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Bibliometric Analysis of Product-Service System Research Field

by

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Introduction

- Product-service system (PSS) has emerged as one of the most important business concept for industrial organizations.
- Although there are already literature reviews that provided important guidance about PSS, there is an opportunity to investigate PSS using more quantitative metrics.
- This article provides an understanding of PSS research field through a bibliometric analysis, leading to the description of its state-of-art and identifying possible evolution in terms of knowledge creation





Procedures of searching

Web of Science covered papers published from 2002 to 2013

keywords: "product service system" or "servitization"

English language and scientific journals

Initial sample with 131 selected articles

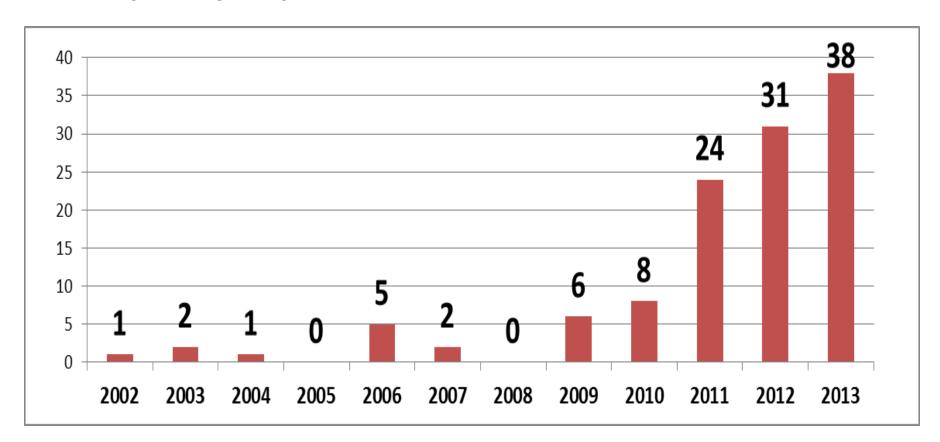
a double-check process (118 selected articles)

Analyses with bibliometric softwares





Frequency of publications



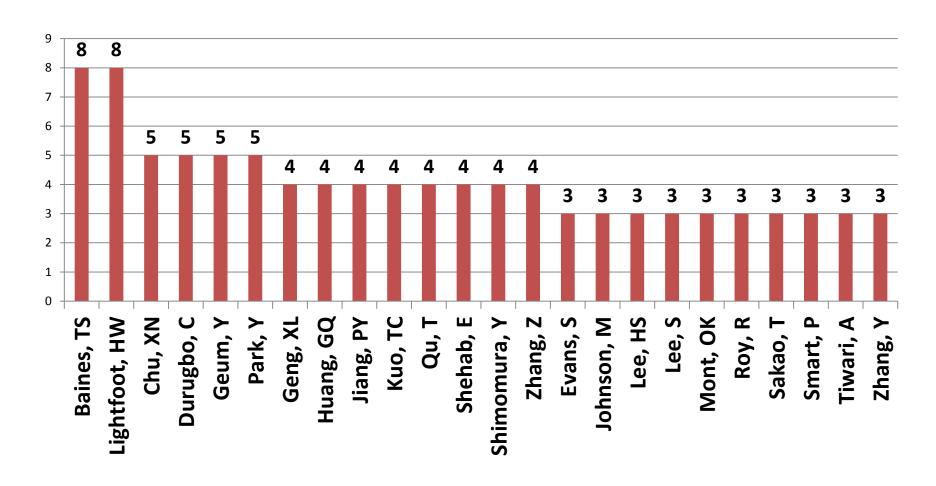
From 2011 to 2013, the number of papers has increased drastically (78,8%)





Authors

(386 authors)

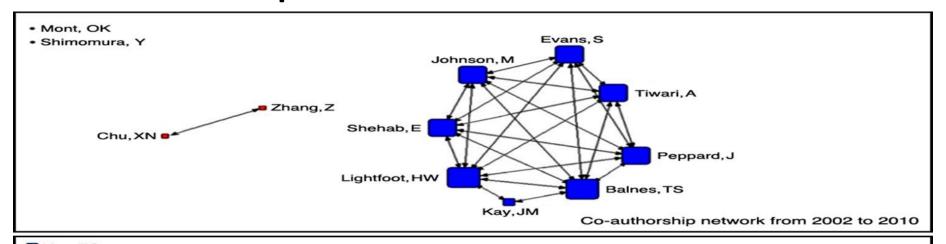


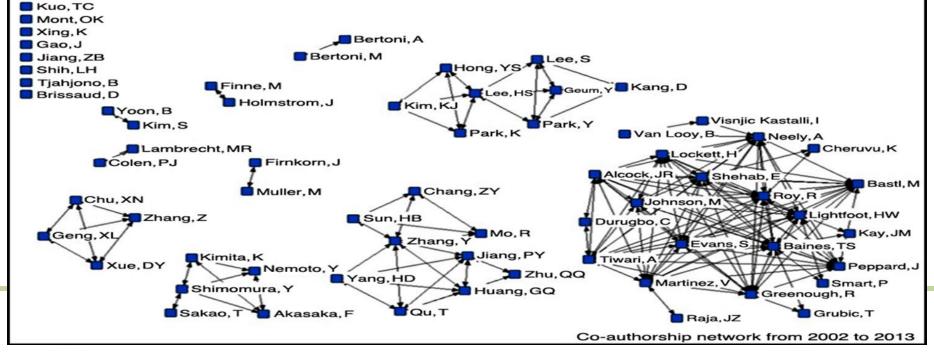




Co-authorship network

(from 2002 to 2010 and from 2002 to 2013)







Institutions

(123 institutions)

Ranking	Institution	Papers
1	Cranfield University, United Kingdom	20
2	Shanghai Jiao Tong University, China	9
3	Seoul National University, South Korea	7
4	Tokyo Metropolitan University, Japan	5
5	Xi'an Jiaotong University, China	5
6	Aston University, United Kingdom	4
7	Katholieke Universiteit Leuven, Belgium	4
8	Linkoping University, Sweden	4
9	Lulea University of Technology, Sweden	4
10	Lund University, Sweden	4
11	The University of Hong Kong, China	4
12	Aalto University, Finland	3
13	Chung Yuan Christian University, Taiwan	3
14	University of Bristol, United Kingdom	3
15	University of Cambridge, United Kingdom	3
16	University of Vaasa, Finland	3





Journals

(45 journals)

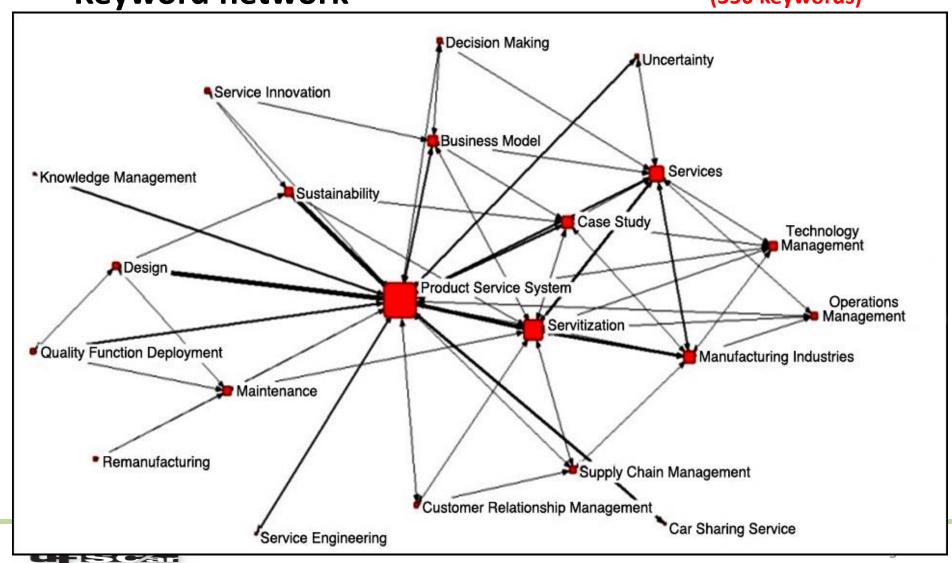
Ranking	Journals	Papers
1	Journal of Cleaner Production	19
2	Int. Journal of Production Research	11
3	Int. Journal of Adv. Manufacturing Technologies	9
4	Journal of Engineering Manufacture	8
5	Computers in Industry	7
6	Service Business	5
7	CIRP Ann-Manufacturing Technology	4
8	Expert Systems with Applications	4
9	Int. Journal of Operations Production Management	4
10	Industrial Marketing Management	3
11	Int. Journal of Computed Integrated Manufacturing	3
12	Journal of Engineering Design	3
13	Journal of Engineering Technology Management	3





Keyword network

(350 keywords)





Most cited references

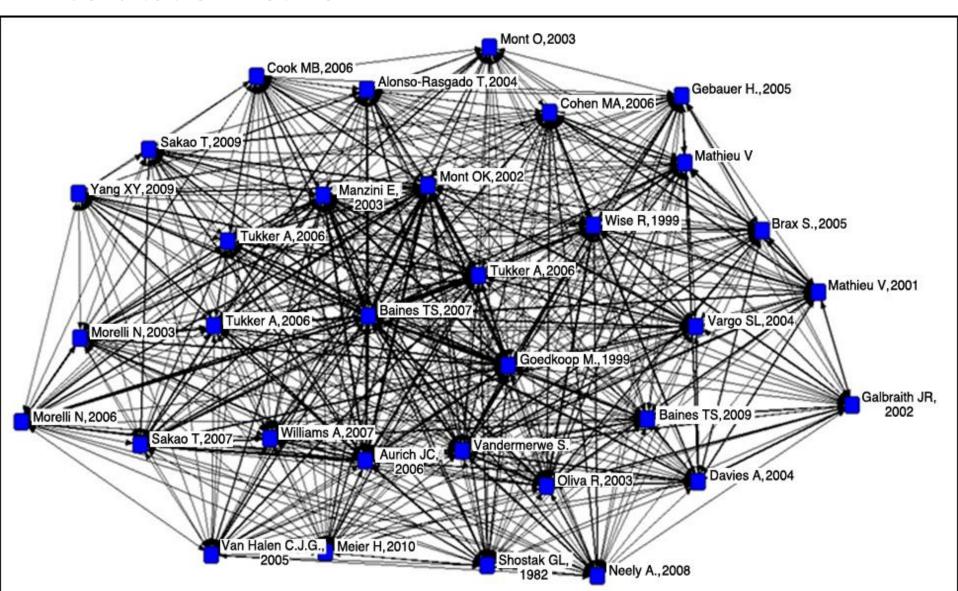
(4277 references)

Author (year)	Title	<mark>Journal</mark>
Baines et al. 2007	State-of-The-Art in Product-Service Systems	Proceed. Inst Mech Eng Part B- Journal Eng
Mont. 2002	Clarifying the Concept of Product-Service System	Journal of Cleaner Production
Tukker 2004	Eight Types of Product–Service System: Eight Ways To Sustainability?	Business Strategy and Environment
Goedkoop et al. 2009	Product-Service Systems, Ecological and Economic Basics	Report
Manzini and Vezzoli 2003	A Strategic Design Approach to Develop Sustainable Product Service Systems:	Journal of Cleaner Production
Aurich et al. 2006	Life Cycle Oriented Design of Technical Product-Service Systems	Journal of Cleaner Production
Vandermewe And Rada 1988	Adding Value by Adding Services	European Management Journal
Oliva And Kallenberg 2003	Managing the Transition From Products To Services	Int. Journal of Service Ind. Management
Wise And Baumgartner 1999	Go Downstream: The New Imperative in Manufacturing	Harvard Business Review
Tukker And Tischner 2006	Product-Services as a Research Field: Past, Present And Future. Reflections From A Decade of Research	Journal of Cleaner Production





Co-citation network





Conclusions

- This article presented a bibliometric analysis of PSS research field based on a sample of 118 papers collected from the Web of Science and published from 2002 to 2013
- the remarkable growing of PSS papers, confirming the relevance of the field.
- **Co-authorship** with groups that have been established over the last years, which are mainly located in Europe and Asia.
- the most cited references were presented, indicating the knowledge foundation of the PSS research field
- Limitations
- A new enlarged version will be submitted to a journal.





Acknowledgements

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Thank you

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