



Gatekeepers of Innovation Research: who is who in scientific publication

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Introduction

General Subject

- ✦ Annual growth exceeds the growth rate of the set of disciplines on other areas of research.
- ✦ Such growth involves new actors.

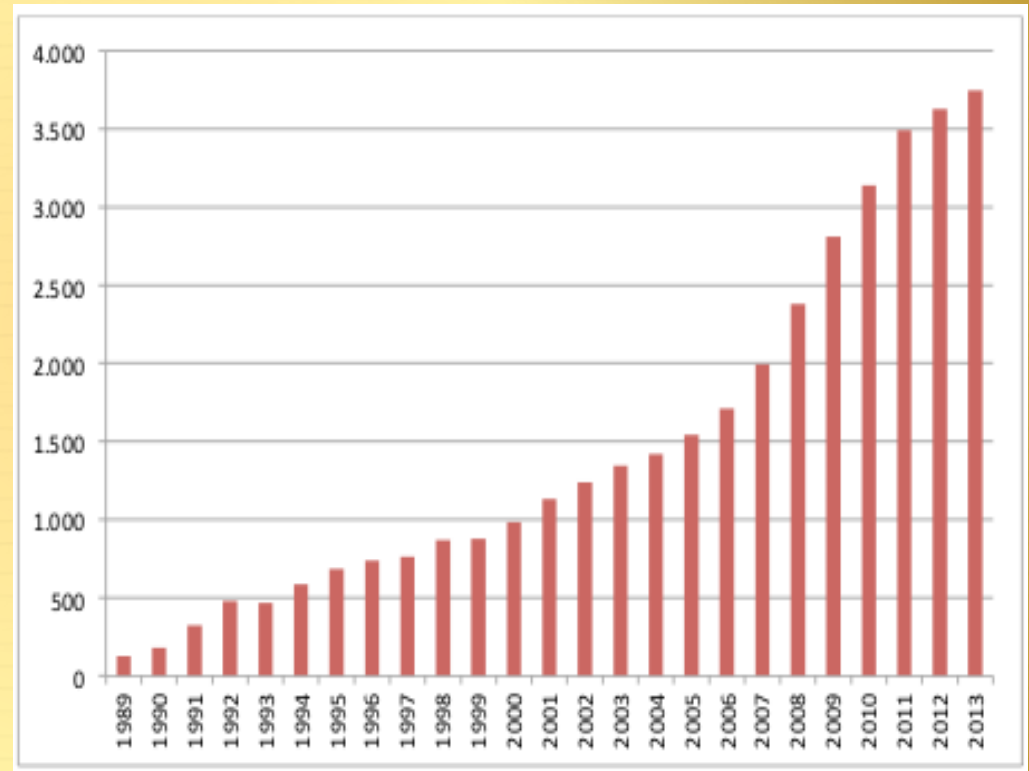


Figure 1. Annual number of studies in innovation research.
Source: Cancino & Merigo (2017) A Bibliometric Analysis of Innovation Research.

Innovation

Linear Models

Linear Models

1950/60s – Technology Push

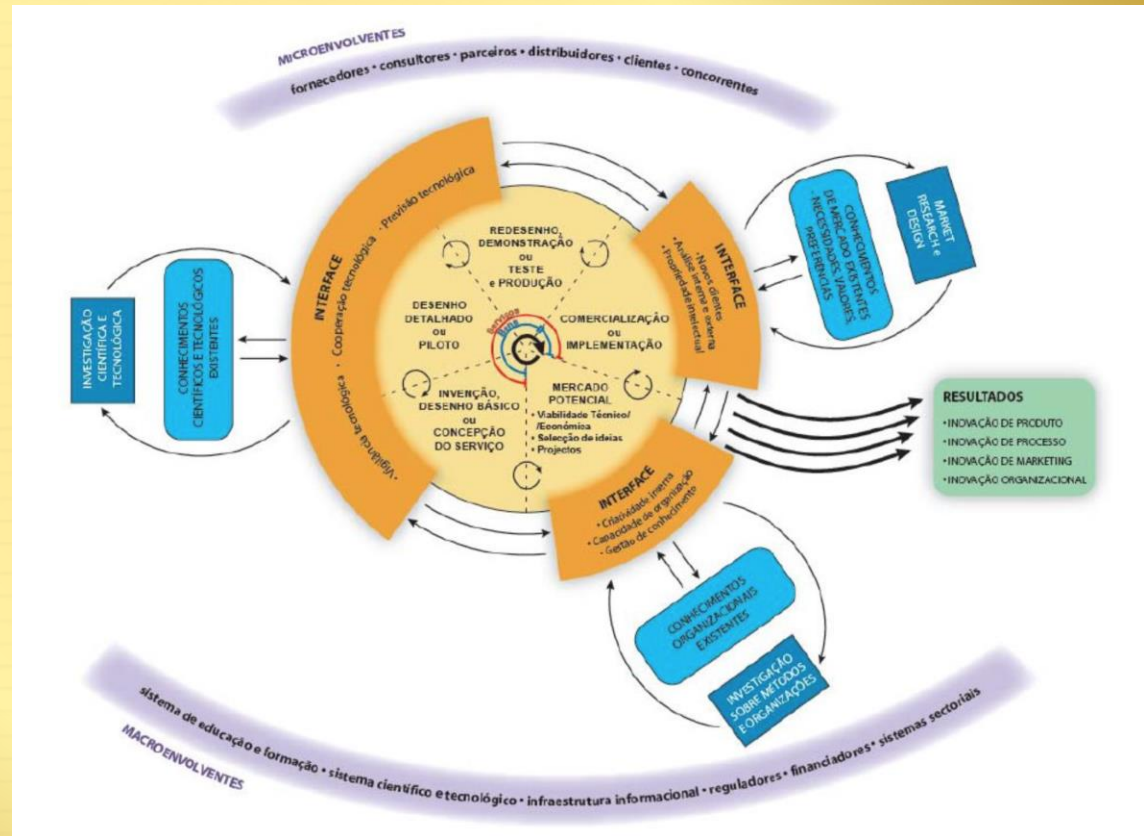


1970s – Market Pull



Innovation Interaction Model

- ✦ Knowledge accumulation;
- ✦ External linkages



Caraça, Ferreira, Mendonça (2006)

Scientific Articles Publication

The Peer Review Process starts with the researcher ...



The researcher writes a paper and submits it to the editor of a journal.



The editor determines whether the article is of sufficient quality and appropriate content. He will either reject or accept it. If he accepts the article, he gives it to the reviewers.



The editor receives the revised article and makes the final decision to publish or not, taking into consideration the reviewers's feedback.



End Result: Publication!



These reviewers have specialized knowledge of the subject area and are often times researchers themselves.

They review the article for quality of research. Their goal is to find any gaps in reasoning and to ensure that nothing has been overlooked.



The article is returned to the editor along with a recommendation to either reject the article, revise it or accept it.



The article is returned to the researcher along with the reviewers's feedback and any requests for revision. She will have to revise the article and resubmit it.




- ✦ Authors
- ✦ Reviewers
- ✦ Editors
- ✦ Readers/ Users

This is complex!

Methodologies


Bibliometrics



Statistical Analysis of Bibliographic data:

- ✦ Measures patterns of authorship, publication and use of literature;
- ✦ Usually citation analysis of research output & publications;
- ✦ Measuring by author, article, publication or journal.

State-of-the-Art



2012

Fagerberg, et.al.
*Innovation: Exploring
the knowledge base*

2013

Shafique
*Thinking inside the box?
Intellectual structure of
the knowledge base of
innovation research*

2016

Merigo, et al.
*Academic research in
innovation: a country
analysis*

2017

Cancino, et al.
*A bibliometric analysis of
leading universities in
innovation research*

2009

Fagerberg, Verspagen
*Innovation studies—The
emerging structure of a
new scientific field.*

2012

Ben Martin
*The evolution of science
policy and innovation
studies*

2015

Cancino, et al.
*A bibliometric analysis of
innovation research*

2017

Cancino, et al.
*Big names in innovation
research:
a bibliometric overview*



State-of-the-Art Important Papers

2012

Fagerberg, et.al.
*Innovation: Exploring
the knowledge base*

The most popular topics.

The most cited handbook
chapters.

2012

Ben Martin
*The evolution of science
policy and innovation
studies*

Publications with titles
related to innovation were
selected and citations
counted.

2013

Shafique
*Thinking inside the box?
Intellectual structure of
the knowledge base of
innovation research*

100 most influential
publications were
identified.

State-of-the-Art

Authors

2009

Fagerberg, Verspagen
Innovation studies—The emerging structure of a new scientific field.

98 project leaders demonstrated their linkage with other scholars.

5 most important sources of inspiration.

2012

Fagerberg, et.al.
Innovation: Exploring the knowledge base

20 authors who contribute the most.

2016

Merigo, et al.
Academic research in innovation: a country analysis

Authors which publish very influential articles.

2017

Cancino, et al.
Big names in innovation research: a bibliometric overview

Leading authors:
- *Total articles*
- *Total citations*
- *H-index*

State-of-the-Art Journals

2012

Fagerberg, et.al.
*Innovation: Exploring
the knowledge base*

98 project leaders
identified the most
important publication
channels.

2009

Fagerberg, Verspagen
*Innovation studies—The
emerging structure of a
new scientific field.*

The 20 journals which
users (cites) the most
innovation articles.

2013

Shafique
*Thinking inside the box?
Intellectual structure of
the knowledge base of
innovation research*

100 most influential
publications were
identified for 3 sub-
periods.

2015

Cancino, et al.
*A bibliometric analysis of
innovation research*

Top 7 innovation
journals (total
publications).

State-of-the-Art Institutions

2009

Fagerberg, Verspagen
*Innovation studies—The
emerging structure of a
new scientific field.*

98 project leaders
identified their
favorite places to
meet.

2012

Fagerberg, et.al.
*Innovation: Exploring
the knowledge base*

Top 10 institutions
based on the scientific
contribution.

2015

Cancino, et al.
*A bibliometric analysis of
innovation research*

Most influential and
productive
universities.

2017

Cancino, et al.
*A bibliometric analysis of
leading universities in
innovation research*

Most influential and
productive universities
for 4 time periods.

State-of-the-Art Countries & Continents

2012

Fagerberg, et.al.
*Innovation: Exploring
the knowledge base*

2016

Merigo, et al.
*Academic research in
innovation: a country
analysis*

Continents where
innovation users (authors
citing) are placed.

The most productive and
influential countries for
periods of 5 years.

State-of-the-Art

Social & Virtual Organizations

2012

Fagerberg, et.al.
*Innovation: Exploring
the knowledge base*

Survey showed a large
number of small virtual
groups of interacting
scholars.

2009

Fagerberg, Verspagen
*Innovation studies—The
emerging structure of a
new scientific field.*

3 “poles” in the innovation
literature were identified
through a cluster analysis.

2016

Merigo, et al.
*Academic research in
innovation: a country
analysis*

Countries were grouped in
supranational regions and
publication evolution of
these regions throughout
time was determined.

What is Missing?



- ✦ Journal Editors as important stakeholders;
 - Who they are?
 - Where they are?
 - Who they work with?

- ✦ Impact of Editorial Changes in Journal's focus.

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- ✦ Fagerberg J, Verspagen B. Innovation studies—The emerging structure of a new scientific field. *Res Policy*. 2009;38(2):218-233. doi:10.1016/j.respol.2008.12.006.
- ✦ The Theory of Economic Development : An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle.
- ✦ Fagerberg, J.; Fosaas, M.; Sapprasert K. Innovation: Exploring the knowledge base. *Res Policy*. 2012;41(7):1132-1153. doi:10.1016/J.RESPOL.2012.03.008.
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Thank You