Sociétés, EGS series) | 2016<br>1995  | Les Classiques Garnier<br>Les presses de l'Ismea      |
| e-Service Journal  | 2001          | Indiana University Press                              |
| International Journal of Service Science, Management, Engineering, and Technology (IJSSMET)                | 2010          | IGI Global  |
| International Journal of Services, Economics and Management (IJSEM)  | 2009          | Inderscience  |
| International Journal of Services and Operations Management (IJSOM)  | 2005          | Inderscience  |
| International Journal of Services Operations and Informatics (IJSOI)                                       | 2006          | Inderscience  |
| International Journal of Services Sciences (IJSSci)  | 2008          | Inderscience  |
| International Journal of Services Technology and Management (IJSTM)  | 2000          | Inderscience  |
| Journal of advanced Research in Service Management (JoARSM)  | 2014          | Advanced Research (ADR) Publications (India)          |
| Journal of Service Management (JOSM)<br>Formerly International Journal of Service Industry Management      | 2009<br>1990  | Emerald   |
| Journal of Service Research (JSR)  | 1998          | Sage  |
| Journal of Service Science Research (JoSSR)  | 2009          | Springer  |
| Journal of Service Science (JSS)   | 2008          | The Clute Institute                                   |
| Journal of Service Science and Management (JSSM)   | 2008          | Scientific Research                                   |
| Journal of Services Marketing (JSM)  | 1987          | Emerald   |
| Managing Service Quality   | 1991          | Emerald   |
| Manufacturing and Service Operations Management (MSOM)   | 1999          | Informa   |
| Service Business   | 2007          | Springer  |
| Service Management   | 2005          | Scientific Journal of University of Szczecin (Poland) |
| Service Science  | 2009          | Informa   |
| The Service Industries Journal<br>Formerly known as Service Industries Review                              | 1983<br>1981  | Taylor & Francis                                      |

## 2. Advances in operating modes and institutional and regulation mechanisms

- *Advances in the recognition of SIS, in the general theoretical perspectives and the understanding of the nature of innovation*

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## 2. Advances in operating modes and institutional and regulation mechanisms

### ➤ ***Advance 8. From Oslo Manual 1992 edition to Oslo Manual 2018 edition***

#### ➤ ***O.M. 1992***

- *Ignorance/denial phase*
- *No services*

#### ➤ ***O.M. 1997***

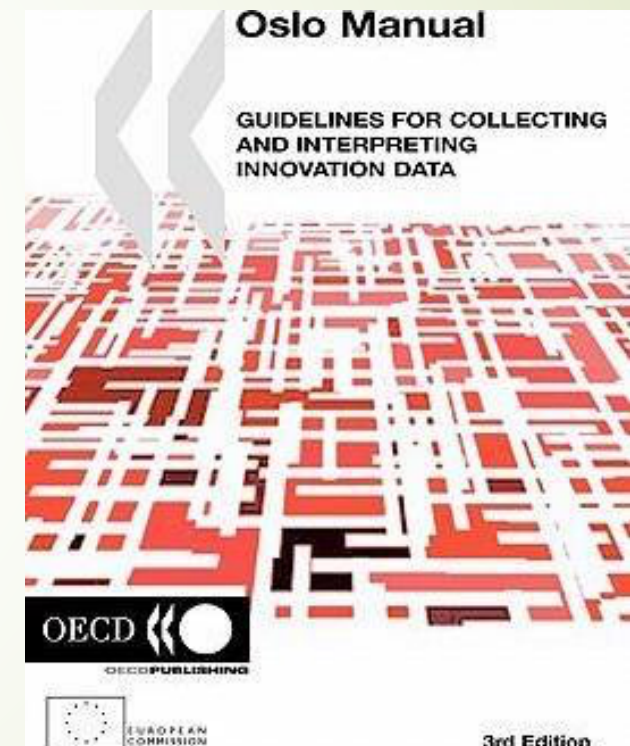
- *Technologist/industrialist perspective*
- *Includes market services*
- *Only technological product and process innovations*

#### ➤ ***O.M. 2005***

- *Demarcation/integration perspectives*
- *Includes marketing innovation, organizational innovation*


#### ➤ ***O.M. 2018***

- *Integration perspective*
- *Product innovation (both goods and services) and Business process innovation*



## 2. Advances in operating modes and institutional and regulation mechanisms

- ***Advance 9. From assimilation surveys to demarcative and integrative surveys***
- *Assimilationist or “subordinate”* surveys: apply to services questionnaires designed for manufacturing and focus on technological innovation.
- *Demarcative or “autonomous”* surveys: address specific forms of innovation in services.
- *Integrative* surveys: same innovation indicators for both goods and services



## 2. Advances in operating modes and institutional and regulation mechanisms

### ➤ *Advance 10. From assimilation policies to demarcation and integration policies*

- *Assimilation*: applying to services industrial policy (mainly scientific and technical)
- *Demarcation*: policies that favour specific actions for services
- *Integration*: promoting “product-service systems” and supporting tangible and intangible dimensions of innovation

## 2. Advances in operating modes and institutional and regulation mechanisms

### ➤ *Advance 11. From the search for productivity to the search for performance*

- *1<sup>st</sup> stage*: the observation of low productivity in services (Clark, 1940 and Fourastié, 1949)
- *2<sup>nd</sup> stage*: challenging the low natural productivity assumption
  - Managerial argument
  - Methodological argument
- *3<sup>rd</sup> stage*: from productivity to performance

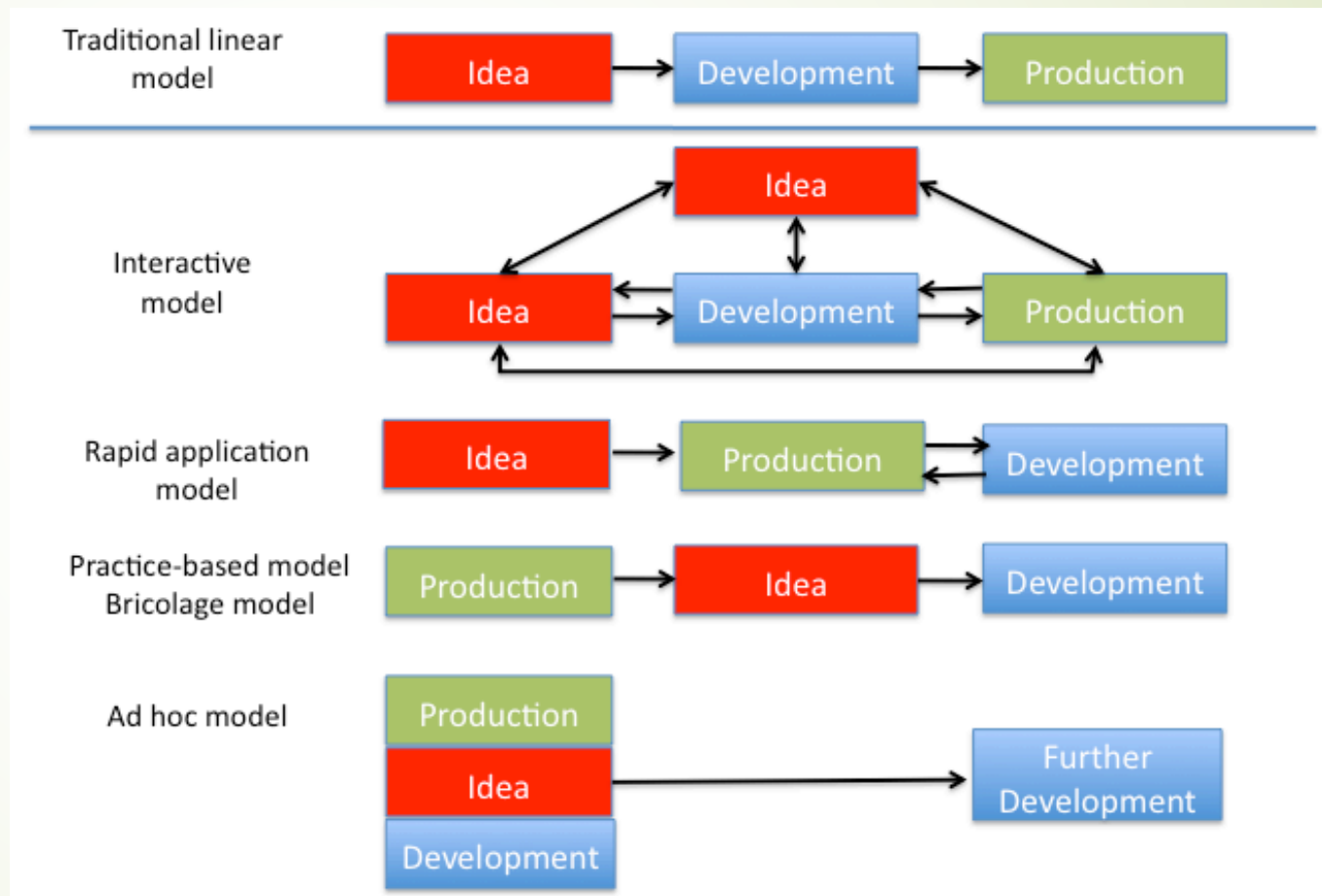
$$P = \frac{?}{L}$$

## 2. Advances in operating modes and institutional and regulation mechanisms

- ***Advance 12. From natural interactivity to linearization and back to a claimed interactivity***
- Services are **interactive** and open by nature
- To limit this interactivity, **linearization** efforts implemented
  - In production: linearization = **industrialization**.
  - In innovation: linearization = **NSD**
- Linearization challenged by the recognition and reinforcement of **interactive, open models**.

## 2. Advances in operating modes and institutional and regulation mechanisms

### Linear and interactive innovation models





## 2. Advances in operating modes and institutional and regulation mechanisms

- ***Advance 13. From services industrialization to goods servitization***
- These two innovation *megatrends* historically follow each other
- *Service industrialization*: Service organizations make their product more material and less blurred.
- *Goods servitization*: the rise of the service logic in manufacturing firms
- However these processes coexist

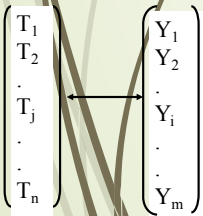
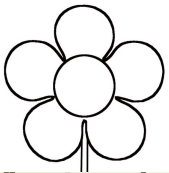
## 2. Advances in operating modes and institutional and regulation mechanisms

- ***Advance 14. Balancing the “intrinsic tension” between service standardization and service customization***
- *Services standardization*: erase service specificities
- *Service customization*: offer a service tailored to the specificities of the customer
- Both are important innovation trajectories in services.
- A new innovation potential: the reconciliation of these trajectories within a single firm or sector.
  - For ex., banks, through their multi-channel offers.

## 2. Advances in operating modes and institutional and regulation mechanisms

### ➤ ***Advance 15. Balancing the “intrinsic tension” between service regression and service extension***

- Innovation may stem from service *extension* but also from service *regression*
- In services marketing: service = core service + peripheral services.
- In microeconomics: Lancasterian approach to the product as a combination of services characteristics
- Innovation as service regression: low cost



# Conclusion

- *Societal challenges*

1. Service innovation and the environmental challenge
2. Service innovation and social innovation
3. Service innovation and developing/emerging countries
4. Service innovation and the religious trajectory
5. Service innovation and population ageing
6. Service innovation and the gender agenda
7. Service innovation and ethical and societal issues

- *Organizational and structural challenges*

1. Service innovation and entrepreneurship
2. Service innovation, employment and skills
3. Service innovation and smart service ecosystems
4. Service innovation, innovation networks and innovation systems

- *Methodological and didactic challenges*

1. Service innovation in forgotten sectors
2. Service innovation and multidisciplinary: towards a service science?
3. Service innovation and new evaluation challenges
4. Service innovation studies and service innovation degrees

