



# **Radical Innovation in Tourism Clusters:**

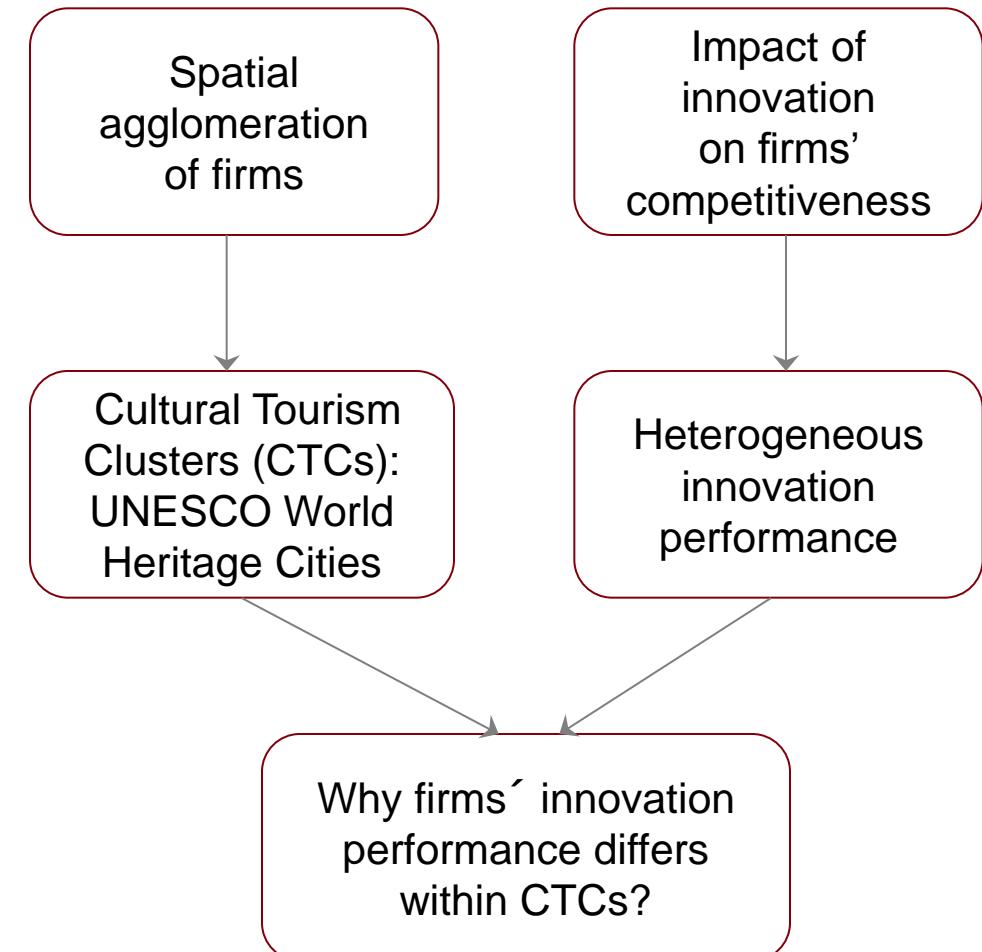
## **The role of knowledge and external relations**

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Dioni Elche

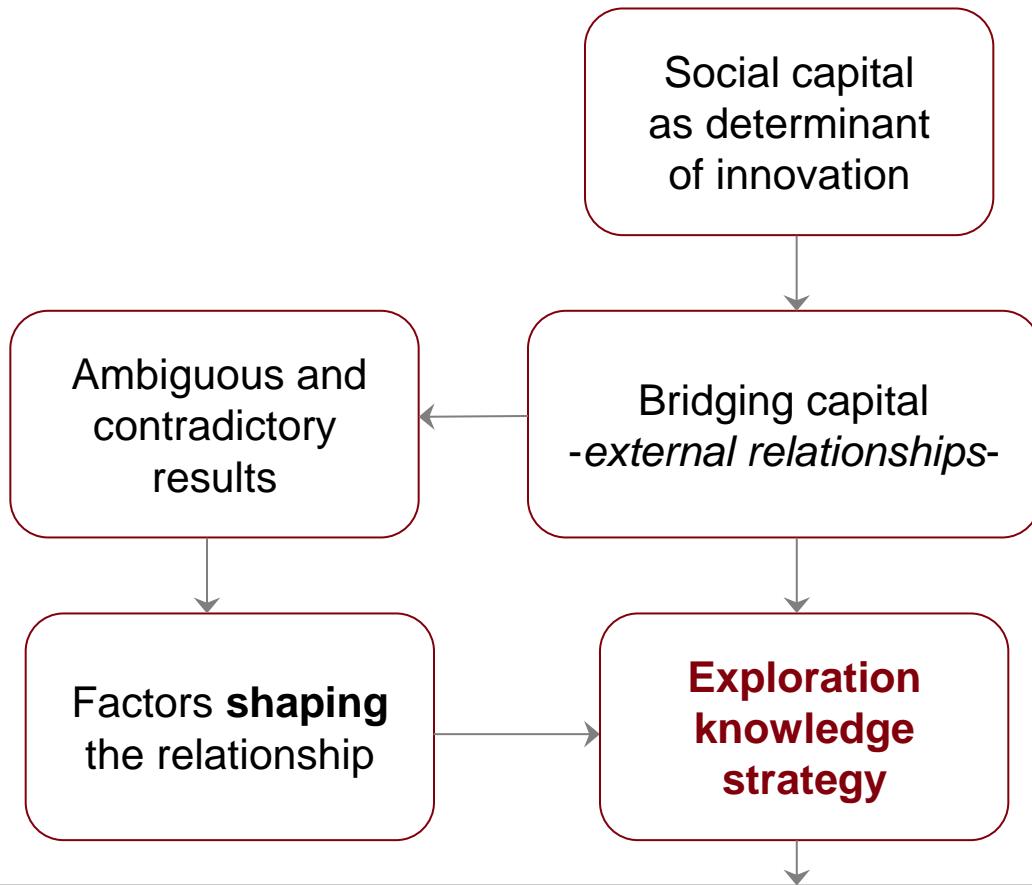
**Universidad de Castilla-La Mancha**  
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# Introduction

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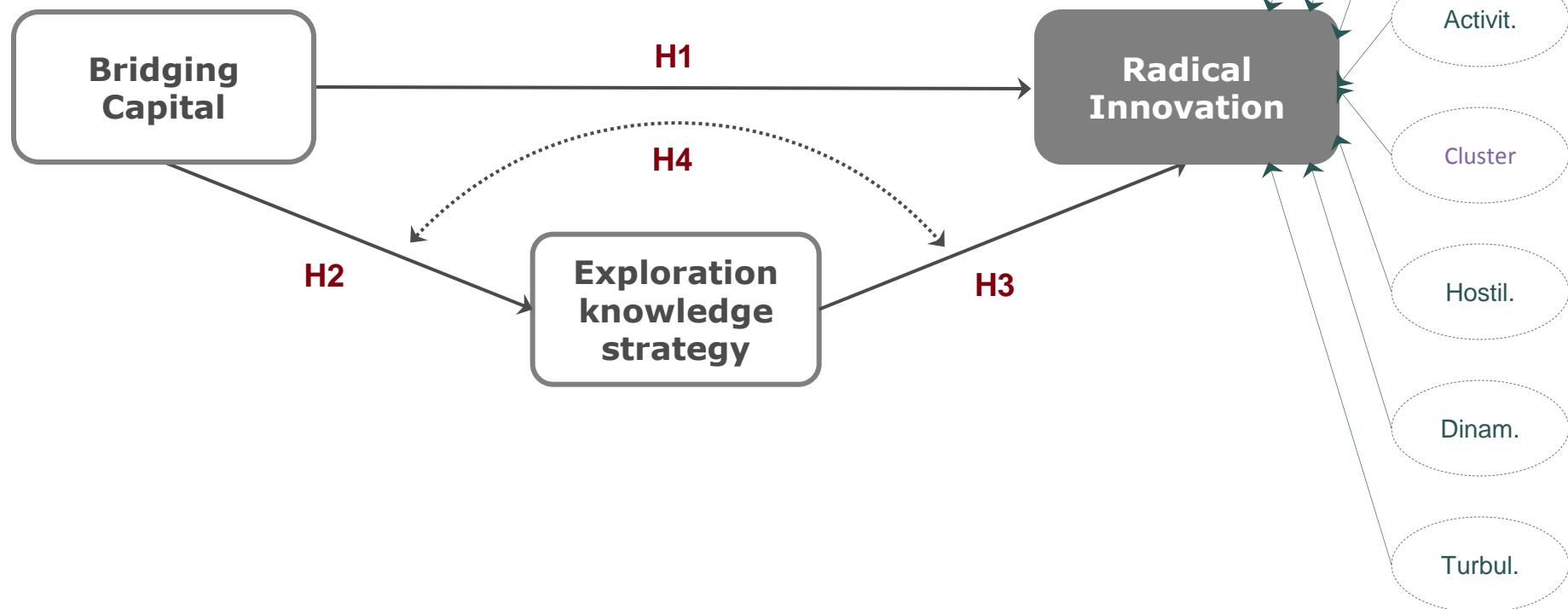
# Objectives



## Objective:

Analyse the mediating effect of **exploration knowledge strategy** between **bridging capital** and **radical innovation** in firms located in cultural tourism cluster

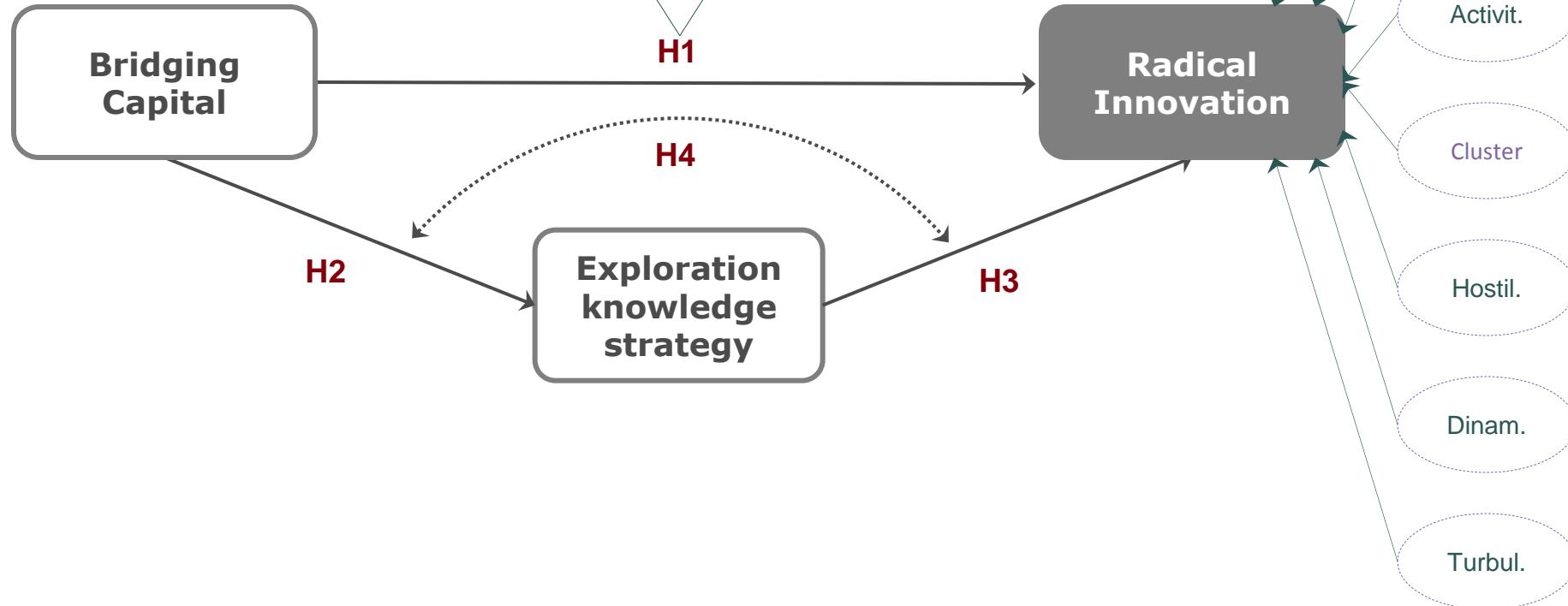
# Hypotheses



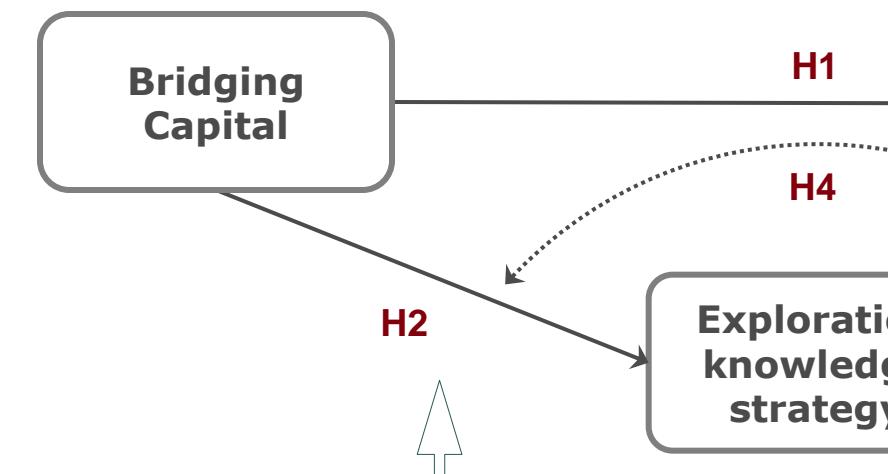
# Hypotheses

Tourism firms through **structural holes** can obtain exclusive information and experiences, which encourage radical innovations (Ahuja and Lampert, 2001; Fleming, 2001).

H1: In cultural tourism clusters, **bridging capital** influences positively in **radical innovation**

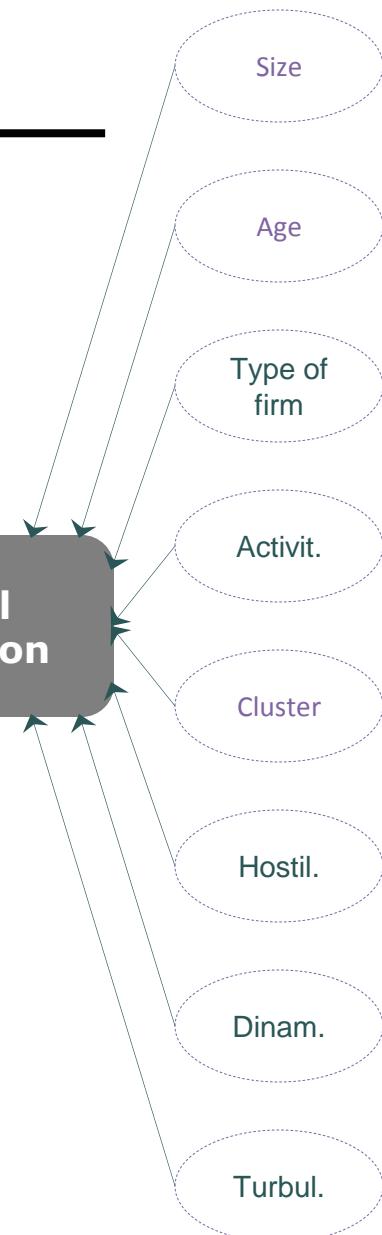


# Hypotheses

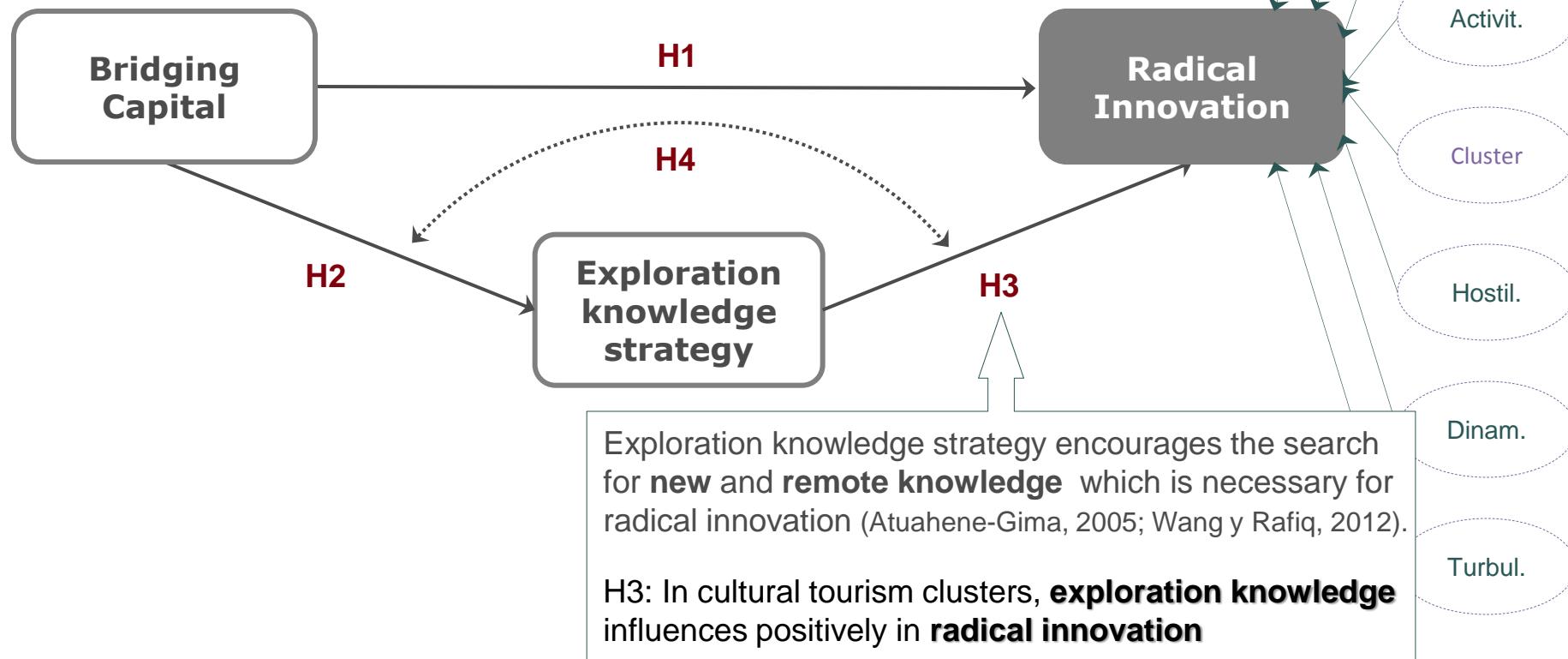


Relations with **external actors** add novel and non-redundant information, contributing exploration knowledge strategy (Weterings y Ponds, 2009).

H2: In cultural tourism clusters, **bridging capital** influences positively **knowledge exploration**



# Hypotheses

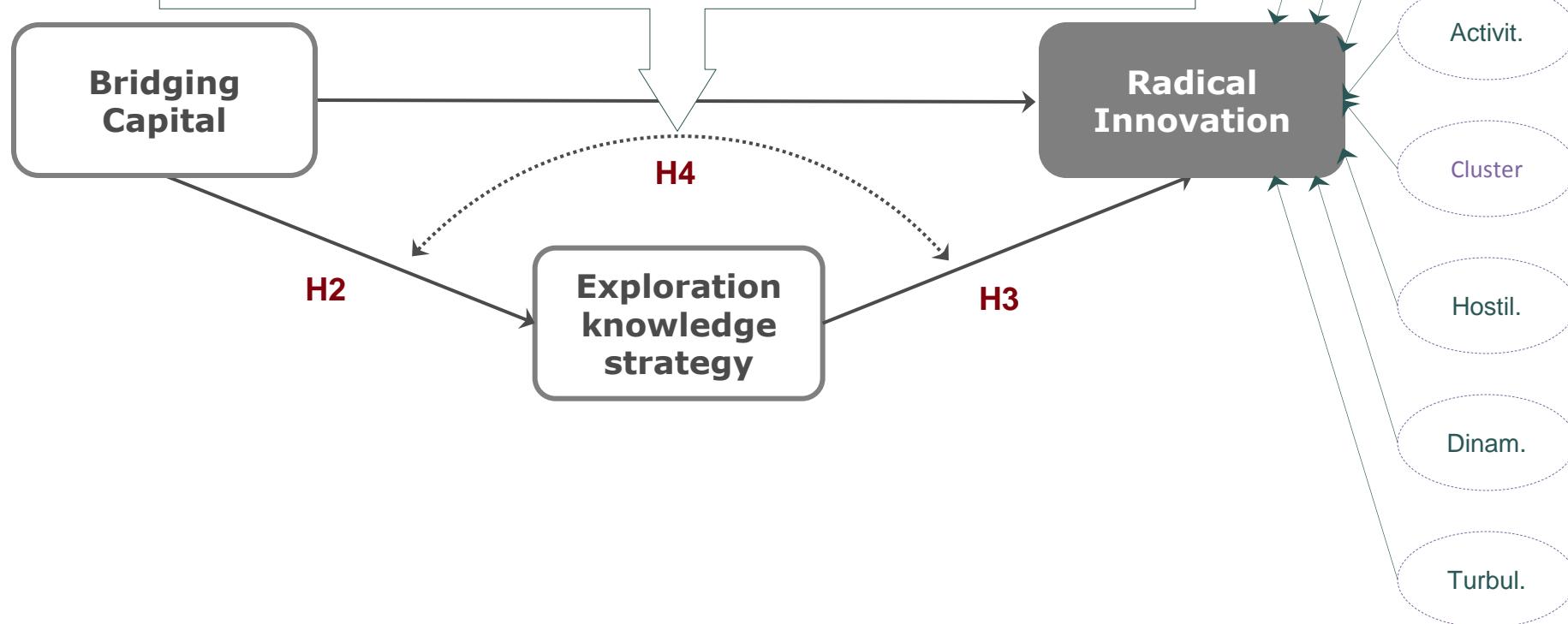


# Hypotheses

The direct effect provides incomplete notion of this relationship.

... So only if bridging capital is aimed at exploration knowledge strategy will lead to increase the result of radical innovation.

H4: In cultural tourism clusters, the relationship bridging capital and radical innovation is mediated by **exploration knowledge strategy**.



# Empirical study

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- Cultural tourism sector: UNESCO World Heritage Cities in Spain
- Population and Sample: 2,037 / 215 firms
- Response rate: 10.5%
- Measures of variables: Likert scale
- Software: PLS-Graph

# Cultural Tourism Clusters

World Heritage Cities	LQ	Index of restaurants	Index touristic	Index economic	LQ <sub>250</sub>
Alcalá de Henares	1	419	144	410	1,18
Ávila	0,9	153	134	120	2,22
Cáceres	0,8	228	84	138	2,22
Córdoba	0,9	768	508	559	1,23
Cuenca	0,9	158	111	95	2,22
Eivissa	2,2	133	274	105	1,02
Mérida	1,07	149	112	102	2,22
Salamanca	1	668	330	322	2,22
San Cristóbal de la Laguna	1,17	373	106	209	1,15
Santiago de Compostela	1,07	354	477	273	2,22
Segovia	1	158	119	96	2,22
Tarragona	1	545	350	591	1,24
Toledo	0,8	238	230	194	1,18

# Measures

VARIABLE	SCALE	N. ÍTEMS
<b>Bridging capital</b>	Tiwana (2008)	3 items
<b>Exploration knowledge strategy</b>	Revilla et al. (2010)	4 items
<b>Radical innovation</b>	Doloreux y Shearmur (2010)	7 items
	Size	Acs y Audretsch (1988) N. employee
	Age	Autio et al. (2000) N. years
	Type of activity	Martínez-Ros y Orfila-Sintes (2008) Subsid./Indepen.
<b>Control</b>	Branch of activity	Damanpour (1996) CNAE code
<b>Variables</b>	Cluster	DeCaloris y Deeds (1999) Location
	Environmental hostility	Covin et al. (2000) 3 items
	Market dynamism	Atuahene-Gima et al. (2006) 3 items
	Technological turbulence	Jaworski y Kohli (1993) 4 items

# Results

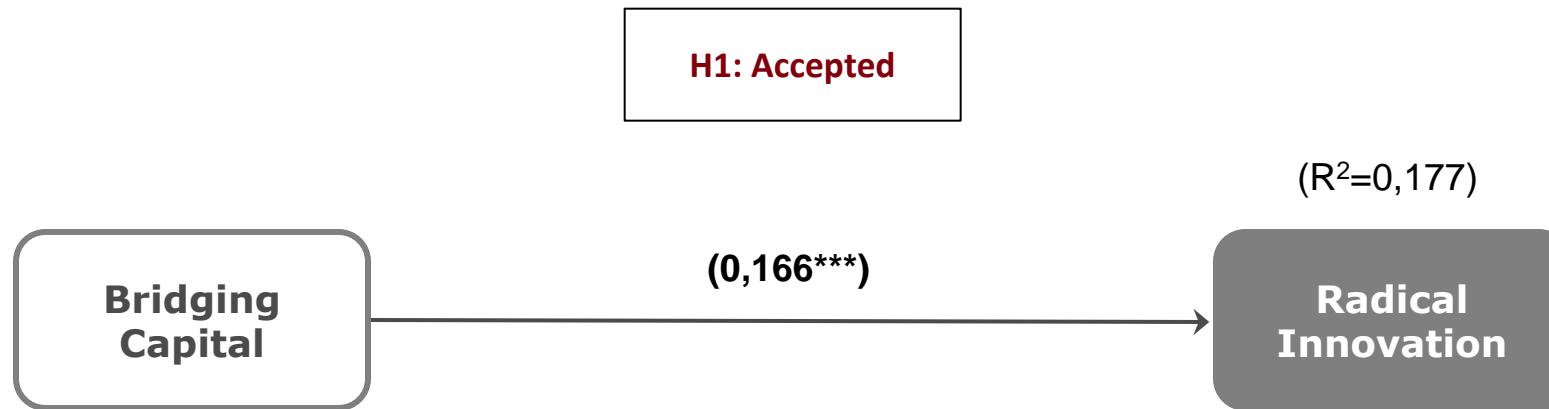
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## Values of the Measurement Model

Construct	Loads of items (>0,707)	Reliability (>0,7)	Convergent validity (AVE>0,50)	Discriminant validity
Bridging capital	Sí	Sí (0,930)	Sí (0,816)	Sí
Exploration knowledge	Sí	Sí (0,937)	Sí (0,789)	Sí
Radical innovation	Sí	Sí (0,945)	Sí (0,711)	Sí

# Results

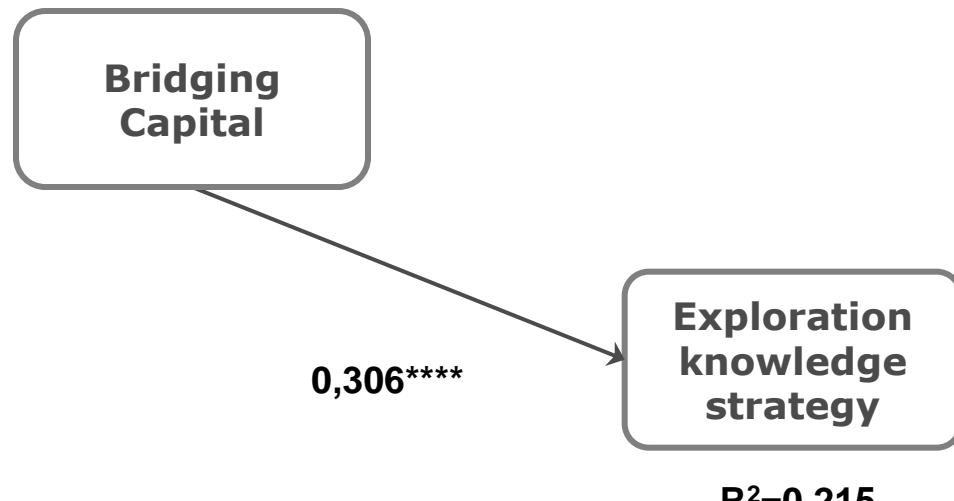
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# Results

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H2: Accepted



# Results

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H3: Accepted

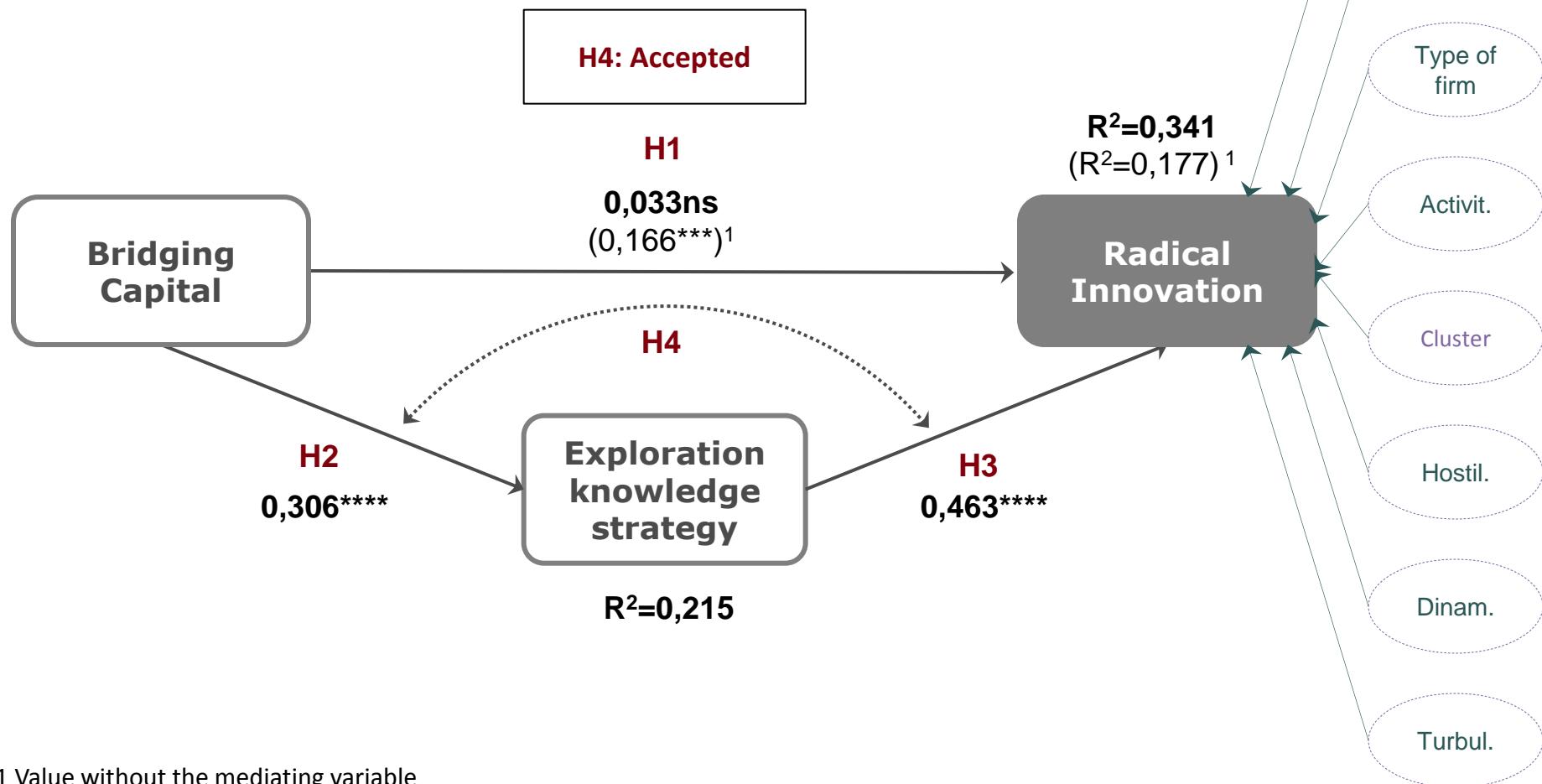
$R^2=0,341$

Radical  
Innovation

Exploration  
knowledge  
strategy

0,463\*\*\*\*

# Results



<sup>1</sup> Value without the mediating variable

Significance level \*p<0,10; \*\*p<0,05; \*\*\*p<0,01; \*\*\*\*p<0,001

# Conclusions

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## **Innovation in tourism firms located in World Heritage Cities**

Identification -*empirically*- the features of industrial clusters  
in this kind of historical cities

Explanation about some **determinants of radical innovation** in  
cultural tourism firms

Confirmation of **the mediating effect of exploration knowledge**  
strategy between bridging capital and radical innovation

# Conclusions

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## Contributions:

To show the relevance of establishing **contacts with external actors** to overcome problems of information redundancy and block-in in the cluster

To **improve the understanding of the association** between bridging capital and radical innovation because we introduce the mediating role of exploration knowledge strategy

# Conclusions

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## Contributions:

**Integration of the dimensions** less discussed in the literature:  
**bridging** capital, **exploration** knowledge and **radical**  
innovation.

The context of a specific network -> Cultural Tourism Cluster

**Empirical evidence** about radical innovation in  
cultural tourism clusters

Identification of **World Heritage Cities** as  
cultural tourism clusters in Spain

# Conclusions

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## Future investigations:

To analyse other dimensions not included in this paper -**bonding capital, exploitation of knowledge** and **incremental innovation**- and combination of both of them

To study the role and hotels and restaurants chains, touristic **intermediaries** and **institutions** in innovation

## Recommendations to firms:

To establish **relationships with actors outside** the cluster to avoid internal block-in and encourage the development of radical innovation



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