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| --- | --- | --- | --- | --- | --- |
|  | Case study | Method | Approach | Measure | Result |
| Giuliani  (2011) | The wine cluster in Chile | Quantitative  (SAOM\*) | Dynamic | Transitivity  reciprocity | The mechanisms of transitivity and reciprocity account for the informal hierarchical structure within the cluster. |
| Stefano and Zaccarin  (2013) | Co-authorship and co-invention in the Trieste area (multiplex approach) | Quantitative  (ERGM\*\*) | Static | Transitivity (triangle AAB and K-triangle ABA) and 3-Star | Transitivity plays a crucial role in tie formation, whereas preferential attachment is found to be insignificant. |
| Ferriani et al. (2013) | Italian multimedia cluster in Bologna | Quantitative  (SAOM\*) | Dynamic | Social interaction and economic interactions | Social interactions have a relatively stronger impact on the formation of multiplex ties. |
| Giuliani  (2013) | A wine cluster in Chile | Quantitative  (SAOM\*) | Dynamic | Cohesion effects  (reciprocity and transitivity) | Reciprocity and transitivity contribute to the core–periphery structure of cluster networks, where actors with a higher degree of fitness (accumulated resources) take central positions. |
| Balland et al.  (2015) | The Toy Valley cluster in Spain | Quantitative  (SAOM\*) | Dynamic | Embeddedness status  Proximity\*\*\* | Status is a driving force for the formation of inter-firm links in business knowledge networks, and proximity plays a decisive role in the formation of technical knowledge networks. Embeddedness has a similar impact on both networks. |
| James et al. (2015) | Automotive sector in Västra Götaland, Sweden | Qualitative | Dynamic | Network size  Composition  pace of change | Over time, knowledge anchoring benefits from the self-enforcing local knowledge networks and actors at the peripheral position. |
| Molina-Morales et al.  (2015) | A foodstuffs cluster in the Valencia region, Spain | Quantitative  (ERGM\*\*) | Static | Transitivity  Node degree (out- and in-degree)  Proximity dimensions\*\*\* | The study proves the negative impact of cognitive and institutional proximities on tie formations, whereas social and geographical proximities facilitate the formation of collaborative ties. |
| Crespo et al.  (2016) | Clusters in the European mobile phone industry | Quantitative | Dynamic | Hierarchy  assortativity | Hierarchy and assortativity account for different performances of clusters. Clusters can prevent lock-in as long as they sustain a minimum degree of disassortativity. |
| Lazzeretti and Capone  (2016) | The cluster of high technology applied to cultural goods in Tuscany, Italy | Quantitative  (SAOM\*) | Dynamic | Proximity dimensions\*\*\* | Social and institutional proximity are the main drivers of network change in the early stages. Geographical and cognitive proximities become the most influential factors in forming innovation network over time. |
| Belso-Martinez et al.  (2017) | The foodstuff cluster in Valencia, Spain | Quantitative  (ERGM\*\*\*) | Static | Transitivity, reciprocity, and  proximity dimensions\*\*\* | Transitivity, reciprocity, organizational, social and geographical proximity are relevant driving forces of network formation at the advanced stage of the cluster. |
| Menzel et al. (2017) | The Research  Triangle region of North Carolina, USA | Quantitative  (SAOM\*) | Dynamic | Transitivity, preferential attachment, and assortative mixing | No fundamental change was observed during and after dot-om bubble in terms of explorative or exploitative tie formations. |
| Juhász and Lengyel (2017) | The printing and paper product cluster in Kecskemét, Hungary. | Quantitative  (SAOM\*) | Dynamic | Geographical proximity, cognitive proximity, transitivity, reciprocity, and cyclicity. | Transitivity, geographical proximity, and cognitive proximity joined with having a common third contribute to tie formation whereas cognitive proximity is essential for tie preservation. |
| Capone and Lazzeretti  (2018) | The cluster of high technology applied to cultural goods in Tuscany, Italy | Quantitative  (ERGM\*\*) | Static | Proximity dimensions\*\*\* | The findings show that proximity dimensions have various impacts on different modes of ties. Also, social ties have a strong impact on innovative performances. |
| Giuliani et al. (2018) | The Cordoba cluster in Argentina | Quantitative  (SAOM\*) | Dynamic | Social drivers (e.g. transitivity), institutional drivers (e.g. cluster policy), agentic drivers (e.g. gatekeeper/external star) | The underperforming cluster shows a local core–periphery (not fragmented) structure, implying that the cluster has a functioning network where dominant actors turn to external stars instead of diffusing knowledge at the local level. |
| Tanner  (2018) | Danish wind power clusters | Qualitative  (innovation biography approach) | Dynamic | Geographical proximity | Geographical proximity is essential for exchange knowledge and idea. Yet, its configuration changes over time. |

\* Stochastic actor-oriented models

\*\* Exponential random graph models

\*\*\* Proximity dimensions: cognitive proximity, institutional proximity, social proximity, geographical proximity and organizational proximity