CLUSTERING:
Physical and Digital proximity

clUstErInɡ

International Conference on Clusters & Industrial Districts
May 24-25th, 2018, Valencia (Spain)
Faculty of Economics- University of Valencia
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Welcome

3rd International Conference CLUSTERING-2018

The 3rd International Conference CLUSTERING-2018 will officially start on Thursday 24th of May of 2018, at 9.00am in the Faculty of Economics of the University of Valencia. Maria Dolores Parra, General Director of IVACE-International, will open the event, which has been celebrated for four years now. The event focuses on research around the phenomenon of geographical agglomerations that cluster economic activity in a certain territory.

However, the activities start on Wednesday 23rd, with two Pre-Conference courses. They are two seminars on research methods run by experts in the subject, which will provide valuable applications of several statistical techniques. Prof. Patricia Carracedo, from the Valencian International University (Spain), will teach how to identify and map clusters by using R software. Besides, Prof. Bo Nielsen, from the U. of Sidney (Australia) will explain how to develop multilevel analyses.

It is now the 4th edition of the conference (the first one in the form of a workshop), which has positioned this scientific meeting as a referential forum for the research discussion around clusters. We believe this is due to its nature. While most of Conferences are held in different places each year and cover a wide range of topics within a discipline, CLUSTERING is always held in the University of Valencia and it adopts a horizontal approach, focused in clusters as the main topic of interest, but including a variety of disciplines (economics, marketing, sociology...).

This enables us to analyse the phenomenon of clustering from two perspectives: diversity and depth. The evidence of the latter relates to the themes and topics included, and the former becomes evident in the increasing number of universities and nationalities that participate in the Conference. Indeed, the existence of a high cognitive proximity between attendees eases the creation of an academic atmosphere specialized in the topic, which makes the event an enriching academic forum for discussion and debate.

That proximity is also important for discussing the role that the local context plays in the global environment. The distance between two individuals, firms or regions affects both their trust and commitment, and it has an impact on the frequency and type of their interactions. The positive relationship between agglomeration and performance (economic performance, innovation, entrepreneurship, survival...) is a clear example of the influence that geographical proximity has on the economic activity of businesses. The existence of the different modalities that those agglomerations may take (clusters, industrial districts, technology parks, innovation ecosystems...) is also an evidence of its wide range.

However, along with that physical reality, there is another reality, virtual in nature, which is characterized by the irruption of digital technologies that challenge some of the theoretical assumptions regarding the need of physical proximity. This is what has been labelled as Digital Economy. Not only these technologies are changing the way products are manufactured (Industry 4.0) but they are also creating new ways to organize the commercial activity.

In another words, we are witnessing a spatial reconfiguration of resources and capabilities. This fact has inspired the motto for the conference this year: **New challenges for Clustering: Physical and Digital Distance.** Prof. Philippe Gugler (University of Fribourg, Swiss) will be the inaugural keynote speaker with his talk about “Are geographical clusters still relevant in the digital...
economy?” and prof. Roberta Rabellotti (Università di Pavia, Italy) will lead the plenary session entitled “Multinationals Clustering: challenges and opportunities”.

In this edition we registered an increase in the number of participants. There will be 45 studies presented, co-authored by scholars of 35 different universities coming from 25 countries. The prestigious journal Competitiveness Review will evaluate a selection of papers for a Special Issue on the topic. It is worth mentioning the PhD Workshop and the Torrecid Award for the best PhD project, which is highly valuable for early career scholars. It entails an excellent forum to present and discuss research projects, including doctoral research proposals.

The final program includes two round tables that, we believe, will be very interesting for the attendees. The first one, on Thursday 24th (11.00 to 13.15 h.), is entitled “Clustering as a tool for innovation”. The aim of this session is to discuss the challenges and opportunities for clusters derived from changes in the environment. The second will be on Friday 25th, and it is entitled “Entrepreneurial Ecosystems and Strategies for their development”, which aims to build a space where “entrepreneurial ecosystems” are discussed.

Finally, I want to express my gratitude to the people have contributed for this event to become true. First of all, I will like to acknowledge the support given by the Generalitat Valenciana-IVACE, Jose E. Clar and TORRECID, to the Faculty of Economics and especially to Fina Atienza and the Dean Jose M. Pastor. Above all, I would like to highlight the work and support of the colleagues from our research group GESTOR (Organizational Geostrategy: Clusters and Competitiveness), and the invaluable work done by Xavi Molina and Asun Fernandez. All of them have made this possible, which encourages us to start working on Clustering 2019.

Francisco Puig Blanco.
**COMMITTEES**

2.1 Organizing Committee

**Chair: Francisco Puig (Universitat de València)**

**Members:**

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<tr>
<th>Name</th>
<th>Institution/University</th>
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<td>Berrbizne URZELAI</td>
<td>Mondragon University (Spain)</td>
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<td>Emilio GIL</td>
<td>University of Valencia (Spain)</td>
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<td>Joan CRESPO</td>
<td>Utrecht University, Utrecht (The Netherlands)</td>
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<td>Marcelo ROYO-VELA</td>
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<td>Miguel GONZALEZ-LOUREIRO</td>
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<td>Nina GOROVAIA</td>
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<td>Orietha E. RODRIGUEZ</td>
<td>Universidad ICESI (Colombia)</td>
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<td>Patricia CARRACEDO</td>
<td>International University of Valencia (Spain)</td>
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<td>Philippe GUGLER</td>
<td>University of Fribourg (Switzerland)</td>
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<td>Santiago CANTARERO</td>
<td>University of Valencia (Spain)</td>
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2.2 Scientific Committee.

Chair: Xavier Molina-Morales (Universitat Jaume I, Castellón).

Members:

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<td>Aimeé PÉREZ-ESPARZA</td>
<td>University of Guadalajara (México)</td>
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<td>Ángel BELZUNEUGUI</td>
<td>University Rovira i Virgili of Tarragona (Spain)</td>
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<td>Ángeles MONTORO</td>
<td>Complutense University of Madrid (Spain)</td>
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<td>Anoop MADHOK</td>
<td>York University of Toronto (Canada)</td>
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<td>Antonella ZUCHELLEA</td>
<td>University of Pavia (Italy)</td>
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<td>Aurora PEDRO</td>
<td>Universitat de València (Spain)</td>
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<td>Barbara JANKOWSKA</td>
<td>Poznań University of Economics and Business (Poland)</td>
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<td>Bartolomé MARCO-LAJARA</td>
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<td>Berrbizne URZELAI</td>
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<td>Bo NIELSEN</td>
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<td>Daniella FJELLSTRÖM</td>
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<td>Fabio SFORZI</td>
<td>Università degli studi di Parma (Italy)</td>
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<td>University of Castilla-La Mancha, (Spain)</td>
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<td>Pedro GARCIA-VILLAVERDE</td>
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<td>Pervez N. GAHURI</td>
<td>Birmingham Business School (UK)</td>
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<td>Philippe GUGLER</td>
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<td>Polavarapu RAO</td>
<td>Long Island University (USA)</td>
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<td>Rajneesh NARULA</td>
<td>University of Reading (UK)</td>
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<td>Roberta RABELLOTTI</td>
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<td>Simona IAMMARINO</td>
<td>London School of Economics and Political Science (UK)</td>
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<td>Teresa MARTÍNEZ-FERNÁNDEZ</td>
<td>University Jaume I Castellon (Spain)</td>
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<td>Ulrike MAYHOFER</td>
<td>Université Jean Moulin (France)</td>
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<td>Valentina DI MARCHI</td>
<td>University of Padova (Italy)</td>
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3. Doctoral Symposium and Torrecid Award

The IV Doctoral Symposium welcomes professors and doctoral students working on subjects related to Clusters and Industrial Districts. The symposium is an exclusive session where students and recognized experts in the area of Clusters and Industrial Districts will discuss, in a presentation-discussion-reply format, different issues related to their PhD. Research, such as the theoretical framework, methodology or the expected contributions.

TORRECID Award for the Best Proposal

Among the different thesis proposals presented in CLUSTERING the experts and panel will select the winner of the TORRECID prize. Such recognition and prize will be of € 500 for the doctoral student.

- Winner proposal of 2015: Berrbizne Urzelai
- Winner proposal of 2016: Emilio Camarena-Gil
- Winner proposal of 2017: David Valiente-Bordanova

Scientific Committee 2018:

- Angeles Montoro (Universidad Complutense de Madrid) (coordinator).
- Joan Crespo (U. Toulouse).
- Luis Martinez-Cháfer (UJI, Castellón)
- Enrique Claver (U. Alicante)

Doctoral proposals 2018:

2. “Examining the Best Practice for Business Incubation and the Impact of Enterprise Clustering on New Venture Creation in Nigeria”. Nottingham Trent University (UK) Author: Chiamaka Kwazu. Supervisors: Kostas Galanakis and Piers Thompson
4. “La dimensión social del conocimiento global-local y su papel como de resiliencia en la industria de Alicante”. U. Miguel Hernández (SPAIN). Autora: Rosario Mateu García. Director: José Antonio Belso y María José López
4. General information and Internet Access

The Faculty of Economics is located in the Campus of Tarongers (Valencia). It is located in the northeast of the city and has access to both by public and private transport.

How to reach the Campus by public transport:

- Bus, line 9, 18, 29, 30, 40, 41 and 71
  
  (www.emtvalencia.es/ciudadano/index.php)
- Metro and tram line 4 and 6
  
  (www.metrovalencia.es/page.php)

The sessions will take place in the Hall, which is located on the ground floor, and in the Halls I. Villalonga and Sanchez Ayuso (both located on the first floor).
Internet Access

Free internet access is available in the rooms Sanchez Ayuso and Villalonga.
5. Recommendations for Presentations and Session Chairs

The three rooms where the communications are presented and discussed are equipped with computers that read PowerPoint files as well as projectors and screens.

It is recommended to bring the presentation in a USB and download it into the computer 10 minutes before the start of the session.

Presentations of the parallel sessions should not be longer than 10-12 minutes so as to have time for debate, to raise questions and provide answers.

Session Chairs should be in the room the 10 minutes before the session starts so as to ensure all presentations have been downloaded into the computer.

The main responsibility of the session Chair is to assure that the session takes place tidily, providing enough time for all communications to be presented and discussed.

It is at the discretion of the Session Chair, after being agreed with the speakers, if discussions will be held after each presentation or at the end of all of them.

As a suggestion for the Session Chair, 60% of the time should be given to the presentation and 40% to the debate and discussion.

* Important: Given the attendance of non-Spanish speakers, it is suggested that the slides are prepared in English, and the presenter should adapt the speech to the audience’s language. The organization will try to complete the sessions considering the similarity of the subjects and language.
Drinks, coffee breaks and lunch

To speed up the performance of the sessions, a bar service and restaurant will be available for attendees, which will include coffee, pastries and drinks, as well as the lunch for free for the two days of the conference during both days (Thursday and Friday). That service will be located in different areas of the Faculty Hall (see further details in the full programme).

Due to logistics reasons, please inform us about your attendance to the lunch at the moment when you receive your credentials.

Social Dinner

We have organized a social dinner at the Moonlight Restaurant http://restauranteluzdeluna.com/ on Thursday 24th at 20:30 pm.

In light of our agenda and the pleasant environment where the restaurant is located, we strongly suggest you go to there by feet, and share a walk with colleagues from the Faculty right after the end of the session on Thursday.

The dinner is included in the registration fee so it is free for the speakers and attendees of the conference. The menú includes Spanish tapas as appetizer (esgarrat con mojama), then one starter (grilled scallops in a bed of crispy spawn and bittersweet sauce), one main dish (millefeuille of beef sirloin and mixgrill of vegetables with a fine sauce of plums) and one dessert (delicias Moonlight with fresh fruit), coffee and drinks.
8. Pre-conference workshops on Research Methods

**Seminario/Worksh. 1. Mapeando clusters espaciales.** (Patricia CARRACEDO)

**Seminario/Worksh. 2. Introduction to multilevel analysis** (Bo NIELSEN).

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**Patricia CARRACEDO GARNATEO**  
- Profesor Adjunta de Universidad  
- Área de empresa  
- U. Internacional Valencia, Spain  
- patricia.carracedo@campusviu.es

**Bo Bernhard NIELSEN**  
- Professor of Business Strategy  
- International Business Discipline  
- University of Sydney, Australia & Copenhagen Business School  
- Bo.nielsen@sydney.edu.au

The objective of the workshop is to provide attendees with some theoretical-practical foundations on alternative spatial dependence statistics that allow the detection of temporary clusters with free software R. The presented methodology takes into account the geographical location of the spatial units and, in consequently, neighborly relations between them. An example applied to mortality in Europe will be provided.

This workshop is introductory in nature. It covers the theoretical and conceptual reasons for considering multilevel issues in our research design (interdependence vs. independence of observations, hierarchical and non-hierarchical nesting of data, intraclass correlations and variance partitioning). Focus is on practical application illustrated via examples rather than statistical modeling in a particular software.

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1. **Mapeando clusters espaciales**  
Language: Spanish //Idioma: español

Índice
1. Estudio de la dependencia espacial.  
Análisis de autocorrelación.  
1.1 Introducción  
1.2 Los estadísticos SMR y CMF.  
1.3 El Índice de Moran Global y Local.  
2. Software estadístico R.  
3. Identificación de clusters significativos espaciales con R.

2. **Introduction to multilevel analysis**  
(Language: English)

Index
1. The need for multilevel analysis  
1.1 Conceptually – what is it?  
1.2 Theoretically – what can it explain?  
1.3 Empirically – why does it matter?  
2. Practical examples of multilevel analysis  
2.1 International Business  
2.2 Top Management Teams  
2.3 Economic Geography  
3. Discussion of your own research  
4. Introduction to Mplus and HLM if time allows
9. Keynote Speakers

Opening session: “Are geographical clusters still relevant in the digital economy?”

Philippe GUGLER, University of Fribourg (Switzerland)

Philippe Gugler is Director of the Center for Competitiveness of the University of Fribourg. He holds the Chair of Economic and Social Policy. He is the President of the Department of Economics at the Faculty of economics and social sciences of the University of Fribourg. He is former Dean of the Faculty of Economics and Social Sciences at the University of Fribourg (Switzerland). Philippe Gugler was awarded the Hall of Fame of the Institute for Strategy and Competitiveness of the Harvard Business School by Professor Michael Porter in 2010. Since December 2012, he is Chairman of the European International Business Academy - EIBA - (650 members). Since January 2014, he is Editor in Chief of the Scientific Journal «Competitiveness Review» published by Emerald in United Kingdom. He is also member of the board of several institutes in Switzerland and abroad (Thailand; Italy, Netherlands).

His websites are: www.unifr.ch/pes and www.unifr.ch/competitiveness/en Philippe.gugler@unifr.ch

Plenary: "MNEs Clustering: challenges and opportunities".

Roberta RABELLOTTI, Università di Pavia (Italy)

Roberta Rabellotti is a Professor of Economics at the University of Pavia and also holds a position as Adjunct Professor at the University of Aalborg. She has provided academic advice to, amongst others, the European Commission, the Inter-American Investment Bank (IADB), OECD; UNIDO; ECLAC-UN, UNCTAD and various national and regional governments. Her research is focused on innovation in developing countries, clusters, Global Value Chains (GVC) and Foreign Direct Investment (FDI) and multinationals.

She has published widely in international journals and her last books were published by Harvard University Press, Edward Elgar, Palgrave and Routledge. She holds a Master in Development Economics from Oxford University and PhD from the Institute of Development Studies at the University of Sussex.
Speakers

Roundtable: (English): “Entrepreneurial Ecosystems and Strategies for their development: Clustering as a tool for innovation”

- Felipe Carrasco: ATEVAL-Textil Valencia
- Antonio Novo: DG Cluster IDiA
- Antonio Collado: FORD-España
- Alberto Pezzi: ACCIÓ. Generalitat de Catalunya

Roundtable (English) “Entrepreneurial Ecosystems and Strategies for their development”

- María Dolores Parra, DG IVACE-Internacionalización
- Enrique Penichet, Start-up Bbooster
- Óscar Morant, Instituto IDEAS
- Nacho Mas, CEO Asociación Valenciana de Startups

Roundtable with academics, conclusions and closing (English/Spanish)

- Bo Nielsen, University of Sydney (AUSTRALIA).
- Aurora Pedro, University of Valencia (SPAIN).
- Pedro García-Villaverde, University of Castilla-La Mancha (SPAIN).
- Graeme Evans, University of the Arts London (UK).
10. Short program

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<tr>
<th>WEDNESDAY 23RD MAY, ROOM 1.P03 (FACULTY OF ECONOMICS)</th>
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<tr>
<td>10:30-18:30 Pre- conference activities (Room 1.P-03)</td>
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<td>10:30-13:30 Mapeando clusters espaciales*. Patricia CARRACEDO. (VIU, Spain)</td>
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<td>15:30-18:30 Introduction to multilevel analysis. Bo NIELSEN. (University of Sydney, Australia)</td>
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**THURSDAY 24TH MAY (09:00-13:15 h)**

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<td>08:00-09:00</td>
<td>Registration (S-G)</td>
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| 09:00-10:30 (SG)| Welcome and Opening session  

*Theme: Are geographical clusters still relevant in the digital economy?*  
- Chair: Prof. Philippe GUGLER, University of Fribourg (Switzerland)  
  10:30-11:00 Coffee Break (S-G)  
  11:00-13:15 Roundtable: Clustering as a tool for innovation (S-G)  
    Doctoral symposium (S-1)  
    Lunch (announcement of TORRECID Award)  
| 15:00-17:00 Parallel Sessions | Proximity and Space (S-1) (Eng)  
Distritos industriales y competitividad (S-2) (Spa)  
Metodologías análisis cluster(S-G) (Eng/Spa) |
| 17:00-17:30   | Coffee break (SG) |
| 17:30-19:00 (SG)| Theme: "MNEs Clustering: challenges and opportunities".  
- Chair: Prof. Roberta RABELLOTTI, Università di Pavia (Italy)  
20:30 Social dinner (Rte. Playa)***

**FRIDAY 25TH MAY (09:00-13:15 h)**

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<td>08:00-09:00</td>
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| 09:00-10:30 (SG)| Multinationals and clusters(S-1) (Eng)  
Casos internacionales (S-2) (Spa)  
Redes e innovación (S-G) (Spa) |
| 10:30-10:45     | Coffee break |
| 10:45-12:15 (SG)| Organizational learning (S-1) (Eng)  
Clusters turísticos (S-2) (Spa)  
Clusters emergentes y territorios (S-G) (Spa) |
| 12:30 13:30 (SG)| Roundtable: Entrepreneurial Ecosystems and Strategies for their development  
HALL |
| 13:30-15:00     | Lunch (Hall) |
| 15:00-16:30     | Otros clusters y aglomeraciones (S-1) (Eng/Spa)  
Networks and institutions (S-2) (Eng)  
Evolution and dynamics (S-G) (Eng) |
| 16:30-17:00     | Coffee break (S-G) |
| 17:00-18:00 (SG)| Roundtable with academics, conclusions and closing  
- Chair: X. Molina-Morales (UJI Castellón, Spain) |

* All the activities on Thursday and Friday will take place in the Hall of the Faculty of Economics (Salón de Grados) and in the Room 1 and 2 of the first floor.  
** Room 1 (S-1) “Sala Ignasi Villalonga”  
** Room 2 (S-2) “Sala Sánchez Ayuso”  
** Hall (S-G) “Salón de Grados”  
***The restaurant is 25 min. Walk from the Faculty of Economics
11. Detailed program

**WEDNESDAY 23RD MAY, ROOM 1.P03 (FACULTY OF ECONOMICS)**

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<td>*Coordinator: Marcelo Royo-Vela (U. of Valencia)</td>
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<td></td>
<td>- María Dolores Parra (IVACE-Internacionalización)</td>
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<td>- Jorge Hermosilla (Vicerrector de Territorio, UV)</td>
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<td>- José M. Pastor (Decano Facultat d’Economia, UV)</td>
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<td>- Francisco Puig (Coordinador Clustering-2018)</td>
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<td>Opening session:</td>
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<td>“Are geographical clusters still relevant in the digital economy?”</td>
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<td>Philippe GUGLER, University of Fribourg (Switzerland)</td>
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<td></td>
<td>*Chair: Luis Martínez-Cháfer (UJI, Castellón)</td>
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<tr>
<td>10:30-11:00</td>
<td>COFFEE BREAK (S-G)</td>
</tr>
<tr>
<td>11.00-13:15</td>
<td>Roundtable: (English)</td>
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<tr>
<td></td>
<td>“Clustering as a tool for innovation”</td>
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<td></td>
<td>• Felipe Carrasco: ATEVAL-Textil Valencia</td>
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<td></td>
<td>• Antonio Novo: DG Cluster IDiA</td>
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<td></td>
<td>• Antonio Collado: FORD-España</td>
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<td></td>
<td>• Alberto Pezzi: ACCIÓN. Gen. de Catalunya</td>
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<td></td>
<td>Chair: Miguel González-Loureiro (U. Vigo)</td>
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<tr>
<td>13:15-15:00</td>
<td>LUNCH (announcement of TORRECID Award)</td>
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</table>

* S-G: Sessions in Spanish

**Doctoral symposium**: (both languages)  
Propuestas:  
1. The role of managerial cognitive reasoning on the internationalization decision-making process of small ventures (Bozidar Vlacic)  
2. Examining the Best Practice for Business Incubation and the Impact of Enterprise Clustering on New Venture Creation in Nigeria. (Chiamaka Kwazu)  
3. Sistema neuronal de distribución híbrida: una herramienta de Control Logístico orientada al Clúster Automotriz Estado de México. (Gabriela Castillo Sánchez)  
4. La dimensión social del conocimiento global-local y su papel como de resiliencia en la industria de Alicante (Rosario Mateu García).  
Tribunal y Expertos  
• Ángeles Montoro (U. Compl Madrid). (Coordinator)  
• Joan Crespo (U. Toulouse).  
• Luis Martínez-Cháfer (UJI, Castellón)  
• Enrique Claver (U. de Alicante)
## THURSDAY 24TH MAY (15:00-19:00 h)

<table>
<thead>
<tr>
<th>Time</th>
<th>Parallel session 1 (S-1)</th>
<th>Parallel session 2 (S-2)</th>
<th>Parallel session 3 (S-G)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:00-17:00</td>
<td>PROXIMITY AND SPACE (English)</td>
<td>DISTRITOS INDUSTRIALES Y TERRITORIOS (Spanish)</td>
<td>METODOLOGÍAS ANÁLISIS CLUSTER (Spanish)</td>
</tr>
<tr>
<td></td>
<td>- Organizational capabilities as co-presence situations (Lisboa, Leao, U. Brazilia-BRASIL)</td>
<td>- ¿Cómo ocurre la transmisión del conocimiento en el distrito industrial? (Díaz-Leite, Molina-Morales, Reyes y Martínez-Cháfer, UJI, SPAIN)</td>
<td>- Cluster analysis for the factors that affect European mortality. A bibliographic review (Carracedo, Debón, VIU SPAIN)</td>
</tr>
<tr>
<td></td>
<td>- Distance as a Signal of Innovative Crowdfunding Projects (Tang, An, The College New Jersey, USA)</td>
<td>- Guía sistémica para evaluación de clústeres (Castillo-Sánchez, U. Politécnica del Valle, MÉXICO)</td>
<td>- Influencia de la crisis en la identificación de perfiles de países dentro del mercado consumidor europeo de tomates (Capobianco, Sayans-Jiménez, De Pablo, U. Almenria, SPAIN)</td>
</tr>
<tr>
<td></td>
<td>- The Significance of Geographical and Sectoral Proximity for Development of Cooperation in Clusters (Lis, Gdańsk University of Technology, POLAND)</td>
<td>- Dependencia espacial de la insolvensia empresarial en España (Rico y Cantarero, U. Valencia, SPAIN).</td>
<td>- Methods to map the intellectual structure of a research domain: the case of agglomerations, industrial clusters and districts (González-Loureiro, Puig, Urzelai, U. Vigo, SPAIN)</td>
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<tr>
<td></td>
<td>Chair: M. Tsakalerou (Nazarbayev U., KAZAKHSTAN)</td>
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<td>Preside: Sylvia Pérez (CETYS Universidad, MÉXICO)</td>
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<tr>
<td>17:00-17:30</td>
<td>Coffee break (SG)</td>
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<tr>
<td>17:30-19:00</td>
<td>Plenary (English): &quot;MNEs Clustering: challenges and opportunities&quot;.</td>
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<td></td>
<td>Roberta RABELLOTTI, Università di Pavia (Italy)</td>
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<td>Discussants:</td>
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<td></td>
<td>* Berrbizne Urzelai (U. West of England, UK)</td>
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<td>Bartolomé Marco-Lajara (U. of Alicante, SPAIN)</td>
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<td>Bo Nielsen (University of Sydney, AUSTRALIA)</td>
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<tr>
<td>20:30</td>
<td>Social dinner (Rte. Playa)**</td>
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<tr>
<td>Time</td>
<td>Session</td>
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<tr>
<td>08:00-09:00</td>
<td>Registration</td>
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</table>
| 09:00-10:30| **Parallel session 4 (S-1)**  
MULTINATIONALS AND CLUSTERS (English)  
- Making sense of foreign direct investment locations (Laine, Turku School of Economics, FINLAND)  
- FDI and cooperation in China: the role of country-of-origin clusters (Urzelai, Puig, U. West of England, UK)  
- Institutional Change and the Development of SME Industrial Clusters in China (Wang, Zheng, Xidian University, CHINA)  
- An analyses of tour operators in the activity of cruises on São Miguel Island and their adaptation to this market segment (Andrade, Couto, Dias, U. Azores, PORTUGAL).  
Chair: E. Camarena-Gil (U. Valencia, SPAIN)  |
| 10:30-10:45| Coffee break             |
| 10:45-11:45| **Parallel session 5 (S-2)**  
CASOS INTERNACIONALES (Spanish)  
- El impacto del trabajo colaborativo para la integración de un clúster lechero en los Altos de Jalisco, México (Pérez-Esparza, U. Guadalajara, MÉXICO).  
- Potencial de clusterización turística en Coahuila. El caso del segmento de la tercera edad (de León, Jaramillo, Martínez, U. Autónoma Coahuila, MÉXICO)  
- Surgimiento de un cluster natural. El caso del sector de producción acuícola en Baja California, México, Pérez-Núñez, CETYS Universidad  
Preside: Eduardo Dias Leites (U. Brazilia, BRAZIL)  |
| 11:45-12:45| **Parallel session 6 (S-G)**  
REDES E INNOVACIÓN (Spanish)  
- From sense of belonging to knowledge acquisition through strength and trust of relationships in clustered firms (Córcoles-Muñoz, Ruiz-Ortega, Parra-Rquena, García-Villaverde, U. Castilla-La-Mancha, SPAIN)  
- El papel de la responsabilidad social corporativa en la atracción de talento en parques científicos y tecnológicos (González-Masip, Martín-de-Castro, Hernández-Estrada, U. Complutense, Madrid SPAIN)  
Preside: Ángela Martínez (U. Castilla-La-Mancha, SPAIN).  |
**FRIDAY 25<sup>TH</sup> MAY (10:45-13:30h)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 7 (S-1)</th>
<th>Session 8 (S-2)</th>
<th>Session 9 (S-G)</th>
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<tbody>
<tr>
<td>10:45 –</td>
<td><strong>ORGANIZATIONAL</strong> &lt;br&gt;<strong>LEARNING</strong> (English)</td>
<td><strong>CLUSTERS TURÍSTICOS</strong> &lt;br&gt;(Spanish)</td>
<td><strong>CLUSTERS EMERGENTES Y</strong> &lt;br&gt;TERRITORIOS (Spanish)</td>
</tr>
<tr>
<td>12:15</td>
<td>-How inter-organizational learning and the dynamic managerial capability can improve the cluster’s performance? (&lt;b&gt;Meira, Barbosa&lt;/b&gt;, Federal U. of Paraiba, BRAZIL)</td>
<td>-Diseño de estrategias competitivas y funcionales para la consolidación, articulación competitiva y dinámica económica del Clúster de Innovación Turística y Cultural y sus actores (&lt;b&gt;de León, Novoa, Ruelas&lt;/b&gt;, U. Autónoma de Coahuila, MÉXICO).</td>
<td>-Emerging clusters in transition economies: the case of the Romanian Tuscany’s wine industry (&lt;b&gt;Expósito-Langa, Bărăulescu, Tomás-Miquel, Belso-Martínez&lt;/b&gt;, UPV, SPAIN).</td>
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<td>-The effectiveness of cluster policy instruments in Poland (&lt;b&gt;Daniluk&lt;/b&gt;, Bialystok University of Technology, POLAND)</td>
<td>-Background of the pioneering orientation from tourism clusters: population ecology approach (&lt;b&gt;Martínez-Pérez, Elche, García Villaverde&lt;/b&gt;, UCLM, SPAIN)</td>
<td>-Analyzing Multinationals’recruiting strategies in MIDs (&lt;b&gt;Belso-Martínez&lt;/b&gt;, U. Miguel Hernández, Elche, SPAIN)</td>
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<tr>
<td></td>
<td>-Digital Clusters – from Silicon Roundabout to Tech City (&lt;b&gt;Evans&lt;/b&gt;, U. of the Arts London, UK)</td>
<td>-Los clústeres turísticos en España como instrumentos de innovación (&lt;b&gt;Pedro, Blázquez&lt;/b&gt;, AEI Cluster del Turismo de Extremadura, SPAIN).</td>
<td>-Revealing the 'intellectual structure' or 'knowledge base' of research on clusters and global value chains (GVCs): A network analysis (&lt;b&gt;Claver-Cortes, Sánchez-Garcia, Manresa-Marhuenda, Marco-Lajara, García-Lillo&lt;/b&gt;, U. Alicante, SPAIN)</td>
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<td></td>
<td>Chair: &lt;b&gt;M. Laine&lt;/b&gt; (Turku School of Economics, FINLAND)</td>
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<td>Preside: &lt;b&gt;Dioni Elche&lt;/b&gt; UCLM, SPAIN</td>
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**HALL (S-G)**

<table>
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<tr>
<th>Time</th>
<th>Roundtable (English): &lt;br&gt;“Entrepreneurial Ecosystems and Strategies for their development” (English)</th>
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<tbody>
<tr>
<td>12:30 –</td>
<td>Participants:</td>
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<tr>
<td>13:30 (SG)</td>
<td>•María Dolores Parra, DG IVACE-Internacionalización&lt;br&gt;•Enrique Penichet, Start-up Bbooster&lt;br&gt;•Óscar Morant, Instituto IDEAS&lt;br&gt;•Nacho Mas, Asociación Valenciana de Startups</td>
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<td>Chair: Lourdes Canós-Darós (UPV).</td>
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### FRIDAY 25<sup>TH</sup> MAY (15:00-18:00 h)*

<table>
<thead>
<tr>
<th>15:00-16:30</th>
<th>Parallel session 10 (S-1)</th>
<th>Parallel session 11 (S-2)</th>
<th>Parallel session 12 (S-G)</th>
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<tbody>
<tr>
<td></td>
<td><strong>OTRAS REALIDADES</strong></td>
<td><strong>NETWORKS AND INSTITUTIONS</strong></td>
<td><strong>EVOLUTION AND DYNAMICS</strong></td>
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<td>(English/Spanish)</td>
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<td>(English)</td>
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<td></td>
<td>-Marketing and Clusters:</td>
<td>-Industrial Clustering in</td>
<td>-Success of IT Companies in</td>
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<td></td>
<td>a Meta-Analysis of Strategies,</td>
<td>Wenzhou, China: A Location</td>
<td>Ülemiste city science park</td>
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<td></td>
<td>-La investigación sobre</td>
<td>-The development of clusters in</td>
<td>-The Changing Nature of the</td>
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<td>parques científicos: Un</td>
<td>Poland - the perspective of</td>
<td>Fashion Industry and its Impact</td>
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<td></td>
<td>enfoque regional (Meseguer, Toledo, U. Católica de Murcia, SPAIN)</td>
<td>enterprises (Wasiluk, Bialystok University of Technology, POLAND).</td>
<td>on Place-Making (Vecchi, Evans, University of the Arts London, UK)</td>
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<tr>
<td></td>
<td>-Social capita and physical</td>
<td>-The impact of actors, networks and institutions in the cluster’s evolution: The case of Brazilian ceramic tile industry (Scur, de Castro-Garcia, University of FEI, BRAZIL).</td>
<td>-Disruptive technology adoption, particularities for the clustered firms (Molina-Morales, Martínez-Cháfer, Valiente-Bordanova, UJI, Castellón, SPAIN)</td>
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<td></td>
<td>space in facilitating creativity and innovation: A case study (Ceylan, Horata, Wasti, Dul, Uludag University, TURQUIA)</td>
<td>Chair: Berrbizne Urzelai (University West of England, UK)</td>
<td>Preside: Miguel González-Loureiro, U. Vigo (SPAIN)</td>
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<td>Chair: Marcelo Royo-Vela</td>
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<td></td>
<td>(U. of Valencia, SPAIN)</td>
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<tr>
<th>16:30-17:00</th>
<th>Coffe Break (S-G)</th>
<th>Roundtable with academics, conclusions and closing (English/Spanish)</th>
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<tbody>
<tr>
<td>Participants:</td>
<td>Bo Nielsen, University of Sydney (AUSTRALIA).</td>
<td>Bo Nielsen, University of Sydney (AUSTRALIA).</td>
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<td>Aurora Pedro, University of Valencia (SPAIN).</td>
<td>Aurora Pedro, University of Valencia (SPAIN).</td>
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<td>Graeme Evans, University of the Arts London (UK).</td>
<td>Graeme Evans, University of the Arts London (UK).</td>
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| 17:00–18:00 (SG) | Chair: X. Molina-Morales (UJI). |

* All the activities on Thursday and Friday will take place in the Hall of the Faculty of Economics (Salón de Grados) and in the Room 1 and 2 of the first floor.
** Room 1 (S-1) “Sala Ignasi Villalonga”
** Room 2 (S-2) “Sala Sánchez Ayuso”
** Hall (S-G) “Salón de Grados”
***The restaurant is 25 min. Walk from the Faculty of Economics
Organizational capabilities as co-presence situations

Marcelo Antonio Lisboa Cordeiro
Univeristy Center of Brasilia - UNICEUB (Brazil)
Marcelo.lisboa@ceub.edu.br

Abstract
For more than two decades, the organizational capabilities approach has provided knowledge about adaptation and competitive advantage of organizations in turbulent environments. However, although this field has substantially grown in importance, diverse studies have pointed to the existence of problems related to the capability construct: the bifurcation of the dynamic capability field in incompatible knowledge arenas and the capability paradox. Therefore, in this paper we review those conceptual problems (and their initial solutions), to offer a new solution, imported from sociology. The solution is conceptualizing an organizational capability as a co-presence situation, a concept broader than routine, which allows more forms of interaction. Co-presence situations occur in a spatial and/or virtual “locale”, connecting people to perform co-dependent activities. The definition of organizational capabilities as co-presence situations unifies the bifurcated dynamic capability field and avoid the capability paradox, through considering capabilities as entities that range from unique to routinized interactions of internal and/or external individuals and resources, instantiated to produce and/or reproduce an organization as a social system.

Keywords: organizational capability; co-presence situations; spatial and virtual connectivity

Actors of change for regional renewal: Roles and Characteristics.
The case of IoT in Toulouse

Joan Crespo
Université de Toulouse (France)
jcrespo@ut-capitole.fr

Resumen:
New path creation to diversify the regional economy is acknowledged to be fundamental processes to achieve sustainable regional development. However, despite the fact that new pathways are not created by disembodied economic forces, the role of the actors involved in new development paths, the so-called actors of change, remains understudied. This papers contribute to fill this gap. It offers an analytical framework to characterize different processes of path
creation depending on the features of the actors of change involved, and the roles they are playing. Then we link these different processes to different types of new regional paths. We show that multiple configuration of the actors’ type role space give rise to different path creation processes, and not all of them are equally adapted to generate certain types of new regional paths. We empirically illustrate this with the case of Toulouse and the development of a new regional path around Internet of Things (IoT), a nascent technological domain.

Palabras clave: Path Creation, Actor of change, Internet of Things

Distance as a Signal of Innovative Crowdfunding Projects

Linghui Tang
Department of Economics School of Business
The College of New Jersey Ewing, NJ 08628
Email: tang@tcnj.edu

Liping An
United Nations. Long Island City, NY 11101
Email: anl@un.org

Abstract

Distance has long been considered a barrier for international commercial activities. In this study, we explore how the benefits of clustering can take place on the internet when geographic distance serves as a positive signal rather than an obstacle for international transactions. We argue that digital technology not only allows early stage entrepreneurs to have instant contact with global customers and investors, it also helps to reduce psychological fears associated with geographic distance. Using crowdfunding projects on Kickstarter, we found that distances between funders and founders were positively related to the success of fundraising for a campaign. In particular, projects located in English speaking countries had a higher chance to succeed than projects located inside the US.

The Significance of Geographical and Sectoral Proximity for Development of Cooperation in Clusters

Anna Maria Lis
Gdańsk University of Technology (Poland)
Anna.Lis@zie.pg.gda.pl.

Abstract

Purpose - The main aim of this paper is to analyse relations between geographical proximity and sectoral proximity (which are considered to be the basic attributes of the cluster structure) and development of cooperation in clusters.

Design/methodology/approach - The research was based on an original theoretical concept referring to the trajectory of development in cooperative relations in cluster initiatives. In the concept there were four levels of cooperation defined with some particular developmental objectives attributed to them, along with an accessible pool of information and knowledge. The research was carried out in mid-2017, in four purposefully selected clusters: two from the ICT...
sector and two from the metal sector. The research sample was 132 cluster enterprises. The main research strategy involved non-experimental models; the basic method of data collection was an online questionnaire and statistical analysis which included analysis of interdependencies.

Findings – The results indicated that the role of geographical and sectoral proximity changed, depending on the level of cooperation in a cluster. In both these dimensions, proximity was important during the initial stage of cluster development: to start cooperation between the members, however, when more mature forms of cooperation were undertaken, the factor of common location was not so crucial any longer, and it was even recommended to maintain some competence distance between the partners.

Research limitations/implications – The main limitations referred to the static character of the data, the use of original measurement tools which had not been tested before, the small and little differentiated research sample and the subjective nature of the research. The abovementioned limitations should be viewed as a starting point for further empirical research.

Practical implications – Knowledge on the significance of geographical and sectoral proximity at various levels of cooperation in clusters is valuable for efficient management of a cluster and for higher competitiveness that it can achieve.

Originality/value – The research study contributes to literature which refers to the question of proximity in cluster structures through the analysis of relations between geographical and sectoral proximity and development of cooperation in clusters. On one hand, the results of the research confirm the opinion expressed by representatives of a trend which emphasizes the importance of geographical proximity in the functioning of enterprises; on the other hand, however, they point out that the role of geographical and sectoral proximity evolves with development of cooperation in clusters.

**Keywords**: Cluster; Geographical proximity; Sectoral proximity; Cooperation
¿Cómo ocurre la transmisión del conocimiento en el distrito industrial? Un estudio comparativo entre España y Brasil

Eduardo Dias Leite  
Universitat Jaume I (España)  
al325716@uji.es

F. Xavier Molina-Morales  
Universitat Jaume I (España)  
xavier.molina@emp.ujie.es

Edgar Reyes Júnior  
Universidade de Brasilia (Brasil)  
prof.edreyes@gmail.com

Luis Martínez Cháfer  
Universitat Jaume I (España)  
chafer@emp.ujie.es

ABSTRACT

This research presents a study of how the process of knowledge transmission occurs among industrial district workers. Tacit and explicit knowledge, besides the fact of belonging to an industrial district, help in the transmission of knowledge. For the methodological aspects, we did a review of the literature, whose methodological scheme was quantitative and for the analysis of the data, we used the statistical methods of Confirmatory Factor Analysis (CFA), and Structural Equation Modeling (SEM). The results of this research, carried out on two industrial districts in Spain in the Industrial District of the Ceramic of Castellón and another in Brazil in the Pharmochemical Pole of the Agroindustrial District of Anápolis, shows that the transmission of the knowledge is potentiated through the informal processes (observation, values, beliefs and perceptions), formal processes (courses, conferences and seminars, company norms and learning from technicians and more experienced workers), and participation in an industrial district.

Keywords: tacit knowledge; explicit knowledge; industrial district; transmission of knowledge.
Ventaja competitiva y distrito industrial: una revisión de la evidencia empírica del “efecto distrito”

Enrique Claver-Cortés
University of Alicante (Spain)
Enrique.claver@ua.es

Bartolomé Marco-Lajara
University of Alicante (Spain)
Bartolome.marco@ua.es

Pedro Seva-Larrosa
University of Alicante (Spain)
Pedro.seva@ua.es

Lorena Ruiz-Fernández
University of Alicante (Spain)
lorena.fernandez@ua.es

Abstract:
Interest in the study of distributors of industrial products was in the early 1970s, and one could see that it was important for the industry. After an initial phase on which the concept of industrial district is based (Becattini, 1979), the literature has a line of research focused on the analysis of the competitive advantages of the companies of the district, and that has been called «district effect» (Signorini, 1994). The objective of this work is to know what is the current status of this effect in scientific research, for this a review of the empirical literature that addresses the issue from its initial conception to the present has been carried out. The results of this review suggest that the debate on how to affect the territory to the competitiveness of companies located in industrial districts is still a topic of great interest. On the other hand, it was observed how most of the works that have addressed the measurement of the impact of the project have been done around three dimensions: (1) productivity; (2) international competitiveness; and (3) innovation.

Keywords: District effect; Industrial district; Productivity; International competitiveness; Innovation
Guía sistémica para evaluación de clústeres

Gabriela Castillo Sánchez
Universidad Politécnica del Valle de México (México) Instituto Politécnico Nacional (México)
gcastillomx@yahoo.com.mx

Resumen
El Clúster actualmente se reconoce como una forma de organización empresarial que, gracias a la ejecución de sus actividades económicas, promueve el desarrollo regional de los espacios geográficos en los cuales está inmerso, sin embargo, es muy común observar que pese a los esfuerzos que hacen sus integrantes; los resultados no son los que se esperan. Es por ello, que esta investigación tiene por objeto construir una Guía basada en la Sistémica para evaluar la actividad del Clúster a fin de detectar áreas de oportunidad que aumenten su eficiencia operativa y competitividad, aprovechando en su totalidad la sinergia que generan sus miembros.

En la actualidad existen diversas publicaciones y organismos internacionales encargados de promover y evaluar la actividad de los Clústeres ubicados en países en vías de desarrollo o con pocas oportunidades de crecimiento económico, sin embargo, esta forma de organización empresarial sólo es vista como una estrategia impuesta por terceros para disminuir la pobreza de los pueblos, siendo pocos los gobiernos que visualizan esta opción como un medio para generar riqueza y un desarrollo sostenible capaz de insertar a un ejército de Pymes presentes y futuras que buscan a toda costa sobrevivir en un entorno cada vez más hostil.

El trabajo está dividido en tres apartados, el primero explica la promoción del Desarrollo Regional derivado de las actividades que realiza el Clúster, en el segundo apartado se desarrollan cada una de las variables que integran las cuatro categorías empleadas para construir la Guía de evaluación, el tercer apartado muestra el instrumento resultante del análisis y síntesis de diferentes teorías relacionadas con cada uno de los aspectos incluidos en las cuatro categorías anteriormente mencionadas.

Se espera que los aspectos definidos con la Metodología de Sistemas Suaves y que se incluyen en la Guía, evalúen adecuadamente la situación del Clúster, así también que los resultados obtenidos posteriores a su aplicación sirvan para detectar áreas de mejora que mediante estrategias gerenciales incrementen su competitividad y eficiencia operacional.
Dependencia espacial de la insolvencia empresarial en España

Manuel Rico
Universidad de Valencia (España)
rilloma@alumni.uv.es

Santiago Cantarero
Universidad de Valencia (España)
santiago.cantarero@uv.es

Resumen:
Cuando una empresa es insolvente, esto es, que no puede hacer frente a sus deudas de forma generalizada, tiene la obligación legal de acogerse al concurso de acreedores. Ante el importante incremento del número de concursos durante la crisis económica y la baja eficacia del procedimiento (sólo un 7% de las empresas sobreviven), observada también entre las distintas provincias españolas, cabe preguntarse si hay factores ligados a la localización que influyen en que el grado de supervivencia de las empresas sea superior en unas regiones respecto a otras.

En este estudio se plantea si el PIB per cápita de cada provincia española puede influir en la mayor o menor probabilidad de sobrevivir a un concurso de acreedores. Para ello, se contemplan estas variables para una muestra aleatoria de 599 empresas insolventes durante el periodo de 2007-2015, el de mayor contracción económica y, por ende, el de mayor número de concursos de acreedores.

Para evaluar si hay un comportamiento diferenciado según la localización de la empresa, se utilizaron los programas gvSIG y GEODA, y se aplicaron dos índices, el Índice Global de Moran (1950) y el Índice de Asociación Local (LISA), que ayuda a la interpretación de los resultados obtenidos. Posteriormente, se lleva cabo un análisis Bivariante de Moran, correlacionando las variables Índice de especialización territorial o aglomeración (Iag) -siguiendo el método de Staber (2001) y de Cromley y Hanink (2012)- y PIB per cápita con la variable territorio, con la intención de valorar sobre el espacio si hay comportamientos similares.

El estudio estadístico evidencia que sí existe una relación evidente entre las variables y se produce un efecto dependencia espacial, de manera que el territorio, el resultado del concurso y la renta per cápita tienen una estrecha relación.

Palabras clave: Concurso acreedores, clusters, mapping, índice de Moran
Cluster analysis for the factors that affect European mortality. A bibliographic review.

Patricia Carracedo  
Universidad Internacional de Valencia (España)  
patricia.carracedo@campusviu.es

Ana Debón  
Universidad Politècnica de València (España)  
andeau@eio.upv.es

Abstract:  
This study reviews the current research studies that analyse economic and social determinants affecting mortality in Europe. Once a number of 1.557 articles from Scopus database were collected, the statistical techniques "Homals" and "Cluster" were applied to the factors that affect mortality with statistical software R. Homals performs a homogeneity analysis with the objective of reducing the dimension of the data and the cluster technique detects clusters of the collected descriptors. Among the clusters obtained, the factors that have been frequently considered together to study European mortality were detected. The information provided by the conglomerates is important, since both insurers and public policies will have more information to improve the risk classification. In the actuarial field, it would help actuaries in the design of pensions and life insurance. In the field of public policies, it would help to prevent, treat or improve mortality as well as an efficient distribution of resources.

Keywords: mortality; Europe; homals; cluster; R

Evaluation of distance measures selection in clustering real data

Jana Cibulková  
University of Economics, Prague (Czech Republic)  
cibj00@vse.cz

Hana Řezanková  
University of Economics, Prague (Czech Republic)  
rezanka@vse.cz

Abstract:  
This contribution is an illustration of cluster analysis application in the field of tourism for marketing purposes. It demonstrates not only the importance of distance measure selection in hierarchical clustering that leads to different clustering solutions, but also the importance of
Identifying a target market helps every company develop effective marketing communication strategies. Selecting a target market allows companies to craft messages that appeal specifically to them. However, companies don't have the time or resources to be able to reach everyone with a product message. Identifying a target market allows marketers to focus on those most likely to purchase the product. Once a company knows who they are targeting, it is much easier to make decisions on media allocations. For content marketing purposes, marketing personas are needed to help deliver content that will be most relevant and useful to company’s target audience. A marketing persona is a composite sketch of a key segment of target audience. When a company offers several products, a target audience may differ from product to product.

This work is focused on one ambitious start-up company providing services in the travel and tourism industry. The company provides advanced door-to-door transport services in Europe and they want to create several marketing personas and then use this knowledge to develop targeted marketing programs. The product is always a service; however, routes of the service differ. It would be not possible, nor meaningful, to create marketing persona for every route the company’s services cover (since it is over 2,400 routes). Hence, there is a need to segment the routes into groups. In general, it is often necessary to split a data into segments and perform any subsequent analysis within each segment in order to develop (potentially more refined) segment-specific insights. This may be the case even if there are no intuitively “natural” segments in a data. In such situations, to identify segments in the data one can use statistical clustering techniques. Cluster analysis is used in a variety of applications in the field, especially for market segmentation, which is one of the most fundamental strategic marketing concepts. Markets can be segmented based on demographics, psychographics, geographic, product or behavioural segmentation.

As mentioned above, the company provided a dataset with over 2,400 observations for further analysis. The dataset contains basic information on routes on which the company has provided its services since the beginning of the year 2017. Datasets attributes are categorical variables describing basic features of a route – whether it is domestic or international route, whether it is faster or longer compared to public transportation, whether the origin and destination location is a capital, name of a destination and origin country, etc. Since the majority of these attributes are binary variables, binary transformation is applied on non-binary categorical variables (origin and destination). The goal of the analysis is to identify distinct groups in the routes described by the dataset, and then use this knowledge to develop targeted marketing programs by creating a marketing persona for each group. In order to achieve this goal, distance-based clustering methods are used. To be specific, hierarchical clustering methods (single-linkage, average-linkage and complete-linkage) are applied on the dataset. Statistical software R is used for all the computations, statistical analysis and visualizations.

**Keywords:** Cluster analysis; Binary data; Distance measures; Internal evaluation criteria;
Influencia de la crisis en la identificación de perfiles de países dentro del mercado consumidor europeo de tomates

CAPOBIANCO URIARTE Maria de las Mercedes
Departamento de Economía y Empresa - Universidad de Almería
mercedescapobianco@hotmail.com

SAYANS-JIMÉNEZ Pablo
Área de Metodología de las Ciencias del Comportamiento - Universidad de Almería

De Pablo Valenciano Jaime
Departamento de Economía y Empresa - Universidad de Almería

Abstract:
En un contexto globalizado en el que la competitividad se ha convertido en vía para la supervivencia económica, es un paso ineludible el estudio de la composición de los perfiles de países dentro de un mercado objetivo. Este tipo de análisis brinda información de relevante de la ubicación de clústeres industriales a estudiar y debería ser realizado previamente a la obtención de índices de competitividad y/o productividad en los países exportadores.


En el periodo precrisis se obtuvieron tres conglomerados iniciales, dentro de los cuales se pudieron identificar sub-perfiles específicos de producción, importación y exportación para los distintos países europeos. No se encontraron perfiles diferenciados temporalmente en el periodo analizado. En el periodo post crisis se obtuvieron los mismos tres conglomerados iniciales pero con la diferencia que un país cambió de perfil dentro del mercado consumidor europeo de tomates, como es el caso de Grecia.

Los resultados obtenidos por los sub-perfiles más específicos aportan información de relevancia, para la toma de decisiones durante la planificación de estrategias de posicionamiento para un país intra o extra comunitario exportador de tomates en el mercado europeo. Además de información relevante de la situación de los clusters europeos que participan en el comercio del tomate.

Keywords: perfil país, análisis cluster bietápico, mercado consumidor europeo, tomates, crisis económica global.
Methods to map the intellectual structure of a research domain: the case of agglomerations, industrial clusters and districts

Miguel González-Loureiro

University of Vigo (Spain) and CIICESI-Instituto Politécnico de Porto (Portugal)
mloureiro@uvigo.es

Francisco Puig

Universitat de València (España) francisco.puig@uv.es

Berrbizne Urzelai

University of the West of England (UK) Berrbizne2.Urzelai@uwe.ac.uk

Abstract:
Clustering is one of the most studied business phenomena because it enables firms to compete internationally while cooperating locally. After decades of changes driven by globalization, the time has come to take stock of this topic. This organizational model has been studied in a multidisciplinary way and under a diversity of theoretical constructs such as agglomeration, industrial cluster and industrial districts. Despite the existence of a number of literature reviews, the still unveiled issue is the intellectual structure of the concept of clustering.

In this paper, we performed a content analysis of 4,808 articles found in Scopus and the WoS, by means of a homogeneity analysis by alternating least squares and a cluster analysis. Our results show that clustering is still phenomena of increase interest, and that Porter’s seminal studies made the cluster concept to gain prominence against other similar but not equal notions such as agglomeration and industrial district. We provide an illustrative map of its intellectual structure, where we found five areas of research that still require further permeability. Three of them show the topics associated with the main theoretical approaches the researchers adopted (agglomeration economies, cluster network advantage and industrial districts embeddedness). The other two areas (international strategy and economic geography) and its location in the map relative to the other areas suggest that there still are important gaps.

In this systematic literature review, we provide details of the method we used for the sake of replicability. Other areas may also benefit from this technique.

Keywords: Clustering; agglomeration; industrial district; systematic literature review; HOMALS
Making sense of foreign direct investment locations

Markus Laine
Turku School of Economics (Finland)
markus.o.laine@utu.fi

Abstract:
Foreign Direct Investment (FDI) sub-national location decisions in International Business (IB) literature are commonly approached through functionalist research on the firm-level or environmental determinants of location. The distinct process leading to the strategic decision on the final province, county, or district for a multinational enterprise’s (MNE) subsidiary has so far received less attention from scholars. The choice of location for a foreign subsidiary within a chosen market is, however, the result of an organizational process where individual managers evaluate and interpret alternative locations through their own experience and the distinct requirements of their firms.

This research is built around a comparative multiple case study examining six FDIs from a single Nordic country to a country-of-origin cluster in China. Primary data consisting of 23 in-depth interviews of top managers, consultants and government bureaucrats, as well as rich secondary data are utilized in an organizational interpretation framework adapted from Daft and Weick’s (1984) model. Specifically, this paper examines how managerial experience and organizational resources guide the environmental scanning, interpretation and decision making processes leading to diverging perceptions of host environment institutions and knowledge spill-overs and, ultimately, the final decision of subsidiary location.

Identical environmental factors may be interpreted in different ways by separate organizations. The potential for knowledge spill-overs offered by proximity to home-country peers is a strong attraction for firms with less international experience and financial resources to conduct organized scans of the environment, but may be perceived as a deterrent for more experienced and capable organizations with specific host-location requirements. Institutional qualities are interpreted differently based on organizational power and managers’ host-country experience.

This research contributes to the behavioural stream within IB literature by introducing a new framework for analysis of FDI location decisions. By utilizing strategic cognition literature it is able to link firm-level and environmental determinants of location within the decision making process. At the same time it examines the mechanisms by which institutional factors and knowledge spill-overs actually influence sub-national location decisions of MNEs.

Keywords: FDI; decision making; sensemaking; case study
FDI and cooperation in China: the role of country-of-origin clusters

Berrbizne URZELAI
University of the West of England (UK)
Berrbizne2.Urzelai@uwe.ac.uk*

Francisco PUIG
Universitat de València (ESPAÑA)
francisco.puig@uv.es

Abstract:
Business cooperation through clustering is an essential strategy for SMEs’ internationalization process and when facing the challenges of globalization and liberalization of markets. This approach lies down in the idea that firms are simultaneously interconnected productively, socially and commercially in origin and destination, and through different types of interactions (business, social, economic).

In this paper we discuss this idea by looking at a new type of clustering formed by firms belonging the same country-of-origin. As different to the industrial and/or initiatives clusters, we argue that country-of-origin clusters (COC) in emerging countries can provide the key resources (tangible and intangible) necessary to meet the challenge of internationalization of SMEs successfully, especially when this implies complex and more risky entries of foreign direct investment (FDI). However, due to the different backgrounds of their participants within the cluster, a heterogeneity is expected in how this type of clustering adds value to its members.

The objective of this paper is to analyse the perceptions of the role of this type of clustering in a sample of 24 managers from European SMEs subsidiaries located in China by comparing isolated and co-located firms.

From the empirical analysis made we conclude that the COC is highly perceived as a strategic asset that gives members access to information, knowledge and networking. However, the managers co-located do not differ from isolated in their perceptions about externalities related with other resources and markets. These results have important contributions and can serve as guide for managers and politicians.

Keywords:
Cluster, internationalization, networks, externalities, SMEs, Homals
Institutional Change and the Development of SME Industrial Clusters in China

Jinmin Wang
The University of Nottingham, United Kingdom;
Yaoqun Zheng
Xidian University, (China)

Abstract:
Institution is an important variable to explain the development of industrial clusters in emerging markets including China. From the perspective of institutional change, formal institutions are the explicit coordination mechanism of industrial cluster while informal institutions are implicit coordination mechanism. This paper aims to contribute to the institution and industrial clusters literature through analyzing both positive and negative impacts of institutions on the cluster development in China from a dialectic, comprehensive and dynamic perspective with a case study of Zhejiang Province, East China.

Under the Zhejiang Model, the rural entrepreneurship was strongly encouraged even when it was suppressed in other provinces. SME clusters composed of family workshops gradually came into being in townships and cities. Meanwhile, specialized markets were established by the local government to distribute goods and raw materials. The close interaction between SME clusters and specialized markets has led to the rural industrialization in the region.

However, the development of SME cluster in Zhejiang Province is currently in the path dependence and institution lock-in, which includes cognitive lock-in, social capital lock-in and public policies lock-in, resulting in negative effects on the development of industrial clusters. It is highly important for the central and local government to make continuous institutional innovation to promote the sustainable development of industrial clusters.

Keywords: SME; industrial clusters; formal institutions; informal institutions; institution lock-in; China
An analysis of tour operators for cruises on São Miguel Island and their adaptation to this market segment

Ruben Andrade  
University of the Azores (Portugal)  
rfilipeandrade@gmail.com

João Pedro Couto  
University of the Azores (Portugal)  
joao.pa.couto@uac.pt

Sandra Dias Faria¹  
University of the Azores  
(Portugal)  
sandra.mc.faria@uac.pt

Abstract  
A good management/organization of the entire cruise system, which helps in adequate marketing of the destination and proper development of the ports’ infrastructure, would result in a functional environment for the tourist. Further, these measures would positively influence the attractiveness of the destination (Gračan, 2016). As far as entertainment is concerned, cruise ships are very similar to each other, creating more and more on-board activities, shopping and other quality services, as well as the sale of products and services on land. These can be all summarized in one common factor: being considerably more expensive on-board than when purchased off the ship (Clancy, 2017). Therefore, this study focuses on the role of tour operators of large nautical cruises in activity on São Miguel Island, in order to understand their commercial adaptation to the type of tourism expanding in the archipelago, as well as discusses the advantage of the existence of a Commercial Office to concentrate all the offers of all tour operators in Ponta Delgada’s port.

Keywords: Cruise tourism; tourism destination; clustering initiative; strategic management.
El impacto del trabajo colaborativo en el cluster lechero de los Altos de Jalisco, México

Dra. Aimée Pérez Esparza
University of Guadalajara (México)
aimee.perez@cutonala.udg.mx

Resumen:
Este análisis pretende mostrar los beneficios del trabajo colaborativo para el crecimiento del cluster lechero en Jalisco, México. Debido a la gran cantidad de pequeños productores existentes en el estado, se genera la necesidad de diseñar mecanismos que fomenten la eficiencia en el trabajo de éstos. El trabajo colaborativo permite la obtención de beneficios de tipo financiero, tecnológico y estratégico, incrementando así las posibilidades de los pequeños productores para hacer frente a su competencia. Por su parte, Jalisco es el principal productor de leche de bovino en el país, pues cuenta con un 19% del total de la producción nacional de éste producto, por lo que se deben diseñar estrategias que favorezcan a sus productores.

Debido a que en los últimos años se ha llevado a cabo un interesante trabajo entre los productores lecheros de los Altos de Jalisco, resulta un caso de estudio importante para su análisis. Si bien en la actualidad dicho sector se ha manejado a través de organizaciones cooperativas, en este trabajo se propone generar un cambio, mediante el modelo de cluster en dicha zona.

En el documento se hace énfasis a la importancia del cluster lechero, sus ventajas y sus desventajas. La intención es dar a conocer los beneficios de éste tipo de organización en el sector lechero, así como analizar a la industria lechera en el estado y su problemática. Además se retoman algunos estadísticos que permiten conocer el comportamiento de la producción lechera en Jalisco, con la finalidad de mostrar la realidad de éste sector y la importancia del estudio del mismo. Proponiendo el modelo de cluster lechero como una opción para que el pequeño productor obtenga mayores beneficios de manera colaborativa que los que obtendría de manera individual, pasando así de un modelo de cooperativas agrarias a un modelo de cluster agroindustrial.

Keywords: Trabajo colaborativo, cooperativas, cluster agroindustrial, sector lechero, campo mexicano.
“Potencial de clusterización turística en Coahuila. El caso del segmento de la tercera edad”

Miguel Emmanuel Mireles Bretado  
Universidad Autónoma de Coahuila (México)  
miguel.mireles.bretado@gmail.com

Eliseo Medina Elizondo  
Universidad Autónoma de Coahuila (México)  
elmedinae@uadec.edu.mx

María de Jesús De León Olivares  
Universidad Autónoma de Coahuila (México)  
mariadejesus d@yahoo.com.mx

Armando Parres Frausto  
Universidad Autónoma de Coahuila (México)  
aulavirtualcatorreon@live.com.mx

Sandra López Chavarría  
Universidad Autónoma de Coahuila (México)  
sandy05@hotmail.com

Resumen:

En el presente capítulo se evalúa el potencial competitivo y de clusterización del Estado de Coahuila de Zaragoza para acoger un segmento turístico de alta relevancia en el turismo internacional: los turistas de la tercera edad. Para ello se estudia el tamaño del mercado, se evalúa el desempeño del sector en la entidad y se analizan factores que favorecen y limitan el aprovechamiento de esta oportunidad. Asimismo, se examinan las alternativas estratégicas que pudieran asumirse a partir de los escenarios que plantean las tendencias globales y los recursos y capacidades con que cuenta la región. La metodología empleada en la investigación es mixta. Se parte de un análisis documental para estudiar el tamaño del mercado, elaborar un inventario de atractivos y evaluar posibles encadenamientos. Asimismo, se aplican entrevistas estructuradas y se emplea el método de expertos para evaluar los recursos y capacidades de la entidad, las principales barreras que se enfrentan y las principales alternativas de agregación de valor en el sector. Finalmente, se exponen las principales direcciones estratégicas que, a criterio de los autores, deben considerarse para lograr un aprovechamiento efectivo del segmento turístico en la entidad.

Palabras clave: Clúster, competitividad, turismo, tercera edad, estrategias.
Surgimiento de un clúster natural, el caso del sector de producción acuícola en Baja California, México.

Sylvia Mónica Pérez Núñez
CETYS Universidad (México) Sylvia.perez@cetys.mx

Abstract:
Un clúster natural surge como resultado de la evolución histórica de una o más industrias en una región geográfica, se caracteriza por aglomerar a un grupo de empresas e instituciones interconectadas que se vinculan por aspectos comunes y complementariedades. Este modelo implica la articulación de las dimensiones sectorial y territorial, busca fomentar sinergias que fortalezcan la integración y la competitividad de las cadenas productivas, lo que resulta en una mayor eficiencia colectiva. En el caso del sector de producción acuícola de Baja California, a partir de un análisis mixto, se han identificado elementos que permiten afirmar que existe una masa crítica indispensable para la organización del sector en un modelo clúster. La evidencia indica la existencia de una estructura institucional enfocada al desarrollo del sector, y una red de vinculación interempresarial para la transferencia de tecnología y de actividades de cooperación y colaboración.

Keywords: Clúster; Acuicultura; Vinculación; Redes; Innovación
On network dynamics and innovation policies in clusters. Assortativity and behavioural effects.¹

José A. Belso-Martínez  
Departamento de Estudios Económicos y Financieros  
Universidad Miguel Hernández  
(jbelso@umh.es)

F. Xavier Molina-Morales  
Departamento de Organización de Empresas y Márketing  
Universitat Jaume I de Castelló  
(molina@emp.ujie.es)

Abstract:
During the last decades, an academic consensus has been reached on the innovative intensity that characterizes the most dynamic clusters. Policy makers have not remained unaware of this reality. There are many programs designed to promote from the internal R & D of the companies to the implementation of new organizational solutions. Although aspects such as the design of these actions or the evaluation of their impact have been investigated, their side effects or derived from their overlap remain unexplored. In this sense, this work studies the indirect effects on the exchange of knowledge between companies of two programs for the promotion of the internal innovation of the company.

The empirical evidence obtained in the biotechnological clusters of Alicante and the analysis of social networks confirm the existence of these side effects. The results suggest the need to assess the undesirable impact of designing or implementing cluster innovation promotion programs.

Keywords: industrial cluster, innovation policy, homophily, extra-cluster relationships

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Inter-Organizational Knowledge Spillovers: Attraction of Talent in Science and Technology Parks and Corporate Social Responsibility Practices.

Jaime González-Masip  
Complutense University of Madrid (Spain) jgmasip@ucm.es

Gregorio Martín-de Castro  
Complutense University of Madrid (Spain) gmartinc@ccce.ucm.es

Adolfo Hernández  
Complutense University of Madrid (Spain) adolfher@ucm.es

Abstract
In a Knowledge Economy and Society, the management of knowledge and talent are key production factors and drivers of firm sustained competitive advantage. In this new competitive arena, firm competitiveness comes directly from continuous innovations, relying on knowledge-based resources and flows coming from inside the firm, as well as outside the firm through inter-organizational knowledge flows. In that sense, we propose that firms located in science and technology parks which develop corporate social responsibility practices can attract talented workers as an effective knowledge management mechanism attracting individual tacit knowledge from the environment, and thus improving firm competitiveness and success. Empirical evidence from Spanish longitudinal database corroborates our main thesis.

Keywords: Talented workers, knowledge attraction, science and technology parks, clusters, corporate social responsibility
From sense of belonging to knowledge acquisition through strength and trust of relationships in clustered firms

Mateo Córcoles-Muñoz  
University of Castilla-La Mancha (Spain)  
Mateoemanuel.corcoles@alu.uclm.es

María José Ruiz-Ortega  
University of Castilla-La Mancha (Spain)  
Mariajose.ruiz@uclm.es

Gloria Parra-Requena  
University of Castilla-La Mancha (Spain)  
Gloria.parra@uclm.es

Pedro M. García-Villaverde  
University of Castilla-La Mancha (Spain)  
Pedro.gvillaverde@uclm.es

Abstract:

New studies are demanded to analyze what are the mechanisms that enable firms to acquire valuable external knowledge in contexts of clusters. In cluster it is developed an industrial "atmosphere", which helps the circulation of knowledge and reciprocal learning (Dei Ottati, 2006). The sense of belonging of a firm is close to the concept of industrial district of Becattini (1990), linked to their roots with clusters, i.e., the extent in which the firms participating in the local community are identified with the same (Molina-Morales, Capó-Vicedo, Martínez-Fernández & Expósito-Langa, 2013).

We propose that a greater sense of belonging carries more integration of the clustered firms, which creates a favorable context so that knowledge can be transmitted and interpreted. However, firms must develop appropriate mechanisms to exploit this potential of the sense of belonging. We determine these mechanisms from the conception of the clusters as networks of interorganizational relationships. Interorganizational relations present relevant dimensions, such as the strength of the links and trust between agents (Nahapiet & Ghoshal, 1998). Both dimensions can be key mechanisms to explain how the sense of belonging of the firms to the cluster leads to the acquisition of relevant knowledge.

The aim is to study the mediating effect of the strength and trust of interorganizational relationships in the relationship between the sense of belonging to the cluster and the acquisition of knowledge of the firms. The empirical analysis has been developed on a sample of 166 firms in the footwear industry in Spain located in clusters (Boix & Galletto, 2006). We verified the mediating effects by PLS. The results prove that only those firms that are able to take advantage of their greater sense of belonging to the cluster to generate strong interorganizational relationships and trust with other agents, will acquire valuable knowledge. The work contributes to reinforce the theoretical relevance of the sense of belonging as a key element to integrate clustered firms in a real industrial district, as highlighted by Becattini (1990). The perspective of interorganizational relationships provides a solid theoretical framework to explain how clustered firms transform the sense of belonging in valuable knowledge.

Keywords: Sense of belonging; knowledge acquisition; strength; trust; clusters.
How inter-organizational learning and the dynamic managerial capability can improve the cluster’s performance?

Gibson Meira Oliveira  
Federal University of Paraíba (Brazil)  
gibson.meira@gmail.com

Anielson Barbosa da Silva  
Federal University of Paraíba (Brazil)  
anielson@uol.com.br

Abstract
This essay has the objective to discuss how inter-organizational learning and the dynamic managerial capability can improve the Cluster’s Performance. We intend to establish a theoretical framework that can help firm’s networks to improve your performance, regarding that one way to be competitive is the development of dynamic managerial capabilities integrated to mechanisms of inter-organizational learning. This proposal has a theoretical contribution to clustering process by way of considering that the dynamic managerial capabilities is an asset of firm’s network still not explored in an inter-organizational level. Besides, the mechanisms of learning (Zollo & Winter, 2002) can contribute to develop a dynamic capability and one theoretical assumption is that these mechanisms can improve the cluster’s performance and competitiveness.

The effectiveness of cluster policy instruments in Poland

Andrzej Daniluk  
Bialystok University of Technology (Poland)  
a.daniluk@pb.edu.pl

Abstract:
Clusters are an important element of the mechanism for supporting regional development, as they generate positive externalities for the region. These effects are mainly related to the acquisition of new entities for cooperation in the region. Key clusters are characterized by strong links between enterprises, research centers and other scientific units.

The aim of the article was to assess the impact of cluster policy in Poland on the background of European Union activities related to strengthening the competitiveness and innovation of the European economy. The basic assumptions of the cluster policy in the current financial perspective of the EU have been identified. An analysis of basic documents and programs concerning the shaping of cluster policy in Poland was carried out. The results of own research were also taken into account. They concerned the conditions for the cooperation of enterprises in a selected region of Poland with administration units that have an impact on shaping the cluster policy. One of the economic problems of Poland is the low level of cooperation between entrepreneurs and
other enterprises. This is one of the most important reasons for the low level of competitiveness of the Polish economy. In the case of Poland, practical mechanisms that enable effective development of clusters are only at the initial stage. It is necessary to use the most effective policy instruments to support the development of clusters that could affect the competitiveness of individual regions of Poland.

It was found that the applied cluster policy mechanisms resulted in an improvement of the conditions for the development of existing clusters compared to the previous 2007-2013 perspective. The most important effects of using selected cluster policy instruments in Poland are presented. They are aimed primarily at strengthening the position of national key clusters and enabling the internationalization of the activities of clusters that are the most important for the economy. It also pointed to the limitations in the effective implementation of cluster policy instruments on the example of a selected region of Poland. Basic recommendations concerning desired changes in the intensity of using particular cluster policy instruments were given.

**Keywords**: innovation; clusters; cluster-based policy;

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### Digital Clusters – from Silicon Roundabout to Tech City

**Professor Graeme Evans**  
University of the Arts London,  
g.l.evans@fashion.arts.ac.uk

**Abstract**

Over the last 25 years the formation and growth of business clusters has been widely recognised by academics and policy makers. Building on Michael Porter’s initial work and that of economists and geographers, recent research suggests that the agglomeration and co-location of businesses can fuel co-operation, competition and, in particular circumstances, significant innovation. It is widely argued that by clustering, firms gain shared advantages including the potential for innovation - not only meeting clients’ and customers’ current needs but also shaping future markets.

There has been considerable media speculation about the emergence of a new ‘tech cluster’ of digital start ups in and around Shoreditch in London’s east end. This has attracted high level government intervention including a strategy to develop the cluster into a Tech City, a corridor of digital enterprise from the City Fringe to the new Olympic Park, Stratford.

At first view the emergence of tech start ups in east London seems to be explained by many of the advantages cited in work on other creative clusters – London’s overall relative wealth and appeal to global talent; dominance of English as the business language; diversity of communities; proximity to global firms, government and cultural institutions; concentration of Higher Education. Local entrepreneurs stress the draw of ‘the East’ – its off beat youth and arts culture, ethnic quarters, relatively cheap rents, constant arrival of new comers and the area’s non conformity (compared with central and west London); the ‘can do’ innovative culture and the excitement generated by constant
speculation about which firm will be next to ‘strike tech gold’ and negotiate a lucrative buy-out.

However, a better understanding of the dynamics of this sub-cluster can be gained from examining its position within London’s wider regional Creative and Digital Economy. In Britain, the Digital Economy, as with the creative industries, is over-represented in London. The emergence of an east London sub-cluster is therefore likely to have both regional and national significance. Cluster analysis for London (using Location Quotients - LQs) identifies ward level over representation of the Digital Economy in a continuous central corridor from west to east London, with most concentration in the core of the city and outlying scattered pockets of significance – a pattern not too dissimilar to the distribution of creative employment. This confirms that Shoreditch marks the extreme eastern edge of a London digital corridor. It also indicates that the centre of gravity in this cluster remains in London’s core and west. The growth of the London’s Digital Economy’s eastern edge therefore suggests new sectoral developments with particular spatial requirements.

Here, (re)location onto the fringe of established business and creative clusters has facilitated new forms of convergence between sectors of the economy (notably Publishing, Printing and Advertising with Software and Data Services) encouraging early adoption of digital formats. Early adopters engage with software developers and the cycle continues. Innovation driven firms are capitalising on a growing demand for new/mobile applications as well as developing bespoke software for the music and fashion industries, as well as comparison and social network websites, 3D and interactive content and digital-design and also a strong presence of Specialist Design. This marks an agglomeration of particular Content, rather than ICT, with over representation of Printing, Publishing, Design, Software, Advertising and PR & Communications. Although there are firms in the TV, Film and Video Production and Music Production sectors in this locality, they do not exhibit agglomeration or over-representation within the regional economy. There is also little or no ‘silicon’ in the media-hyped ‘Silicon Roundabout’. Technology firms here focus on the development of software applications and adaptations, many driven by the growing capacity to capture data, link databases and identify contact networks.

The east London creative sub-cluster is therefore characterised by both specialisation in creative content, representation and reproduction, and sectoral diversity, with software, data services and design. It is both part of and distinct within the London regional Digital Economy.

This paper draws on research into the composition and geography of this ‘creative digital’ cluster. It is argued that this sub-cluster cannot be divorced from the wider regional creative and digital economy and that its inter-dependence with a small number of ‘content’ industries (Advertising, Fashion) is critical to its formation. The significance of the ‘creative digital’ firm which blends design, communications strategy and technological development is highlighted as is the unique position of east London in enabling such firms to flourish.
A conceptual framework for sport clusters as sectoral initiative-clusters

Anna Gerke
Audencia Business School
(France) agerke@audencia.com

Abstract:
The purpose of this paper is to develop a conceptual framework for sectoral initiative clusters in the sport sector. A study of seven sport clusters led to a set of characteristics and factors that determine the emergence, development, and longevity of sport sector specific clusters, otherwise called sport cluster hereafter. Data collection consisted of semi-structured interviews, observations, and secondary data. Data analysis took place in an abductive approach including deductively defined themes and inductively emerging themes.

The findings provide a conceptual framework consisting of location-specific factors of sport cluster emergence, a typology of ten typical cluster organisations, four types of interorganisational linkages prevailing in sport clusters, and a continuum of interorganisational behaviour between cluster organisations ranging from competition to citizenship. The findings and the conceptual framework from this work is useful for cluster researchers to understand sport clusters and might be applicable to other sectoral initiative clusters. The findings provide also practical implications for cluster managers, cluster policy makers and cluster member organisations.

Keywords: Sport cluster, sectoral-initiative cluster, interorganisational linkages, interorganisational behaviour
Diseño de estrategias competitivas y funcionales para la consolidación, articulación competitiva y dinámica económica del Clúster de Innovación Turística y Cultural y sus actores caso: Torreón Coahuila México (Comarca Lagunera).

María de Jesús de León Olivares
Universidad Autónoma de Coahuila (México)
maridejesus.d@yahoo.com.mx

Arianna Karina Novoa Galván
Universidad Autónoma de Coahuila (México)
Lic.Arianna.Novoa@hotmail.com

Ana Isabel Ruelas
Universidad Autónoma de Coahuila (México)
anaisaruelas@hotmail.com

Armando Parres Frausto
Universidad Autónoma de Coahuila (México)
aulavirtualfcatorreon@live.com.mx

Abstract:
En el presente trabajo se formulan estrategias para la consolidación del Clúster de Innovación Turística y Cultural. La actividad turística en México ha experimentado un continuo crecimiento y una profunda diversificación, las llegadas de turistas internacionales en el mundo han pasado de 25 millones en 1950 a 278 millones en 1980, 674 millones en 2000, y 1,235 millones en 2016, esto lo convierte en uno de los sectores económicos que crecen con mayor rapidez. El turismo mundial representa el 7% de las exportaciones mundiales de bienes y servicios. Este sector representa el 10% del PIB mundial, con lo que podemos decir que es un sector importante para la generación de empleos. (OMT, 2017)

México es uno de los países más visitados en el mundo, con un registro de 35 millones de turistas internacionales lo que lo coloca en el octavo lugar y en el lugar 14 del ranking mundial de la OMT por concepto de ingreso de divisas, al obtener un monto de 19 mil 600 millones de dólares en 2016 (Secretaría de Turismo, 2017)

La cultura aporta como actividad económica en lo que supone turismo cultural en los territorios que cuentan con activos culturales de distinta índole y alcance. Esta mejora de la actividad tiene una gran importancia, en los sectores comerciales, de hotelería, restauración y otra clase de servicios. (Campa, 2010)
En la región Lagunera no existen antecedentes de una agrupación similar a esta, existen asociaciones de museos o de empresas establecidas en la región pero ninguna como la conformada por la triple hélice en el Clúster de innovación cultura y turismo el cual lo integran: el área académica, instituciones de gobierno y empresarios inmersos en el área turística y cultural.
La metodología empleada en la investigación es mixta. Una primera de análisis del entorno con el fin de determinar oportunidades y amenazas del clúster; una segunda consistente en un análisis interno del clúster con el fin de definir fortalezas y debilidades; y una tercera fase relacionada con la formulación de una estrategia corporativa, un mapa estratégico y un plan de acción para el clúster, dirigido a su fortalecimiento. Finalmente, se diseñan las principales direcciones estratégicas que, a criterio de los autores, deben considerarse para lograr consolidar una Agrupación Empresarial Innovadora.

**Keywords:** Clúster; Desarrollo regional; Iniciativas sectoriales-clúster

**Background of the pioneering orientation from tourism clusters: population ecology approach**

Ángela Martínez Pérez  
University of Castilla-La Mancha (Spain)  
Angela.martinez@uclm.es

Dioni Elche Hortelano  
University of Castilla-La Mancha (Spain)  
Dioni.elche@uclm.es

Pedro M. García Villaverde  
University of Castilla-La Mancha (Spain)  
Pedro.gvillaverde@uclm.es

**Abstract:**

The study adresses the antecedents of the pioneering orientation from population ecology approach, connecting relational factors of the perspective of social capital with environmental factors. There is interest in studying pioneering orientation in the context of cluster because the positive externalities that bring up in these agglomerations can encourage fist-mover advantages (Lee and Jang, 2017). Some studies highlight that in very dynamic markets more opportunities can be generated that encourage clustered firms to develop a pioneering orientation to control emerging market segments and achieve a leadership position in relation to competitors (Tegardand, Echols and Hatfield, 2000). Despite this benefits of market dynamism for pioneers, their can incur costs associated with their first-mover status (Golder and Tellis, 1993). Therefore, we propose an existence of a curvilinear effect between market dynamism and pioneering orientation in clustered firms.

The social capital approach points out that social networks of firms can facilitate firms the access to relevant information and knowledge, which, in turn, can strengthen their capacity to identify and exploit new market opportunities and achieve first-mover advantages (Lee, Lee and Pennings, 2001). From population ecology approach, we propose that social networks exert a moderating role between market dynamism and pioneering orientation (Varadarajan, Yadav and Shankar, 2008). Specifically, the aim of the paper is to study how closed ties and diverse ties moderate the curvilinear relationship between market dynamism and the pioneering orientation of the clustered firms.
The empirical analysis was carried out on a sample of 215 firms belonging to the World Heritage Cities of Spain, which are considered as tourism clusters. The results show a curvilinear U-shaped relationship between market dynamism and pioneering orientation. This curvilinear relationship is accentuated with higher closed ties and attenuated with higher diverse ties.

This paper contributes to improve the understanding of antecedents of pioneering orientation considering both relational factors, through the approach of social capital, and environmental factors, analyzing dynamism (Lévesque, Minniti and Shepherd, 2013). In addition, the paper has delved into the antecedents of pioneering orientation from population ecology approach in the context of clusters, specifically tourism clusters, connecting entry timing and cluster literature.

**Keywords:** Tourism cluster; population ecology; pioneering orientation; market dynamism; social networks.

“Los clústeres turísticos en España como instrumentos de innovación”

**Aurora Pedro Bueno**  
Departamento de Economía Aplicada.  
Universidad de Valencia  
Aurora.pedro@uv.es

**María Blázquez Hidalgo**  
Dirección Fundación Ecoánime.  
Responsable de proyectos e innovación  
Cluster del Turismo de Extremadura.  
mariaecoanime@gmail.com

**Resumen:**  
En los últimos años hemos asistido a la creación de un reducido pero significativo de clústeres turísticos en España. La evolución de estos clústeres está muy vinculada a las ayudas que las Administraciones Públicas (Gobierno central y regionales) reciben de la UE, y a las líneas de acción específicas que diseñaba el Gobierno central para favorecer la cooperación empresarial a través de proyectos consorciados. Esta comunicación tiene como objetivo analizar las características de los clústeres en función de su objetivo, funciones y resultados. De especial interés es el análisis de su papel como instrumentos de innovación y dinamización turística en áreas turísticas en desarrollo. Esta figura se ha convertido en el “departamento de I+D+I” de pequeñas y medianas empresas que cooperan y trabajan conjuntamente para desarrollar proyectos en común y establecer estrategias de promoción conjuntas. Los clústeres sectoriales han dado un interesante paso hacia la multisectorialidad al integrar empresas y organizaciones de diferentes sectores para trabajar sobre un mismo objetivo adoptando nuevas formas de trabajo basadas en procesos de innovación abierta (open innovation).
Efecto sustitución entre la adquisición interna y la generación externa de conocimiento en los distritos turísticos españoles

Bartolomé Marco-Lajara
Enrique Claver-Cortés
Francisco García-Lillo
Mercedes Úbeda-García
Patrocinio del Carmen Zaragoza-Sáez

Departamento de Organización de Empresas
Universidad de Alicante

Resumen:
Sobre el efecto distrito ya se ha investigado mucho por la comunidad científica. Sin embargo, en la mayoría de los casos los estudios se han centrado en sectores industriales de alta tecnología o en sectores manufactureros. En el caso de los servicios los estudios son menos frecuentes, quizás porque siempre se ha pensado que el efecto distrito es menos importante. Aun así, últimamente han ido apareciendo estudios que analizan y demuestran el efecto de la aglomeración sobre la rentabilidad de estas empresas, entre ellas las hoteleras.

El presente trabajo profundiza en dicha línea de investigación, analizando cuáles son los factores concretos que generan ese efecto distrito y cuál es su impacto último en la rentabilidad hotelera. De una manera más específica, se pretende investigar cuál es el papel mediador que las estrategias de generación/adquisición de conocimiento ejercen en la relación estadística existente entre aglomeración empresarial y rentabilidad. Los resultados obtenidos a partir de una muestra de hoteles localizados en la costa mediterránea española demuestran que hay una mediación parcial. Paralelamente se obtiene evidencia para el efecto sustitución entre la generación interna de conocimiento y su adquisición externa, ya que los hoteles situados en grandes aglomeraciones se inclinan mayoritariamente por esta última alternativa.
Emerging clusters in transition economies: the case of the Romanian Tuscany’s wine industry

Manuel Expósito-Langa
Universitat Politècnica de València (Spain)
maexlan@doe.upv.es

Oana Bărbulescu
Transilvania University in Brașov (Romania)
oana.barbulescu@unitbv.ro

José-Vicente Tomás-Miquel
Universitat Politècnica de València (Spain)
jotomi@doe.upv.es

José-Antonio Belso-Martínez
Universidad Miguel Hernández (Spain)
jbelso@umh.es

Abstract:
This research contributes to the debate on the determinants that favour access to global value chains by companies belonging to emerging clusters in transition economies. The role of these countries is becoming increasingly relevant in a global world, where discovering new opportunities is focused on increasing market knowledge to offer the proper products.

Nevertheless, for companies in an emerging cluster, and more specifically, for those of small and medium size, the crossing of the country's geographic border themselves to have international presence is not an easy step. Limitations established by several characteristics such as size, human resources, technology, financial resources or the international entrepreneurial spirit of its managers are fundamental issues in this process. In addition, it is worth highlighting that one of the main barriers is the lack of knowledge about how to operate in the international market.

From a territorial approach, collaboration networks established with other similar companies in the cluster, as well as with local institutions, can be an element that contributes to generating economies of scale and complementing the company's knowledge to make the leap into international markets. In this vein, managing both the knowledge flows circulating within the cluster and those coming from external sources, can have a positive effect on the company's international presence.

Recent studies on emerging industrial clusters in transition economies have led researchers to reconsider the main drivers of cluster accessing to global value chains, shifting the focus to the role of local knowledge and the foreign ownerships acting as gatekeepers of external knowledge. With the aim of deepening the understanding of these
questions, we have studied the wine industry cluster in the Muntenia-Oltenia region of Romania also known as Romanian Tuscany due to its geographical location. In this area, the wineries have different characteristics depending whether or not they have international projection. Consisting of different size winemakers, this cluster, which can be considered in the growth stage of its lifecycle, is the biggest group of wine producers in the country. On the other hand, it is the cluster with the largest presence of foreign investment.

Our theoretical proposal recognizes both, the cluster’s internal heterogeneity, thus granting a prominent role to the characteristics of the individual firm, and the potential relevance of the portfolio of relationships of a clustered firm determined by its network position. Additionally, we consider the relevant role of the foreign investors. By using different analysis techniques, the results suggest that the local knowledge of the cluster, managed through the network of connections, is necessary for the international presence of the wineries. On the other hand, there is a multiplier effect in those wineries where there is foreign ownership, due to their international entrepreneurial character. In contrast, local institutions do not represent a key element for the international presence of wineries.

In summary, the involvement of the winery in the knowledge network exerts a larger effect on its international presence when the firm has high values of foreign ownership. That is, as a firm develops cluster relational capacities, having foreign ownership becomes essential to enhance the international presence of the winery. Definitively, we consider that this paper contributes to a better understanding of how companies in an emerging cluster work to access global value chains.

**Keywords:** Emerging clusters; Transition economies; International presence; Local institutions; Foreign ownership
Analyzing Multinationals’ recruiting strategies in MIDs

José Antonio Belso Martínez  
University Miguel Hernández (Spain)  
jbelso@umh.es

Abstract:
In economic geography, the role of multinationals and their effects on Marshallian Industrial Districts (MIDs) have not been at the forefront of analysis. Evaluation of Strategy and International Business literature (SIB) also reveals that the micro-processes and mechanisms by which MNEs interact, sourcing and spilling over local production systems, and impact those local spaces has not been researched. In this paper, we focus on MNE subsidiaries and its internal and external dynamics related to the MID where they locate. We also highlight the local actors and their dynamics dealing with those MNEs. Our purpose consists of opening the black box on the micro-processes that drive MNEs action on MIDs. For this reason, we concentrate our efforts on the interactions and interdependence process between MNEs and MIDs, describing from the both sides (MNE and local partners) in order to learn about how MNEs interact and impact on MIDs.

Our framework is multidimensional, encompassing the local community (rules, norms, etc.) and local firms, along with the MNE subsidiary established, analyzing their dynamics and multiple interactions. We draw on SIB and EG literature to provide a proper theoretical framework from with to tackle this phenomenon. Those interactions and processes for functioning are dynamically analyzed, explaining the early (when subsidiaries start) and later stages of MNEs in MIDs.

This conversation, despite prominent theoretical approaches initiated on the role of MNEs in global production networks (GPNs), requires a micro-level analysis on three different levels and their interactions: (i) individuals, (ii) local (indigenous) firms and (iii) subsidiaries. It also requires from empirics in order to induce theory to push our knowledge on the phenomenon. This research uses theory-building methodology on a longitudinal case study about the story of ZARA in the Alicante footwear MID in Spain.

Keywords: Clusters, MNEs, subsidiaries, recruiting strategies, footwear.
Revealing the 'intellectual structure' or 'knowledge base' of research on clusters and global value chains (GVCs): A network analysis

Enrique Claver-Cortés
University of Alicante (Spain) enrique.claver@ua.es

Eduardo Sánchez-García
University of Alicante (Spain) doemp@ua.es

Encarnación Manresa-Marhuenda
University of Alicante (Spain) encarnacion.manresa@ua.es

Bartolomé Marco-Lajara
University of Alicante (Spain) bartolome.marco@ua.es

Francisco García-Lillo
University of Alicante (Spain) f.garcia@ua.es

Abstract:
In essence, seeing how important it is to understand the need to open clusters and their inclusion in global value chains (GVCs) which allow for the entry of knowledge, the updating of technologies and skills, the renovation of actors and, in short, an improved level of competitiveness in territories as well as in their productive fabric, mainly shaped by SMEs –thus avoiding cluster myopia or lock-in and cognitive inertia through the exploration of new knowledge (Crescenzi et al., 2015; Eisingerich et al., 2010; Giuliani et al., 2014; Hervás-Oliver and Boix-Domènech, 2013; Hervás-Oliver et al., 2015a; Iammarino and McCann, 2013; among others)– the present paper has as its aim to objectively analyze the research on clusters and global value chains (GVCs) developed in the academic context. Bibliometric methods are used for this purpose: document citation and co-citation analysis (DCA) in particular, along with social network analysis (SNA). Our main objective is precisely no other than to identify and represent the ‘intellectual structure’ or ‘knowledge base’ of the research under study. From our point of view as authors, such an identification not only stems from the need to take stock of the already developed research; in fact, it also gives scholars and researchers a chance to reflect all over again on the excellent opportunity that clusters provide to break down the various activities which shape the aforementioned GVCs into small parts seeking the best fit with the different business agglomerations. In other words, the idea is to try and obtain the best possible resources and advantages in each one of the territories where an enterprise locates its range of activities. Attention also deserves to be paid to how, within an economic globalization context, the integration between MNEs and territories –academic

1 Cluster myopia or lock-in consist of a problem of over-embeddedness, caused by an over-exposure to mainly (or only) the absorption of local knowledge which can be, in the long term, counterproductive for clusters (Pouder and St John, 1996; Uzzi, 1997).

2 By way of example, the research carried out by authors such as Eisingerich et al. (2010, p. 252) has provided empirical evidence that clusters and regions of excellence are not only characterized by the existence of dense local knowledge and endogenous development networks but also by their openness towards new knowledge and technologies.
literature has mainly assumed, as a unit of analysis of the location of MNEs, the country (Beugelsdijk et al., 2010)– can help give a response to the problems of endogenous development and cognitive inertia mentioned above.

Research on international business has traditionally referred to localization using a national scope (Dunning, 2009, McCann and Mudambi, 2004), thus dismissing the specificities and advantages of specific geographical locations (cluster and/or regions). However, it is possible to observe, as noted by Hervás-Oliver et al. (2015b, p.12) how recently there has been a shift in research towards the concept of territory (Beugelsdijk and Mudambi, 2013; Cantwell, 2009), explicitly recognizing the role of local/regional spillovers (benefits based on specific locations) and starting to present specificities and details of local/regional spaces.

**Keywords**: Clusters; Global value chains (GVCs); Bibliometrics; Citation and document co-citation analyses; Social network analysis (SNA).

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**Redes, clusters e internacionalización: efectos sinérgicos desde una perspectiva multisectorial**

**Mª Antonia Vaquero Sánchez**  
University of Miguel Hernández (Spain)  
mavaquero@umh.es

**José Antonio Belso Martínez**  
University of Miguel Hernández (Spain)  
jbelso@umh.es

**José Mª Gómez Gras**  
University of Miguel Hernández (Spain)  
gras@umh.es

**Abstract:**
Como subrayan los análisis del proceso de internacionalización desde la perspectiva de redes, el desarrollo de relaciones colaborativas es fundamental para el éxito de las operaciones en el exterior. A pesar de que sucesivas investigaciones han logrado una descripción detallada de las estructuras de las redes internacionales y su papel en la entrada en nuevos mercados extranjeros, las limitaciones en ámbitos diferentes o fenómenos concretos ofrece múltiples oportunidades de investigación. Uno de estos fenómenos es la aceleración del proceso de internacionalización o la creación de empresas globales o Born Globals (BG). A través de sus relaciones con distintos actores internacionales, las nuevas empresas adquieren los conocimientos necesarios para mitigar los efectos de las barreras y crecer de inmediato en la esfera internacional.

Si bien las propuestas teóricas y la evidencia empírica coinciden en señalar los efectos positivos de la integración en redes locales integradas por actores con actividades internacionales, existen debates abiertos sobre la tipología, el cuándo y el cómo las relaciones locales favorecen la internacionalización temprana de las empresas. Este efecto positivo, se ha mostrado especialmente relevante en contextos como los clústeres
industriales, donde la proximidad geográfica permite efectos desbordamiento (spill-over effects) y mejor acceso a conocimientos específicos.

Utilizando una muestra multi-sectorial de 138 empresas, nuestro trabajo pretende arrojar luz sobre la complejidad del impacto de las redes locales en el fenómeno BG. Combinando propuestas de las teorías de redes, internacionalización y clústeres, nuestro trabajo evidencia que el efecto de las redes difiere en función de su tipología e intensidad. En especial, frente al comúnmente aceptado efecto positivo, señala la existencia de un efecto saturación entre las redes locales y el fenómeno BG. Así mismo, establecen que la localización en un clúster modera este efecto saturación.

**Keywords:** cluster; born global; internacionalización; efecto saturación
Meta-analysis in marketing supplements used in clusters.

Mohammad Reza Mazandarani
PhD student. University of Valencia and
University of Teheran (IRAN)
mazandar@alumni.uv.es

Dr. Marcelo Royo Vela
University of Valencia (SPAIN)
Marcelo.Royo@uv.es

Abstract:
Reviewing published papers always can help to understand particular field better. The aim of this research is to identify the most common role of marketing in the literature of clustering. To this end, 72 of the most significant works which have been published in the context of localized interconnected firms in the last 10 years were analysed.

Three standpoints have been used for reviewing the articles: The scientific characteristic (JCR or SJR), the content (by mentioning the role of marketing), and the methodology used in the paper. For more complete analysis, the selected articles were grouped by iterative sorting to three topics. The first topic is characterization (Marketing models and strategies used in clusters or industrial district characterizations; Hypothesis in relation with marketing; Social capital and it’s relation with marketing strategies within clusters; Trust and marketing cooperation). The second topic is Performance which is divided into the internal level (Competitiveness results; Cooperation and marketing establishment) and, international level (internationalization). And finally, the third one is policies (Role of government and, marketing policies used in clusters).

The results of our investigation may help future research productivity for both academic and marketing planers. This would light many future lines of research for them.

Keywords: Marketing supplements; Clustering; Marketing cooperation; Policies; Performances.
La investigación sobre parques científicos: Un enfoque regional

Ángel Meseguer Martínez
Universidad Católica de Murcia, España
ameseguer@ucam.edu

Miguel Toledo Picazo
Universidad de Castilla-La-Mancha, España
Miguel.Toledo@uclm.es

Resumen:
Los parques científicos son entidades de carácter regional destinadas a contribuir al desarrollo y el bienestar de sus comunidades a través del fomento de la innovación tecnológica empresarial, la transferencia de tecnología y el emprendimiento. Están proyectados desde la teoría de la Triple Hélice (Etzkowitz y Leydesdorf, 2000), de modo que son iniciativas en las que convergen gobierno, universidad y empresa para diseñar enclaves conducentes a la generación de clusters de empresas innovadoras (Chen et al., 2013). De este modo, los parques científicos se han convertido en importantes instrumentos de política regional que apoyan a las empresas mediante el acceso a universidades y centros de investigación, generando una masa crítica de empresas y ofreciendo servicios de apoyo al emprendimiento, a la I+D y a la gestión empresarial (Cooke, 2001).

Los parques científicos atraen a emprendedores y empresas innovadores en todo el mundo, por lo que en su seno se genera empleo cualificado y proyectos innovadores que resultan en la creación de nuevas empresas de perfil tecnológico, en la generación de productos y servicios innovadores, así como patentes y publicaciones (Etzkowitz y Zhou, 2017; Díez-Vial y Montoro-Sánchez, 2016). Por este motivo, desde las primeras experiencias en los Estados Unidos en la década de 1950, los parques científicos se han convertido en un fenómeno global, presente en cerca de 80 países según la Asociación Internacional de Parques Científicos (IASP, 2018); atrayendo importantes recursos públicos y privados.

En cuanto a la investigación y los parques científicos, además de la abundante actividad investigadora en diversas áreas de las ciencias aplicadas que se genera dentro de los parques científicos debido a la localización en su seno de universidades y centros de investigación así como a la interacción con la industria a través de proyectos de I+D; en los últimos años, los propios parques científicos se han convertido en objeto de investigación debido a la relevancia que han venido cobrando a nivel global. De este modo, una sencilla búsqueda del término “science-park” en bases científicas de economía y empresa genera cientos de resultados relevantes en dirección de empresas, aglomeraciones empresariales, emprendimiento, política económica, geografía, etc.

La investigación sobre parques científicos ha crecido durante los últimos años; y no solo se observa un creciente número de artículos, si no que, recientemente, se han publicado diversos estudios de revisión en revistas de impacto que describen el campo investigador de los parques, su evolución y las posibles líneas futuras (Mian et al., 2016; Diez-Vial y Montoro-Sánchez, 2016; Mora-Valentín et al., 2018). Todo ello indica la consolidación del concepto de parque científico como objeto de estudio dentro
del campo de la organización de empresas, junto a áreas muy desarrolladas como los clusters y distritos industriales.

Las definiciones de parque científico, tanto las académicas como las de asociaciones profesionales, determinan características comunes de estas entidades que las diferencian de otros tipos de aglomeraciones empresariales. Sin embargo, debido a la diversidad de entornos legales, económicos y sociales de las diferentes regiones que los promueven, el concepto de parque científico abarca realidades muy diferentes a nivel global en cuanto a las características básicas de su configuración –espacio, número de empresas, etc.-, efectividad y apoyo a la industria regional (Doloreux, 1999). En este sentido, a pesar de que en algunas aportaciones se ha planteado el impacto regional en la investigación sobre parques científicos (Hommen et al., 2006), ningún estudio hasta el momento lo ha abordado como elemento central.

Consideramos que dentro de la definición de parque científico caben realidades muy diferentes que dependen en gran medida de las características propias de las regiones. Por lo tanto, los resultados de la actividad investigadora sobre parques científicos pueden diferir en gran medida en función de la región, lo que puede poner en entredicho la aplicabilidad y la generalización de los resultados de la investigación. Por este motivo, consideramos que es necesario complementar el análisis de la literatura sobre parques con un enfoque regional que tenga en cuenta las diferencias entre parques científicos y su impacto en la investigación en función de su localización.

Para ello, primero llevamos a cabo una revisión de la literatura sobre parques científicos, teniendo en cuenta tanto la distribución geográfica de los estudios como los temas básicos tratados y los resultados de la investigación. En segundo lugar, sobre una muestra internacional de más de 270 parques científicos, analizamos diferencias entre distintas regiones y las comparamos con los resultados de la investigación en dichas regiones.

Los resultados esperados contribuirán a desvelar diferencias regionales tanto en la configuración básica de los parques científicos como en los enfoques y en la investigación. Así, aparte de una nueva contribución al creciente ámbito de estudio de los parques basada en una revisión de la literatura, aplicar un enfoque regional va a permitir mejorar la interpretación de los resultados de la investigación existente y comprender los motivos de la controversia que existe en cuanto a la efectividad de los parques científicos. Además, este enfoque puede servir de apoyo a estudios comparativos entre diferentes zonas con el fin de planificar o revitalizar parques científicos. Por lo tanto, consideramos que puede ser de interés para la comunidad investigadora y para responsables de políticas de innovación.
Social capital and physical space in facilitating creativity and innovation: A case study

Canan Ceylan
Uludag University (Turkey)
ccanan@uludag.edu.tr

Ahmet Melih Horata
Middle East Technical University, Science and Technology Policy Studies (Turkey)
amelihorata@gmail.com

Nazli Wasti
Middle East Technical University (Turkey)
nazli@metu.edu.tr

Jan Dul
Erasmus University, Rotterdam School of Management (the Netherlands)
jdul@rsm.nl

Abstract:
Social capital is characterized as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relations possessed by an individual or social unit" (Nahapiet and Ghoshal 1998, p. 243). Hence, it is an outcome of social interactions and is a resource embedded in interpersonal networks (Nahapiet & Ghoshal, 1998). Since previous research emphasizes the contribution of collaboration, social interactions and knowledge flows on innovation (e.g. Carmona-Lavada et al. 2010; Laursen et al. 2012), it is crucial to take into consideration the role of physical workspaces for enhancing social capital and firm innovation performance.

In this regard, technological and scientific parks, incubators, and clusters can be considered as proper platforms for exchanging knowledge and novel ideas among entrepreneurial firms. Therefore, geographic proximity as one of the physical dimensions of workspaces can facilitate social interactions and knowledge flows and ideas among firms (Phelps, 2010). Creativity researchers argued the effects of social interactions and communication for enhancing physical proximity, subsequently creativity (e.g., Vithayathawormwong, Danko and Tolbert, 2003). However, research on the effects of physical characteristics of buildings on fostering or hindering social interactions, knowledge flows and communication has been still scarce.

In the present study, we analyze buildings in the Technopark which was established in one of the major cities of Turkey. We develop a theoretical model and build propositions to suggest that various physical characteristics of buildings will enhance social interactions and communication among firms located in the building, subsequently support social capital and increase firms’ innovation performance. In this scope, buildings in Turkish Technopark has been analyzed to find evidence on the proposed links of theoretical model and its validity. Our theoretical model gives contribution to the literature on social capital and firm-level innovation by agglomerating research findings. Moreover, our study can help to broaden literature on
clusters by emphasizing the case of technoparks.

A pilot study with a number of semi-structured interviews conducted with employees of tenant firms of a major Turkish technopark was executed in order to find evidence regarding to the proposed links of our theoretical model. Within this aim, semi-structured interviews conducting by the authors were performed with employees of different tenant firms located in separate buildings in Technopark, using the snowballing technique.

Findings of the pilot interviews demonstrated that the physical workspaces of technopark firms are not functional (i.e. physical environment which is not instrumental, inadaptable, and distracting; Dul (2018)). Moreover, interviewees associated buildings in technopark with unfavorable meanings. Our study with semi-structured interviews is continuing with more start-up firms located at the technopark. Such qualitative data through semi-structured interviews will have a preliminary insight for measuring functionality, meaning, and mood for testing our propositions.

**Keywords:**
Social capital, physical space, creativity, innovation, technoparks
Industrial Clustering in Wenzhou, China: A Location Quotient Analysis

Mariza Tsakalerou
Nazarbayev University (Kazakhstan)
mariza.tsakalerou@nu.edu.kz

Abstract:
The basic tenet of localization economies is that production is facilitated when there is an agglomeration of economic activity due to input sharing, labor market pooling, and knowledge spillovers. Agglomeration or clustering is thus intimately tied to a specific geographic location and often central to the explanation of how cities increase in size and population. The implication is that clustering is related to urbanization and that clusters are rare in rural areas. The objective of this paper is to examine this implication by focusing on the rural vs. urban axis and using Wenzhou, China as the interpretive example of the analysis.

China is often used as a testbed for cluster analysis, considering the wealth of clusters that it possesses and the fact that many have mature development trajectories. Modern-day, bottom-up clusters in China were formed after the reforms of the 1980s when the private sector was allowed to operate openly and foreign investment was welcome to enter China. The majority of these clusters operated in low-technology and/or labor-intensive industries, thus leveraging a low-cost but relatively educated labor force to address the huge needs of a country emerging from a centrally planned economy. They were primarily concentrated in coastal areas, because of their close proximity to free-trade zones and international markets. This trend has been recently reversed with a lot of clusters moving inland, to more sparsely populated areas, because of increasing operating costs, scarcity of human and material resources and tough environmental regulations.

While many of these moves were based on market factors, some were influenced by deliberate government policies thus raising distinct questions on the rural vs. urban debate. Wenzhou, in the Zhejiang province, is one of the hotbed areas of clustering activity in China and its world-famous footwear cluster has been studied in depth in the literature. Data on Wenzhou clusters were collected during the author’s four-month research stay at Wenzhou last Fall. An extensive Location Quotient (LQ) analysis on clustering data from Wenzhou (for general clusters in general and the footwear cluster in particular) demonstrates that the degree of urbanization is not necessarily related to the number or strength of clusters in a region.

Keywords: Cluster Development; Urbanization; Regional Development; Wenzhou Clusters.
The development of clusters in Poland - the perspective of enterprises

Anna Wasiluk
Bialystok University of Technology (Poland)
a.wasiluk@pb.edu.pl

Abstract:
In publications up to 2006, Poland was perceived by prestigious business analysts as a country without clusters. In the following years, the number of clusters increased significantly. Establishing clusters was favored by legal solutions that enabled receiving EU funding for the creation of cluster initiatives. However, it turned out that many of these projects ceased to exist with the end of the funding period in 2014 and the introduction of new conditions for obtaining support. It should be noted that in border regions it is desirable not only to develop cluster structures of a national nature, but also clusters with a cross-border scope.

Having considered the above-mentioned deliberations, the main aim of this text was to present the results of long-term research carried out by the author of this text with regard to an evaluation of the past level of Polish businesses in cooperation with competitors and their readiness to improve this in the near future both on a national and international level. In order to meet the research aim the following hypotheses were presented:

H1: One of the main barriers to the development of cluster structures in Poland is the lack of interest of Polish businesses in engaging in cooperation with firms belonging to the same sector.

H2: One of the main barriers to the development of cluster structures in the East of Poland of a trans-national character is a lack of interest of Polish business owners in engaging in cooperation with foreign firms belonging to the same sector.

Analyzes indicate a large deficit in the scope of cooperation so far, as well as readiness to strengthen cooperation in the near future. This applies both to cooperation with domestic and foreign companies. Lack of willingness to cooperate with Polish enterprises is not limited to competition. Analyzes conducted in various publications by the author of this text indicate a large deficit in this respect also in relation to the institutions of the scientific sphere and local government institutions. Under such conditions, it is difficult to talk about the real possibilities of creating and developing effective cluster structures, both on a national and cross-border scale.

Keywords: Cluster; cooperation of enterprises; trust; inter-organizational trust.
The impact of actors, networks and institutions in the cluster’s
evolution: the case of the Brazilian ceramic tile industry

Gabriela Scur
University of FEI (Brazil)
gabriela@fei.edu.br

Renato de Castro Garcia
University of Campinas (Brazil)
Renato.garcia.unicamp@gmail.com

Abstract:
The Brazilian ceramic tile industry is second in both production and consumption, just behind China. In 2015, China produced 5,970 mill/m² ceramic tiles and Brazil almost 900 mill/m². In 2015 the Brazilian consumption was 816 mill/m². In Brazil, the production is concentrated in two main clusters: the region of Criciuma, in state of Santa Catarina and Santa Gertrudes, located in the state of São Paulo. This two clusters are responsible for more than 80% of the national production. The clusters present a high level of rivalry but acting with strategies slightly different. In the last two decades, the Santa Catarina cluster had showed signs of a declining cluster, especially in its quantitative indicators, since production, employment and the number of producers presented strong decrease.

However, qualitatively, producers are being able to respond to this declining by improving their products and competing in a high value market. On the other hand, the experience of Santa Gertrudes cluster exhibits a very fast growth since the middle of 1990s and some qualitative indicators indicate that local producers are being able to accumulate new capabilities, especially in manufacturing what, in turn, allow them to compete based in costs. This paper aims to discuss the process of accumulation of capabilities by manufacturers in these two industrial clusters and its role in the clusters life cycle.

Keywords: Clusters; Life Cycle; Evolutionary pattern; ceramic tile
Success of it companies in Ülemiste city science park

Ergo Kruve
Estonian Entrepreneurship University of Applied Sciences (ESTONIA),
ergo.kruve@eek.ee

Abstract
Information technology (IT) companies are considered the main engine of economic growth of Estonia's future export. Therefore it is very important that IT companies have long-term success and sustainability. Several studies (Ferguson & Olofsson, 2004; Delmastro & Colombo, 2002; Nurutdinova, 2012, 1-12; Díez-Vial & Fernández-Olmos, 2017) estimate that companies that are based at science parks are more successful than outside park-based companies. It is believed that science parks with their special environment will boost business performance.

Science parks impact on tenant companies business success has been investigated by a number of authors (Díez-Vial & Fernández-Olmos, 2017; Nurutdinova, 2012; Ferguson & Olofsson, 2004; Lindelöf, & Löffstein, 2003). All science parks share the notion that a particular environment will increase the success of businesses. Highly developed technology clusters like the Silicon Valley cluster have a number of documented benefits. Entrepreneurs will find investments in the cluster more easily, as well as venture capitalists, and investors will find financing companies in the cluster more quickly. (Bresnahan, & Gambardella, 2004, 1)

1) There is evidence that companies that are located inside science or business parks are more sustainable, but on the other hand that growth of employees and the increase in sales is not very different from outside park companies (Ferguson & Olofsson, 2004), and that profitability of small companies inside park is less than outside park companies (Ruland, 2013, 10).

Prior empirical studies reveal that evidence about the impact science parks and business parks have on residing firms is mixed and should be further researched. Moreover, newer evidence of science park impact on firm performance is scarce. One conclusion from empirical studies is that on average in park firms do not have better financial results than out-park firms. The author believes it is important to consider whether Ülemiste City (ÜC) as a science park affects the financial performance of residing IT companies. Accordingly, the author aims to find out whether residing in ÜC science/business park affects the success of IT companies from a financial point of view.

In this paper financial performance indicators of IT companies that reside inside ÜC science/business park is compared to financial indicators of IT companies outside park. The main aim of this research paper was to determine whether inside park companies have better financial success then outside park companies. The used method is a quantitative study - a document analyses was used to compare the financial indicators of
IT companies operating in ÜC science/business park with outside ÜC park companies. A total of 110 Estonian IT companies and their financial data between 2007-2016 was examined. The sample size consists of 20 IT companies located inside ÜC science/business park and 90 IT companies located outside ÜC science/business park.

The relevant study excludes companies that are not fully located in ÜC park or have more than 150 employees. The comparable data set outside ÜC park was compiled according to age, size and location. A matching analysis was also performed where each inside park company was matched with equal outside park company according to age and size. The author combined and examined financial indicators used by Forsaith & Hall (2000), Ferguson & Olofsson (2004) and Estonian Institute of Economic Research (2013).

First results revealed that there are some differences between companies located inside park and outside park. Inside park companies have a bigger average yearly netprofit but the average profit per employee is lower than outside park companies. Although the study found no significant differences between on park companies and of park companies in regard to sales growth.

**Keywords**: science park, clusters, company performance, IT companies
The Changing Nature of the Fashion Industry and its Impact on Place-Making

Alessandra Vecchi
a.vecchi@fashion.arts.ac.uk
London College of Fashion, University of the Arts London, UK

Graeme Evans
g.l.evans@fashion.arts.ac.uk
London College of Fashion, University of the Arts London, UK

Abstract:

The aim of this short paper is to provide an initial theoretical framework which is apt to assess the changing nature of the fashion industry and its impact on a specific form of clustering, that is placemaking. Cultural and creative clusters ranging from historic districts to new digital hubs have featured heavily in economic development and cluster studies, but their role in place-making is only recently being discovered. Essentially production based, they also tend to locate in industrial areas of cities which are also the subject of regeneration and transformation (Evans, 2014).

The rationale for investigating fashion clusters at this time is very compelling. Breward and Gilbert (2006) claim that the complex relationship between the fashion industry and urban regeneration that underpins contemporary understandings of global fashion as a system is orchestrated around a shifting network of world fashion capitals, particularly Paris, New York, London, Milan, and Tokyo but also incorporating at various times other fashion cities such as Moscow, Vienna, Berlin, São Paulo, Kuwait City, Cape Town, Barcelona, Antwerp, Delhi, Melbourne, Sydney, Shanghai, Hong Kong, Mumbai, and others. Conversely, in line with this change, according to Breward (2010) the nature of this dichotomy is set to change again and become very fluid as the system of fast fashion with its reliance on overseas producers disrupts the traditional relationship between time, place, and fashion creativity (Ottati, 2014). Similarly, the rise of social media has made the display of seasonal collections in a few key fashion locations less relevant; journalists and retailers can identify emerging trends instantaneously online (Nawaz et al., 2015).

However, the identification and promotion of fashion quarters and clusters as part of place-making and growth strategies is still evident in major cities such as London, and this will form the basis of a research investigation into London’s new Fashion District centred in East London - for which this paper and presentation lays the foundation.

Keywords: Fashion industry; Cluster; Urban regeneration; Place-making
Disruptive technology adoption, particularities for the clustered firms

Francesc Xavier Molina-Morales
Departamento de Administración de Empresas y Marketing.
Universitat Jaume I, Castellón de la Plana, España
xavier.molina@emp.ujies

Luís Martínez-Cháfer
Departamento de Administración de Empresas y Marketing.
Universitat Jaume I, Castellón de la Plana, España
chafer@emp.ujies

David Valiente-Bordanova
Departamento de Administración de Empresas y Marketing.
Universitat Jaume I, Castellón de la Plana, España
al013443@uji.es

Abstract:
This paper investigates, under a clustered firm perspective, how disruptive innovations are developed and introduced in clusters. The internal attributes of the clustered firms will condition the process of adoption of new technologies by the companies themselves, therefore the development of these casual relations are analysed using the Absorptive Capacity model. While scholars have studied the association between individual firm attributes and the exploration and exploitation of new technologies, we have specifically determined by logistic regression analysis how potential (exploring domain) and realized (exploiting domain) absorptive capacity determines the adoption of a disruptive innovation introduced in the Spanish Ceramic cluster in recent years. Our results show the relevance of the Exploitation dimension of the absorptive capacity for a clustered firm regarding its capability to adopt a new technology early. On the contrary, the rest of dimensions (Acquisition, Assimilation and Transformation) do not seem to have an important role when it comes to adopting the technology earlier than others. Findings in conclusion, highlight the uneven effect of the exploring and exploiting domains of the absorptive capacity model over clustered firm disruptive innovative dynamics contrary to expected regarding to non-clustered organization dynamics.

Keywords: Disruptive technological innovation, industrial clusters, absorptive capacity, innovation, technology adoption