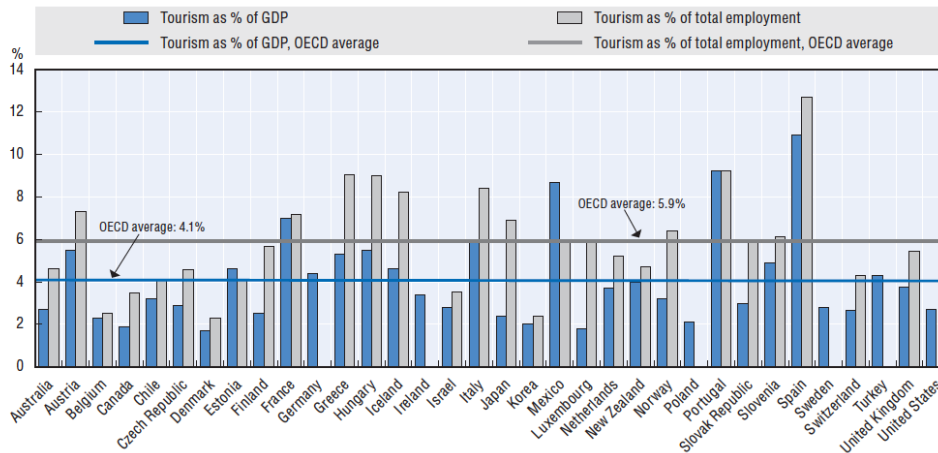


Is regional tourism development an arena for smart specialisation? Towards a classification of tourism innovation models in Europe

Nicola Bellini - Groupe Sup de Co la Rochelle
Francesco Grillo - St. Antony's College, University of Oxford
Giulia Lazzeri - Scuola Superiore *Sant'Anna*
Cecilia Pasquinelli - Gran Sasso Science Institute

Changing Patterns of Territorial Policy: Smart Specialisation & Innovation in Europe
First SMARTER Conference on Smart Specialisation and Territorial Development
Seville, 28-30 September 2016

Figure 1.1. **Direct contribution of tourism to OECD countries**
As percentage of GDP and employment, 2014 or latest year available

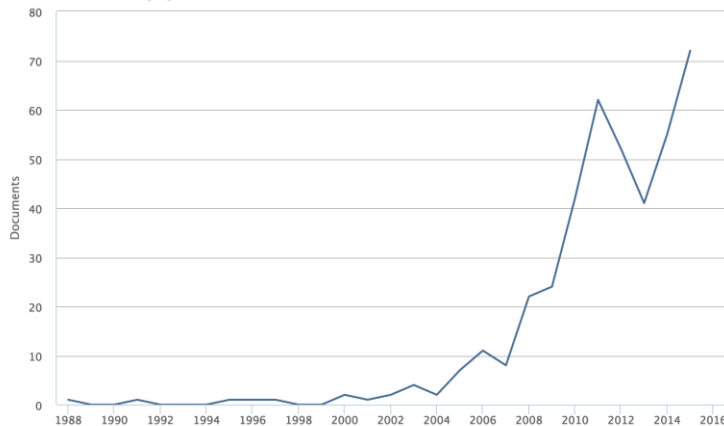


Source: OECD 2016

- +3.3% global international tourists until 2030 (UNWTO 2015), 9.6% global GDP by 2030, 300 million jobs
- 2003-13 greenfield investments in hotel & tourism reached \$97.5bn globally, creating 38,500 new jobs, “*twice as many as in the biotech industry*” (fDi Intelligence 2016)
- **“Europe, the World’s No. 1 Tourist Destination”**: top international destination and main source of international travellers
- Europe’s travel & tourism accounts for 9.2% GDP (indirect/induced effects) and 13.9 million employees (32.2 million indirect jobs): fast growing labor market
- Europe’s “*at-risk infrastructure competitiveness*” (WTTC 2015), especially in countries that are particularly reliant on tourism: France, Italy, Ireland and Greece are “well-placed, but with *key risks*” as forecast investment growth is much weaker than tourism growth

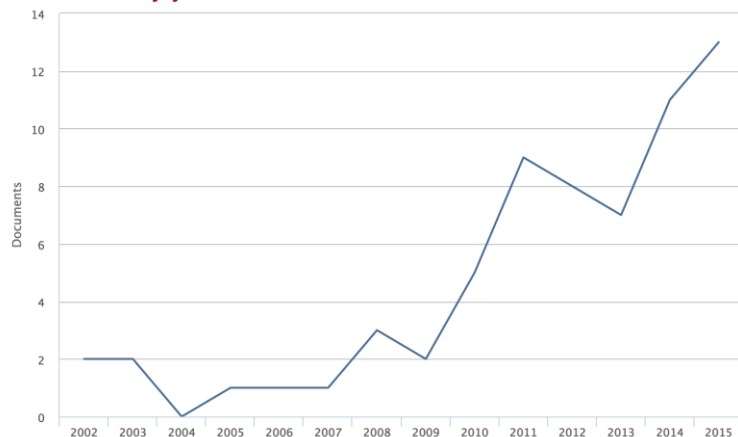
An Innovation agenda in Tourism Studies

Documents by year



Source: Scopus, "Tourism" AND "Innovation" in Keywords, 1988-2015

Documents by year



Source: Scopus, "Tourism" AND "Innovation" in Keywords, "Policy" in Abstract 2002-2015

- Limited research on tourism innovation policies (Hall & Williams 2008; Hjalager 2010)
- Research on tourism innovation policies remains *“extremely fragmented and largely ignored”*, potentially reflecting the persistent isolation of tourism from innovation policy and innovation systems discourses (Hall 2009; Keller 2006)
- The limited literature on tourism innovation policies is mostly conceptual or prescriptive, with relatively little empirical evidence (Rodriguez et al. 2014)
- Need for research that provides a more critical assessment of the potential (Rodriguez et al. 2014)

Innovation in Tourism

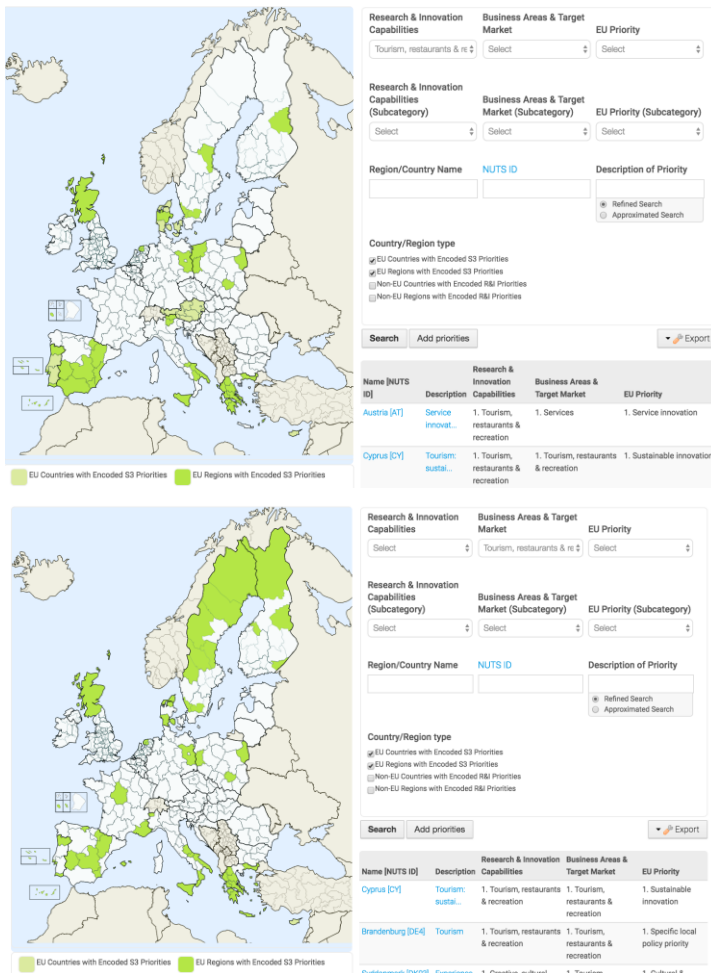
- Innovation concerns tourism organisations at different levels:
 - single firm – firm networks – destination - inter-sectorial/inter-regional networks (Hjalager 2010; Gomezelj 2016)
- Innovation matters (Martínez-Román et al. 2015). It allows:
 - Efficiency improvement (the “industrialisation of services”)
 - Flexible adaptation to changing customers’ needs and priorities and to new geographic markets
- Innovation has requirements in terms of (qualified) human capital: a radical shift from the “industrialist” bias considering tourism as an industry with low knowledge-intensity
- Innovation is not just technological (e.g. managerial/institutional innovation), yet technology plays a decisive role:
 - to enhance and empower the tourist experience (i.e. the “product”) (Neuhofer et al. 2014), redesign and re-authenticate it (Bellini et al. 2015)
 - to support planning and programming of cultural tourism from the ‘smart city’ perspective (Garau 2017)
 - to support a sustainable integration of tourism in the local and regional systems, e.g. transport intermodality through e-ticketing (Gronau 2017)

Innovation policy concepts in tourism

- Coproduction and innovation will increase in a tourism destination located in a region with **related industrial variety** (Aarstad et al. 2016):
 - it implies a multitude of providers offering different but complementary products
 - firms operating in “related” industries sharing an overlapping knowledge base (a relatively narrow cognitive distance allowing potential spillover effects), enabling them to collaborate in the effort to leverage an integrated tourism product
- **Absorptive capacity**: a fundamental issue with uncertain policy implications (Thomas and Wood 2014; 2015)
 - Absorptive capacity as tourism organisations’ ability to acquire, assimilate and utilise external knowledge for competitive advantage
 - Critical link between **acquisition** and **use** of knowledge:
 - “*Activation triggers*” that prompt organisational utilisation of external knowledge rather than simply expanding opportunities for acquisition
 - “*Social activation mechanisms*” to overcome structural, cognitive, behavioral and political barriers preventing knowledge sharing and mutual understanding

“To encourage innovative
behaviour, policy-makers may need to extend their reach to
the activation triggers ... This is challenging because the policy
tools available, especially at the level of the destination, are limited
and there are few, if any, *precedents*”
(Thomas and Wood 2014)

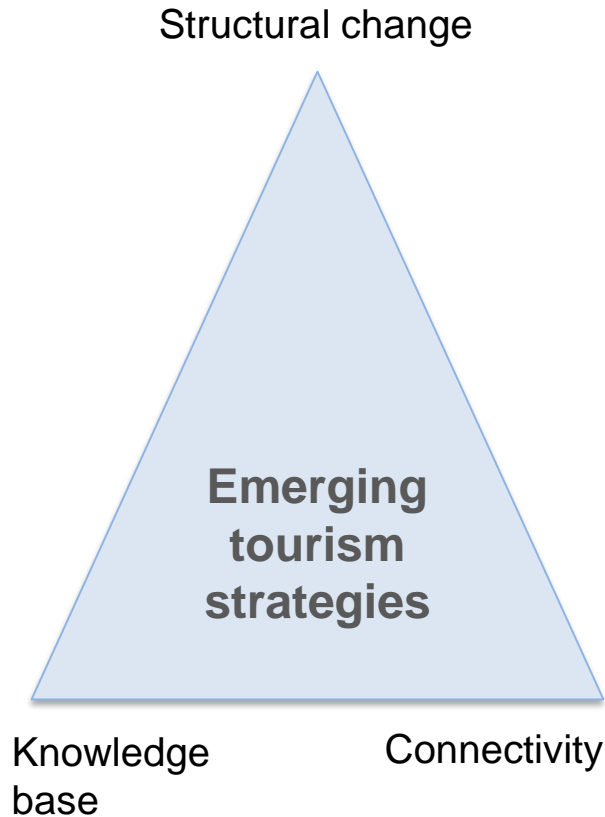
What are the emerging tourism strategies in the S3?



Source: Eye@RIS3. Info retrieved on 25 may 2016

- 80 regions/countries retrieved (over 183 regions + 19 countries)
- Most present countries in the retrieved selection: Greece, Italy, Spain, Portugal, France, Poland
- In the process of S3 analysis we considered so far: Spain, Portugal, Italy, Germany, Slovenia
- *S3 document analysis:*
 - The “weight” of tourism in the S3
 - The “weight” of tourism in the regional economy according to the background analysis proposed in the documents (what regional development rationale)
 - The logic of vertical prioritization (the strategic role of tourism)
 - Focus on ICT (as particular case of “co-invention of applications”, tourism and ICT as “textbook case” according to Foray 2015)

Towards tourism strategy typologies



Structural change	Knowledge base	Connectivity
Transition	Analytical	Connecting globally
Modernisation	Synthetic	Sustaining momentum
Diversification	Symbolic	Cluster building
Radical foundation		Deepening pipelines

Source: Foray 2014; Asheim and Coenen 2007; Cooke et al. 2006; Benneworth and Dassen 2001)

	<i>Critical dimensions</i>		
<i>Emerging tourism strategies</i>	Structural change	Knowledge base	Connectivity
Tourism Modernisation	Modernisation	Synthetic	Connecting globally
Inno through Acquisition, Assimilation, Utilisation of External Knowledge	Transition Diversification Radical foundation	Analytic	Global pipeline Cluster building
Tourism-pulled innovations	Diversification	Synthetic Symbolic	Cluster building
Tourism-generating innovations	Transition Diversification	Synthetic	Cluster building
Tourism and Innovation Culture	Modernisation	Symbolic	Sustaining momentum
Moderating Tourism	Transition Radical foundation	Analytic Synthetic	Connecting globally

① Tourism Modernization

(adopting global state-of-the-art standards)

- A **modernization** through development of specific applications of general purpose technology producing significant impacts on efficiency and quality in the existing sector
- **Synthetic** knowledge (engineering) is critical: application or novel combination of existing knowledge; applied problem-related knowledge; interactive learning with clients and suppliers; dominance of tacit knowledge due to more concrete know-how, craft, practical skill
- Need for **connecting globally** and to find a point of connection to key global actors

Saxony-Anhalt, DE:

Tourism is mature yet growing sector (6 mil arrivals per year), tourism is presented as area for the **transversal domain of Information and Communication Technologies:**

Technologies:

- Use of geo-data for the development of applications for tourism
- ICT and digital media for the modernization of a traditional sector

Sicily, IT:

6.8% firms in tourism, very low turnover (2.4% regional total); 8.4% cultural firms owned by young entrepreneurs; 1st region in Southern Italy for number of arrivals.

- **S3: tourism-ICT relation - ICT to enhance efficiency, visibility and competitiveness**
 - **ICT enabling access and fruition to regional services and cultural assets**
- Incentives to ICT start up businesses (ICT applications for tourism and CAs management)

② Innovation through Acquisition, Assimilation and Utilisation of External Knowledge

- Boosting **transition** (a new emerging domain from existing R&D, engineering and manufacturing capabilities allowing firms to enter new markets), **diversification** (economies of scope between an existing activity and a new one towards a new growing market) and in some case **radical foundation** (a new domain with no direct link with existing structures)
- **Analytic** knowledge is critical: creation of new knowledge; scientific knowledge; research collaboration between firms and research organizations; dominance of codified knowledge (patents/publications)
- Building a **global pipeline** to find a point of connection to key global actors and deepening the existing ones; **cluster building** to improve local networking to connect more local actors into the growing regional network

Innovation through Acquisition, Assimilation and Utilisation of External Knowledge

Autonomous Region of the Azores, PT:

- Tourism is a priority and plays a transversal role
- The sector plays a growing relevance (10% regional GDP), growing differentiation of tourism products
- **SMART TOURISM - LABORATÓRIO DE APLICAÇÃO DE TECNOLOGIAS AO TURISMO:** towards an institutionalised permanent laboratory/network for acquisition, assimilation, use of applications and R&D collaborations

Activation triggers & Social activation mechanisms

Autonomous Region of Madeira, PT:

- Key transversal role of a consolidated and mature sector (25-30% GDP; 12-15% jobs)
 - Activation triggers of knowledge flows in tourism management (attracting **critical mass through international experts**) on biodiversity and eco-innovations, marketing & business models
- Network building for research and international events
- Sourcing qualified human resources

③ Tourism-pulled innovations

(demand pull)

- **Diversification** through the discovery of potential synergies (economies of scale and scope) towards new growing markets
- **Synthetic** knowledge is critical: application or novel combination of existing knowledge (engineering); applied problem related knowledge; dominance of tacit knowledge due to more concrete know-how, craft, practical skills
- **Symbolic** knowledge is also critical: innovation by recombination of existing knowledge in new ways; creation and communication of cultural meanings, symbols and aesthetic values, a form of tacit knowledge that is rooted within specific sociocultural contexts with little or no opportunity of transfer (Asheim et al. 2007; Manniche 2012)
- **Cluster building** improving local networking to connect more local actors into the growing regional network

Aragon, ES:

- Tourism is an emerging sector, less developed than in the rest of the country (2 mil arrivals), based on natural (mountain tourism) and cultural resources
- Tourism as a stimulus to welfare and services (inner areas): **promotion, accessibility, protection and provision of services in unpopulated and inaccessible areas** (tourism niches: senior, disabled)
- Energy efficient buildings and clean transportation

④ Tourism-generating innovations

- **Transition** and **diversification**
- **Synthetic** knowledge
- **Cluster building** to improve local networking to connect more local actors into the growing regional network

Castilla Y Leòn, ES:

- **Among the priorities, Natural and Cultural heritage, Spanish Language including the new technologies for teaching the language** (*Plan del Español como Lengua extranjera de la Comunidad de Castilla y León 2013-2016*)
- Tourism is not present in the final S3 but the enhancement of the Spanish language for global communication remains

Centro, PT:

- Relevant yet not dominant cultural tourism (4.8% regional added value)
- **Highly focused strategy: health tourism** (elder segments)
- **Attractor:** high concentration of advanced health equipment; hospitals, higher education institutes and research centres, mildness of the climate and the environment, quality food, quality spaces for healthcare (hydrotherapy facilities).

Slovenia:

- Emerging sector of growing importance: total contribution of T&T is 12.7% GDP, export activity (8% total exp., 40% service exp.)
- **Health-Medicine to enhance new products development related to natural substances and spa tourism** (e.g. natural medicine and cosmetics, rehabilitation)

⑤ Tourism and Innovation Culture

(identity and distinctiveness)

- **Modernization** through development of specific “applications” with significant impact on **quality** in the existing sector (through opportunities of valuation and value upgrading)
- **Symbolic** knowledge is critical: innovation by recombination of existing knowledge in new ways reusing or challenging existing conventions; learning through interaction in the professional community, learning from young/street culture or fine culture; reliance on tacit knowledge, craft, and practical skills; creation and communication of cultural meanings, symbols and aesthetic values, a form of tacit knowledge that is rooted within specific sociocultural contexts with little or no opportunity of transfer (Asheim et al. 2007; Manniche 2012)
- **Sustaining momentum** through building up new regional hinges with connections to regional firms and building critical mass

Lisbon region and Norte, PT:

- Tourism is an emerging sector in a highly diversified economy
- Key issue: a “low value” destination
- Tourism as **opportunity for valuation of cultural production and of manufacturing productions** (Norte in a process of reindustrialisation; Lisbon urban economy and CCI)
- Lisbon: creative and cultural industries as supporting a process of differentiation and value creation; Art, historical and cultural elements used for brand building (e.g. Fado) and creative tourism niches
- Tourism as **privileged platform** for promoting and differentiating CCI (fashion and lifestyle)

⑥ Moderating Tourism

(‘reverse related variety’)

- Boosting **transition** (a new domain emerging from existing R&D, engineering and manufacturing capabilities that sustain innovation) and **radical foundation** (a new domain with no direct link with existing structures)
- **Analytic** knowledge is critical: innovation by creation of new knowledge; importance of scientific knowledge; research collaboration between firms and research organizations; dominance of codified knowledge (patents/publications)
- **Synthetic** knowledge is critical: application or novel combination of existing knowledge; applied problem-related knowledge (engineering); interactive learning with clients and suppliers; dominance of tacit knowledge, know-how, craft ...
- **Connecting globally** and building global pipelines

Algarve, PT:

- Sun & Sea Tourism development “*at the expense*” of other sectors (regional dependence on tourism: 20% GDP and jobs); “non-S&T driven” region
 - Tourism connecting with other emerging sectors for transitioning towards a more diversified economy.
- Tourism to support value creation in other sectors:**
- Sea
 - Agrifood
 - ICT and CCI
 - Health and Life Sciences
 - Renewable energies

Preliminary remarks

- The potential of RIS3 for furthering the European discourse on tourism
 - As integral part of regional development (beyond the ‘second best’ after industrial/manufacturing development)
 - As integral part of the “high roads of development”: tourism as “credible” component of regional innovation and a regional knowledge economy
- A missed opportunity? Tourism innovation agenda fairly overlooked at the European level: a prejudice of a biased industrialist vision?
 - Tendency to think of tourism as opportunity to support the economic sustainability of cultural and natural assets only
 - Some isolated case shows right the opposite but still need to steer knowledge on policies and practices of tourism innovation
- A dominance of a serial repetition of ICT-based strategies: though ICTs and the Internet are fundamental to tourism destination development, there is a risk of coupling tourism innovation exclusively with these
 - A need to go beyond the idea of innovation as only technologic innovation
 - A need to go beyond the Internet and ICTs as the only technologies “for tourism” (e.g. robotics, medical devices ...)
 - From the analysed cases: detected signals going in different directions

Research implications

- Take tourism and tourism innovation as ‘serious’ agenda in regional development
- A need to develop more systematic review and analysis of the tourism role in European S3
 - The limits of ‘small sample’ analysis
 - Hard and time-consuming process of data and information retrieval and analysis (e.g. language but also – and especially – the ‘readability’ of systems, actors, actors’ behaviors and processes)
 - Need for dedicated research networks on tourism innovation in the S3
- A need for further research to:
 - analyse the implementation phase: shifting from strategies (concepts and ideas) to operationalisation (practices, actions)
 - Assess the “capacity building” in the long-run: what policy learning, institution building, research capabilities