

2030 Agenda and sustainable business models in tourism: a bibliometric analysis

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Abstract

Starting in 2015, 169 states launched a series of initiatives aimed at pursuing achievement of the 2030 Agenda. In particular, one of the main sector interested by 2030 Agenda is represented by the Tourism sector. The centrality of Tourism enterprises is related to the considerable impacts on the landscapes in which they operate. On the point, academics and policy makers have started to discuss about the difficult for Tourism enterprises to adopt business model based on sustainable paradigms such as the circular economy. According to this evidence, this paper aims to analyze the scientific debate that has characterized the first 5 years after the introduction of the 2030 Agenda. Bibliometric analysis has been conducted on 101 articles about the relationship between SDGs and Tourism published during the period 2015-2019. The analysis reveals the existence of three independent clusters of research regarding the impacts on society (Red Cluster), business models (Blue Cluster) and policy implications (Green Cluster). An interpretative framework to evaluate the strategies adopted by tourism enterprises to contribute to the SDGs is then developed and discussed.

Keywords: Sustainable Development Goals, Tourism, Business models,

1. Introduction

In last years, the concept of sustainability has gotten a huge attention in the socio-economic and managerial literature. This concept represents a connection between the growth of society and the economic factors that work within it, and is affected by the environmental, socio-cultural and economic framework (Sancho et al., 2002; Pérez et al., 2013). Increasing consciousness of the negative environmental impacts caused by unsustainable economic-development models has encouraged the adoption of more sustainable paradigms worldwide. A strong driver of this change was been the 2030 Agenda (Bebbington and Unerman, 2018), a worldwide agreement that involves all the United Nations Member States to achieve the significant sustainable development before the year 2030, identifying 17 Objectives (SDGs - Sustainable Development Goals) and 169 targets. Furthermore, contrary to prior experiences such as the Millennium Development Goals, the UN has explicitly requested that also the private sector support these practices through their markets strategies as part of the 2030 Agenda (Pizzi et al., 2020; Sachs, 2012). Although not subject to much attention by the UN, the tourism sector represents a key area of interest for policymakers due to its direct impacts on natural systems (Hall, 2019a; Iazzi et al., 2020; Sgroi, 2020).

Measuring sustainability is an important requirement for managing the resilience of tourism-based socio-ecological systems (Lacitignola et al., 2007). This is particularly significant for the sectors in which tourism activity is strengthened (Petrosillo et al., 2006, 2007). Since the tourism is now recognized as the economic force in numerous Countries, over the last few years, the need for a sustainable paradigm for this sector has emerged (Sgroi, 2020). Effectively, in two of the 17 declared sustainable development objectives, explicit reference is made to tourism. In particular, the main connection with tourism sector can be found in SDGs 8.9 and 12.7b.

43 Attempts to forward the sustainability of the tourism sector have long been supported in policy and
44 research (UNWTO, 2017; Buckley, 2012; UNWTO, 2012). In 2017, the UN WTO started to
45 discuss the alignment of the tourism sector to the SDGs through a conjoint analysis performed with
46 the UN Development Program that evaluated the strengths and weaknesses of the sector (UN WTO
47 and UN DP, 2017). In recent years, a set of initiatives has been launched to support and encourage
48 the transition to new forms of business models for tourism enterprises and destination management
49 organizations (UN WTO, 2019a, 2019b). In addition, at academic field, many studies have shown
50 that the effective development of sustainable strategies within the tourism sector require the direct
51 involvement of different stakeholders such as citizens, SMEs and financial institutions (Haukeland,
52 2011; Waligo et al., 2013). Several academics have called attention to the need to develop specific
53 policies for the SDGs in the tourism sector (Boluk et al., 2019; Hall, 2019a; Scheyvens and Hughes,
54 2019). Furthermore, the sector has a complex impact on local communities through the introduction
55 of new anthropic activities such as infrastructure, roads and construction. Local communities
56 receive these investments in varying ways, influenced by different economic and cultural
57 backgrounds (Lenao, 2015; Scheyvens and Hughes, 2019). However, prior studies highlighted that
58 the main criticisms related to Tourism are represented by the impacts on natural resources
59 (Manomaivibool, 2015). This because the tourism is a tool for development but could affect the
60 quality of ecosystem services since it would degrade natural renewable and non-renewable
61 resources (Lacitignola et al., 2007). The ecosystem services loss should not be ignored when
62 following true ecological sustainability, as this is an essential factor to contemplate in order to
63 quantify the overall ecological costs of human activities (Coluccia et al., 2020). On the one hand,
64 people's recreation behavior is indirectly affected by environmental quality and, on the other hand,
65 the public possesses the ability to directly affect the quality of the natural environment through
66 individual behaviors (Petrosillo et al., 2007, 2009). Increases in this environmental and economic
67 challenge will have negative effects on ecology, economies and human wellbeing, making the
68 community more sensitive (Gupta et al., 2020).

69 In particular, increasing attention has been paid to the implications of the transition to sustainable
70 models by tourism enterprises (Boluk et al., 2019; Gössling and Michael Hall, 2019; Niäiä et al.,
71 2010). Further studies have investigated the possible connection between the development of
72 sustainable practices and the wellbeing of local communities, measured through eradication of
73 poverty and quality of life (Boluk et al., 2019; Hall, 2019a; Scheyvens and Hughes, 2019). In
74 addition, the evidence gathered in these studies has contributed to a field of knowledge about the
75 connections between the political-economic theme of the SDGs and the role of the private sector. In
76 conducting this research, scholars have answered a call to action from several authors to introduce,
77 within the political debate, insights achieved through evidence-based approaches that typically
78 characterize managerial studies (Petrosillo et a., 2010; Bebbington and Unerman, 2018; Guthrie et
79 al., 2019).

80 This paper aims to analyze the scientific debate that has characterized the first 5 years after the
81 introduction of the 2030 Agenda. Bibliometric analysis has been performed on 101 articles that
82 analyzed the relationship between tourism and SDGs. For our purposes, we considered the papers
83 published during the period 2015-2019 on business and economics journal.

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85 **2. Material and methods**

86 A bibliometric analysis of the literature has been performed (Caputo et al., 2018; Dabić et al., 2019;
87 Jin et al., 2019), chosen because it offers the opportunity to systematize a scientific field that

88 includes a high degree of contamination among research areas. The adoption of bibliometric
89 research allows researchers to develop new knowledge through the analysis of a field based on a
90 rigorous approach (Gaziulusoy and Boyle, 2013).

91 A systematic research on Web of Science (WoS) was conducted in March 2020. In order to avoid
92 errors related to the identification of the papers, a research protocol has been developed. In detail,
93 the period between 2015 and 2019 was the defined time span, running from the official launch of
94 the 2030 Agenda to the last year available.

95 For our search, we identified and used the following keywords:

96
$$TS = (SDG* OR \text{“Sustainable Development Goal*”}) AND \text{Touris*}$$

97 The next step involved identification of the exclusion criteria. For this research, we only considered
98 articles published in Business & Economics journals. The choice to limit our analysis to Business &
99 Economics journals is related to the opportunity to develop new knowledge about a
100 multidisciplinary topic such as the SDGs (Gaziulusoy and Boyle, 2013). Furthermore, we
101 considered only the papers written in English. Given that publications concerning the SDGs are
102 multidisciplinary and may practical implications, to ensure relevance to our research question, a
103 filtering process was carried out that consisted of independent reading of abstracts by all this
104 paper’s authors. This search retrieved a final sample of 101 documents that is consistent with prior
105 samples used in bibliometric studies (Bartolacci et al., 2019).

106 Bibliometrics applies statistical methods to study the scientific activity in a field of research (Zupic
107 and Čater, 2015). It combines two main procedures: performance analysis and science mapping.
108 Performance analysis is based on activity indicators, which provide data about the volume and
109 impact of research through the use of a wide range of techniques, including word frequency
110 analysis, citation analysis, and counting publications by a unit of analysis (e.g., authorship, country,
111 affiliation, etc.). Science mapping, meanwhile, is based on first and second-generation relational
112 indicators that provide a spatial representation of how different elements relate to one another (Jin
113 et al., 2019). The objective of science mapping is to show the structural and dynamic organization
114 of knowledge in the field of research.

115 To overcome the limitations that pertain to every synthetic indicator, prior studies have argued for
116 the use of more than one indicator (Bartolacci et al., 2019; Marzi et al., 2017). For this analysis, we
117 used co-citation, bibliographic coupling, and co-occurrence of keywords as indicators. Co-citation
118 analysis allows us to investigate when two articles are both independently cited by one or more
119 articles, while bibliographic coupling takes place when two articles both cite a third article,
120 indicating a probability that the two articles discuss a common topic (Ferreira, 2018). Co-
121 occurrence of keywords analysis uses the author’s provided keywords to investigate the conceptual
122 structure of the field (Ji et al., 2018).

123 As a tool to calculate these indicators, we used the software program VOSViewer (van Eck and
124 Waltman, 2010). In VOSViewer, graphs represent a network of elements through circles, whose
125 size varies according to the importance of the element, while the network connections represent the
126 closeness of links between elements. The spatial position of the circles and different colors are used
127 to cluster the items.

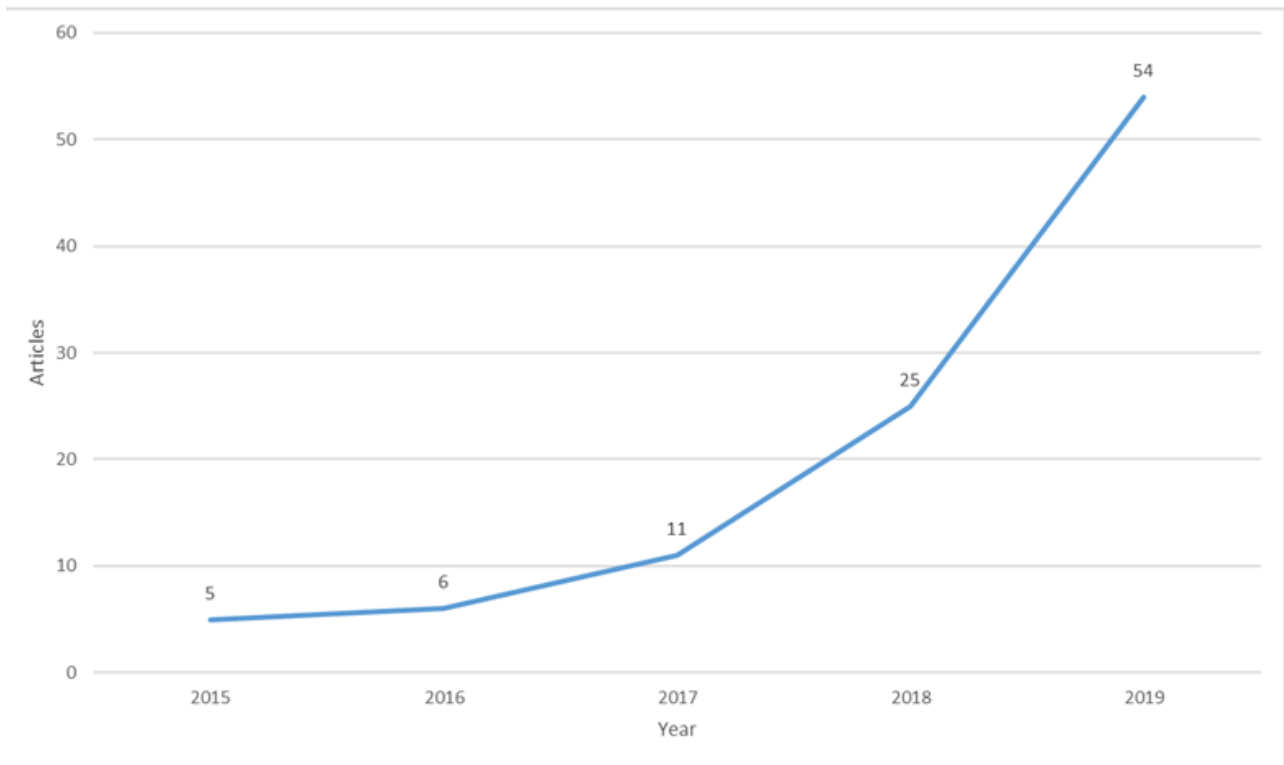
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130 **3. Results and discussion**

131 **3.1. SDGs and Tourism: an overview**

132 The analysis of the period 2015-2019 reveals an overall quantity of published papers equal to 101
133 (Figure 1). Recent years have seen rapid growth of this field, with the fewest papers published
134 during the first years and the greatest number published in 2019. Furthermore, an overall number of
135 citations equal to 348 confirms the relevance of the topic. In this sense, the analysis reveals that
136 even in the tourism sector, the SDGs represents a new research frontier for scholars (Bebbington
137 and Unerman, 2018; Guthrie et al., 2019).



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139 **Figure 1: Articles per year.**

140 The 101 articles have been published in 56 different sources. Of them, 62.5% have been cited at
141 least one time, while the sources with the high number of publications are the Journal of Sustainable
142 Development (20), Sustainability (12), Tourism Geographies (4), European Journal of Sustainable
143 Development (4) and Tourism Management Perspectives (3) (Table 1). Our analysis reveals that the
144 42.57% of the articles have been published in these journals. Thus, the main contributions to the
145 field has been published on tourism's journals.

146 **Table 1: Sources with the highest number of articles.**

Source	Documents	Citations
Journal of Sustainable Tourism	20	53
Sustainability	12	34
European Journal of Sustainable Development	4	1
Tourism Geographies	4	39
Tourism Management Perspectives	3	5

147 The most cited sources are Journal of Sustainable Tourism (53), Sustainable Development (52),
148 Tourism Geographies (39), Sustainability (34) and Journal of Tourism Futures (22). There is

149 significant overlap with sources, with the only exceptions of Sustainable Development and Journal
 150 of Tourism Futures (Table 2). These results could suggest these sources play a central role within
 151 the scientific debate. In particular, Journal of Sustainable Tourism is a 3-Star journal in the ABS
 152 ranking.

153 **Table 2 Sources with the highest number of citations.**

Source	Documents	Citations	Total link strength
Journal of Sustainable Tourism	20	53	325
Sustainable Development	1	52	27
Tourism Geographies	4	39	116
Sustainability	12	34	163
Journal of Tourism Futures	1	22	4

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155 The 101 papers were written by 263 authors. However, only 14 of them have published at least 2
 156 documents (Table 3). Furthermore, only 2 of them have been cited at least 50 times. Thus, despite
 157 or perhaps because of an average of 2.60 authors for paper, the scientific debate has received the
 158 most contributions from Scheyvens and Hughes, who play a pivotal role with, respectively, 94 and
 159 69 citations.

160 **Table 3: Most cited authors.**

Author	Documents	Citations	Total link strength
Scheyvens, Regina	6	94	16
Hughes, Emma	3	69	15
Baum, Tom	2	35	6
Hall, C. Michael	3	21	5
Gossling, Stefan	3	13	3
Cavaliere, Christina T.	2	12	3
Higgins-Desbiolles, Freya	3	12	3
Xiao, Wen	2	11	0
Higham, James	2	9	0
Miller, Graham	2	5	5
Adshead, Daniel	2	4	6
Fuldauer, Lena I.	2	4	6
Hall, Jim W.	2	4	6
Thacker, Scott	2	4	6

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162 **3.2. Co-Citation analysis**

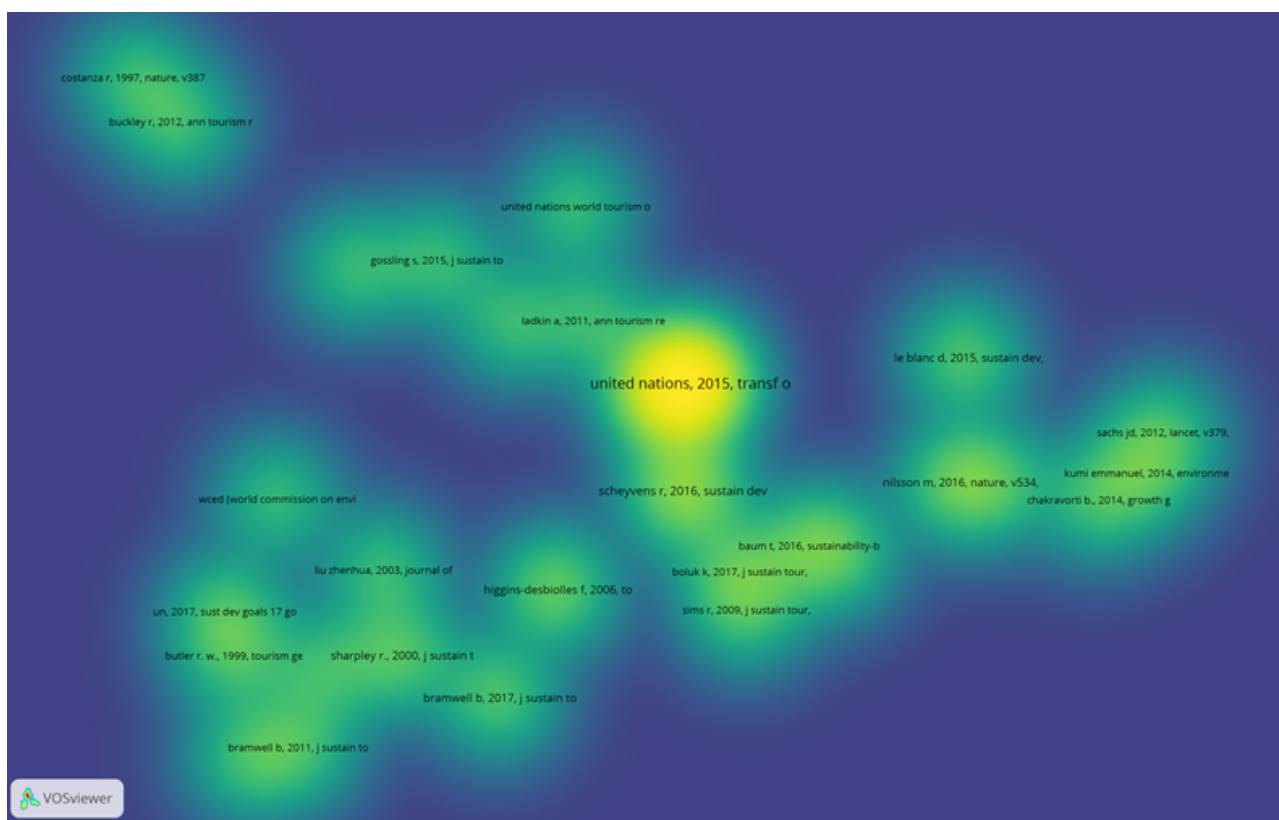
163 **3.2.1. Articles**

164 The 101 articles cited a total of 6065 of external sources. Of these, 30 documents were cited at least
 165 4 times. The 5 most-cited articles are:

- 166 • United Nations. (2015). Transforming our world: The 2030 agenda for sustainable
 167 development. General Assembly 70 session.
- 168 • Scheyvens, R., Banks, G., & Hughes, E. (2016). The private sector and the SDGs: The need
 169 to move beyond ‘business as usual’. Sustainable Development, 24(6), 371-382.

- 170 • Higgins-Desbiolles, F. (2006). More than an “industry”: The forgotten power of tourism as a
171 social force. *Tourism management*, 27(6), 1192-1208.
- 172 • Bramwell, B., Higham, J., Lane, B., & Miller, G. (2017). Twenty-five years of sustainable
173 tourism and the *Journal of Sustainable Tourism: Looking back and moving forward*.
- 174 • Ferguson, L. (2011). Promoting gender equality and empowering women? *Tourism and the*
175 *third Millennium Development Goal*. *Current Issues in Tourism*, 14(3), 235-249.

176 The density analysis (Figure 2) reveals that a large number of academics (20) have based their
177 research on the official 2030 Agenda released by United Nations (2015). In this sense, the analysis
178 confirms a high degree of relationship between theory and practice. Furthermore, the absence of a
179 consolidated group of cited documents confirms the novelty of the field.



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181 **Figure 2: : Density analysis of co-citation of the articles.**

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183 3.2.2. Journals

184 The 101 articles considered within our study are based on prior literature published in 3649 sources.
185 However, only 4 sources (Table 4) have been cited at least 50 times. In particular, the most cited
186 sources are *Journal of Sustainable Tourism* (190), *Tourism Management* (162), *Annal of Tourism*
187 *Research* (155) and *Sustainability* (65).

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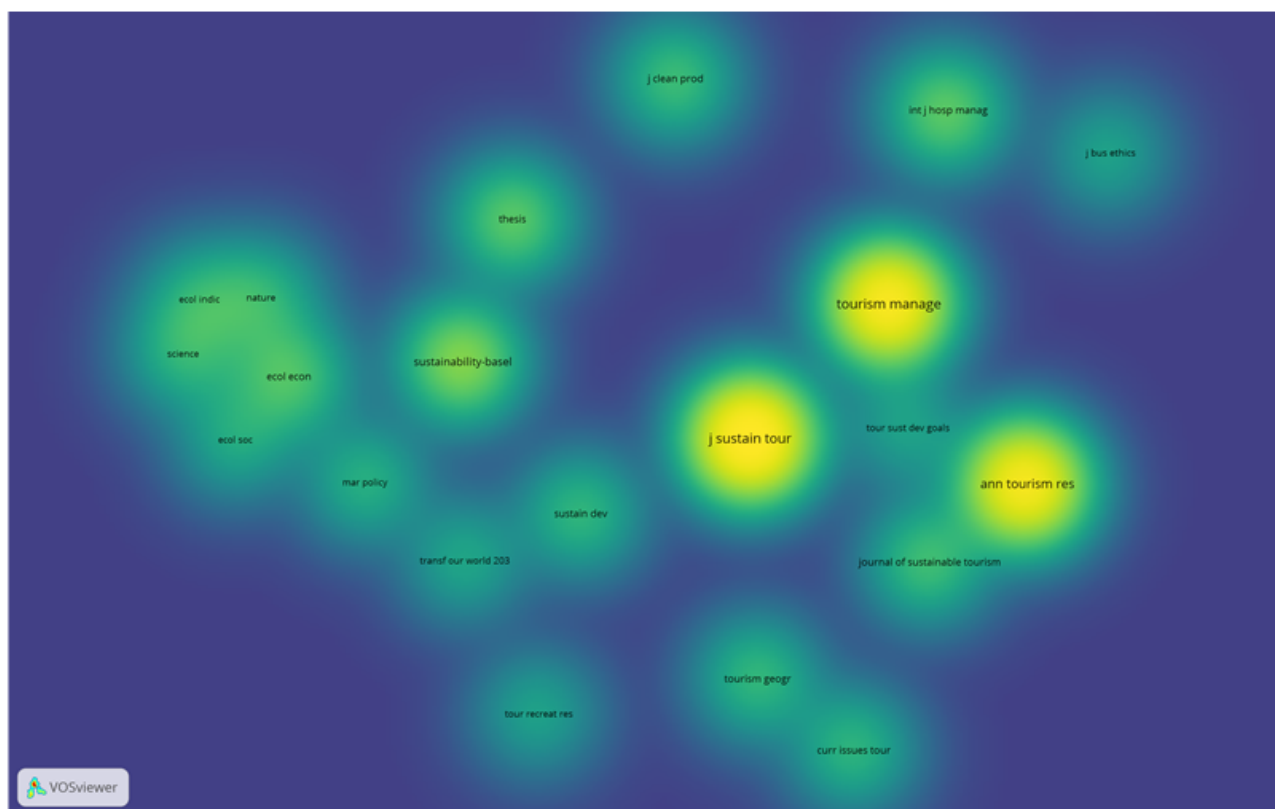
190 **Table 4: Journals co-citation.**

Source	Citations	Total link strength
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Journal of Sustainable Tourism	190	1760
Tourism Management	162	1975
Annal of Tourism Research	155	1991
Sustainability	65	400

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192 However, the density analysis (Figure 3) reveals that the Journal of Sustainable Tourism, Tourism
 193 Management and Annal of Tourism Central are central in the debate due to their high degree of
 194 specialization. Thus, although the themes related to tourism enterprises could be published in non-sectorial
 195 journals, analysis of the SDGs has been characterized by a high degree of journal specialization.



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197 **Figure 3: Co-citation of the sources. Density analysis.**

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199 3.2.3. Authors

200 The co-citation analysis reveals that 4599 authors have been considered within the papers, but only
 201 27 of them have been cited at least 10 times (Table 5). Furthermore, analysis of the 10 most-cited
 202 authors reveals interesting insights. Although our research has only considered scientific papers, 3
 203 of the 5 authors most widely cited are NGOs. Specifically, in their research, many academics have
 204 considered surveys and other publications from organizations such as the United Nations, the UN
 205 World Tourism Organization and UNESCO.

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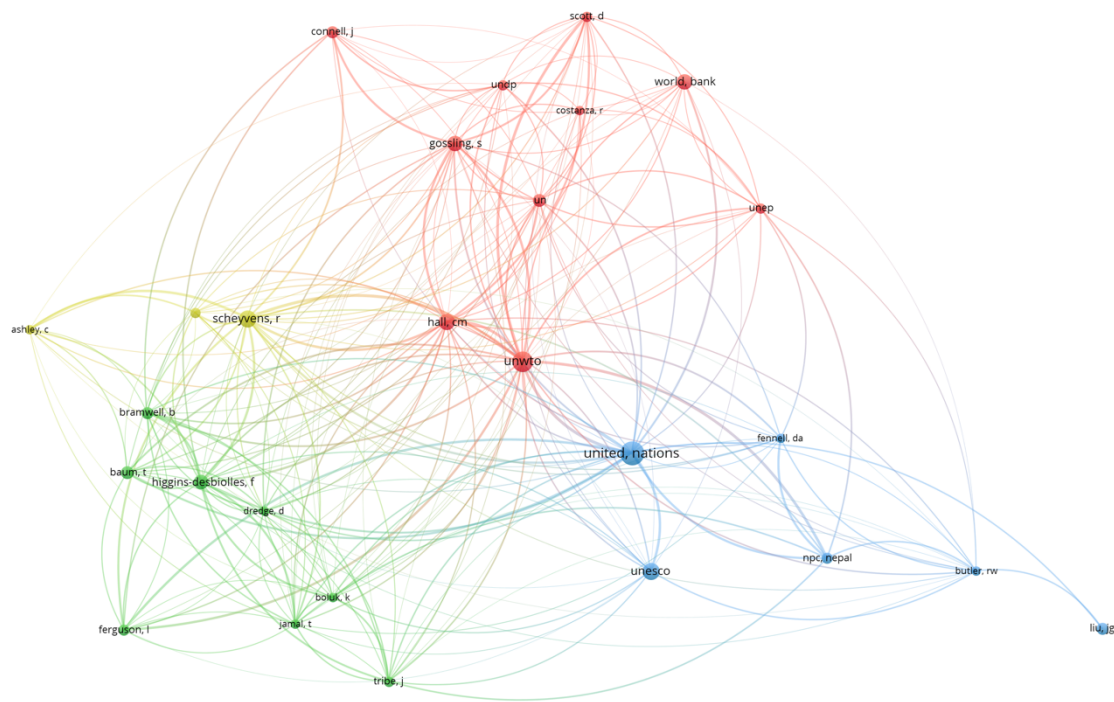
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209 **Table 5: Authors' co-citation analysis.**

Author	Citations	Total Link Strength
United Nations	66	210
UN WTO	49	226
Scheyvens, R	34	176
Unesco	34	68
Hall, C	30	164
Gossling, S	28	112
World Bank	28	54
Higgins-Desbiolles, F	24	119
Baum, T	20	75

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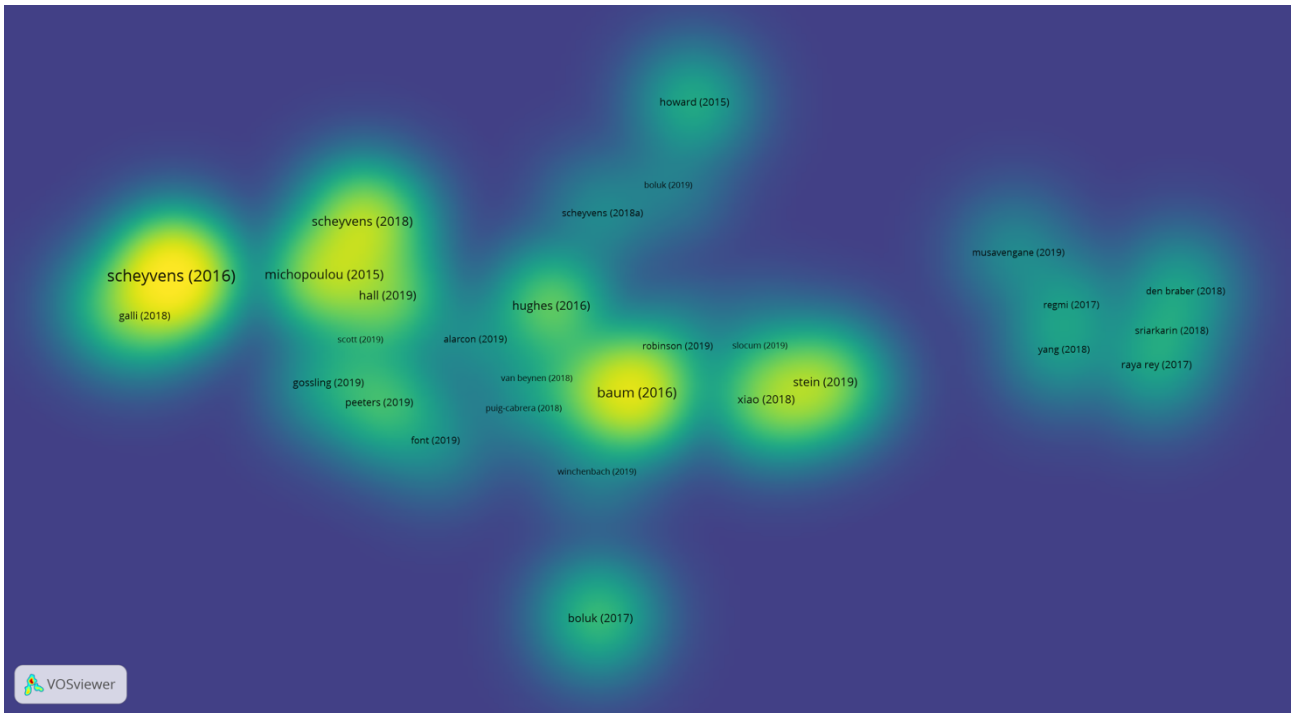
211 This observation has been confirmed by network and density analysis. The network analysis (Figure
 212 4) reveals that two independent clusters have drawn from the content released by the UN WTO
 213 (Red Cluster) and the United Nations (Blue Cluster). Furthermore, the density analysis highlights
 214 that a large and highly concentrated area of the research is based on the contributions provided by
 215 those institutions (Figure 5).



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Figure 4: Network analysis of co-citation of the authors.



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Figure 6: Density analysis of bibliographic coupling of the articles. Journals

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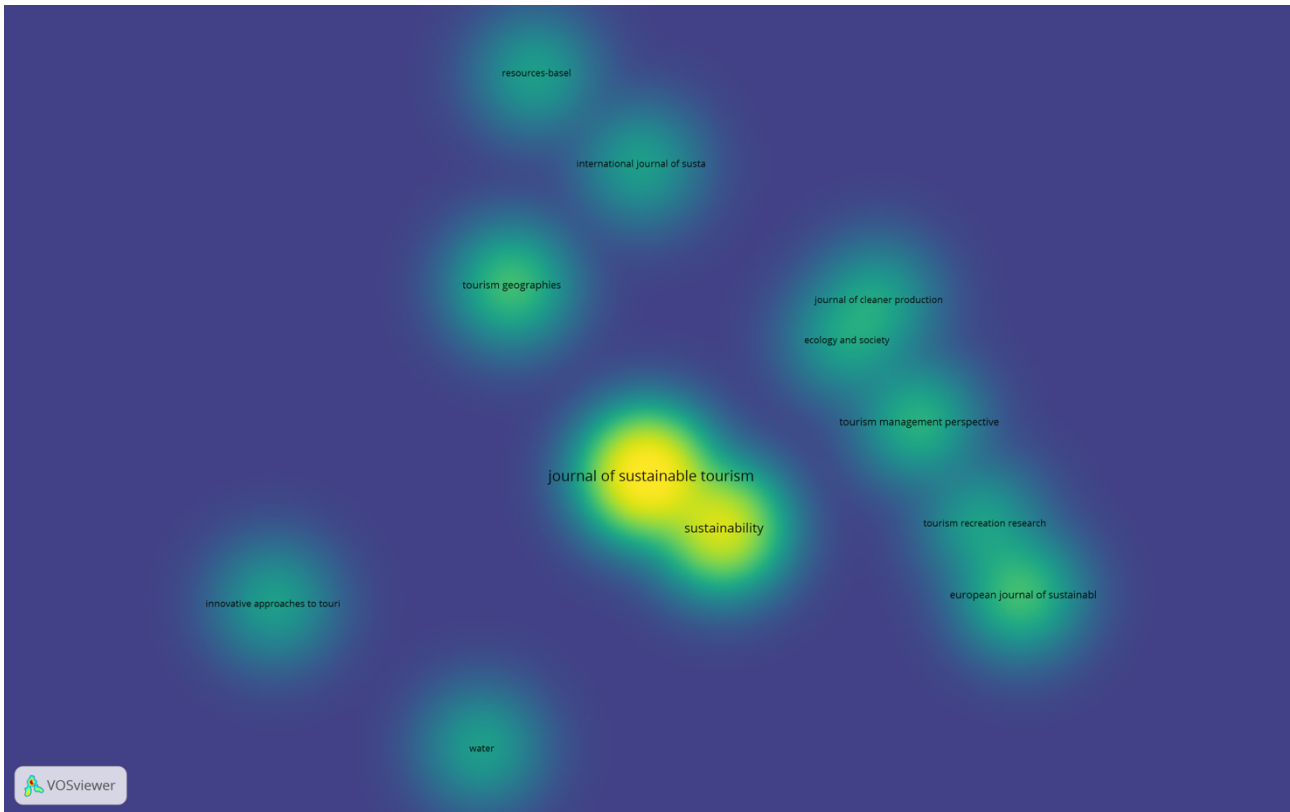
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The journals with the highest index of bibliographic coupling are Journal of Sustainable Tourism, Sustainability, Tourism Geographies, Tourism Management Perspectives and International Journal of Sustainable Development and World Ecology. However, only 12 sources satisfied the threshold of 2 papers on the SDGs published. Thus, the field is characterized by a high degree of heterogeneity, which in turn is related to the inclusion of journals not focused on tourism and hospitality. In addition, we have evaluated the centrality of those journals within the debate through a density analysis (Figure 7). This density analysis revealed that the Journal of Sustainable Tourism represents the main source analyzed by academics within the debate on sustainable tourism.



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Figure 7: Bibliographic coupling of the sources. Density analysis.

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3.3.2. Authors

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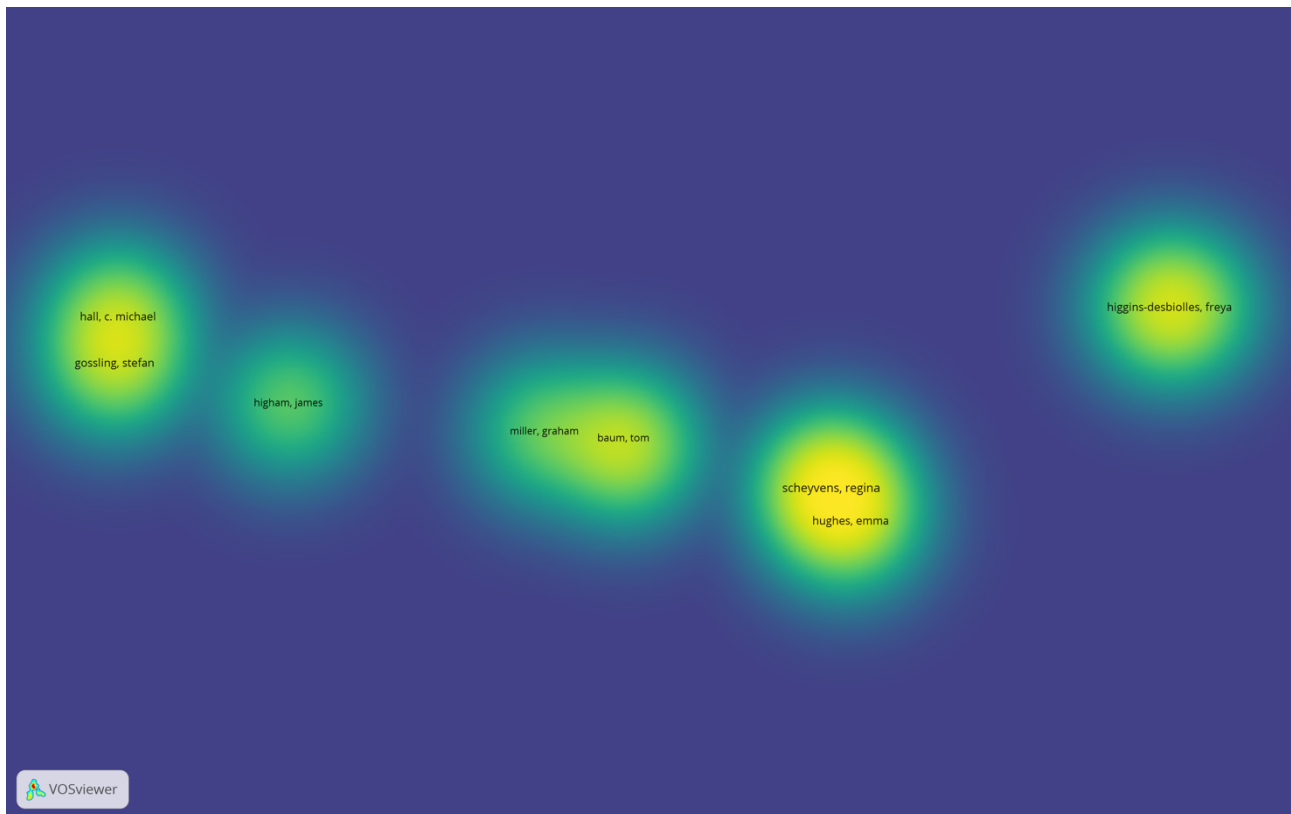
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Finally, we concluded the bibliographic coupling activities by examining the authors of publications (Figure 8). The analysis reveals that only 10 authors have published at least 2 papers with an overall number of citations equal or higher than 5. This result suggests that the scientific debate on sustainable tourism has not yet reached full maturity in terms of scientific knowledge. The authors with the highest bibliographic coupling are Scheyvens (University of New Zealand), Gosling (Linnaeus University), Hughes (Massey University), Hall (University of Canterbury) and Higgins-Desbiolles (University of South Australia).



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Figure 8: Bibliographic coupling of the authors. Density analysis.

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4. Keyword analysis

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Despite the existence of common traits between topics, multidisciplinary fields of study such as sustainable tourism require deep analysis of the literature to develop new insights (Gaziulusoy and Boyle, 2013). Thus, a keyword analysis (Figure 9) has been performed in order to evaluate the specifics of the debate on sustainable development. For our purposes, we have used the Keywords Plus function in order to harmonize the keywords authors used within their papers. The analysis reveals that 321 keywords were used within the papers. However, only 78 of them appears at least 2 times within the list. The five keywords with the highest link strength are management (43), tourism (43), attitudes (30), perception (25) and policy (23). Furthermore, network analysis revealed the existence of three clusters based on managerial practices (Green Cluster), non-financial performance evaluation (Blue Cluster) and contribution to sustainable development (Red Cluster).

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4.1. Green cluster

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The Green Cluster consists of 31 papers that evaluate sustainable tourism through a managerial lens. In detail, they examine the managerial implications of transition to more sustainable business models. Many of the articles within this cluster have been built on the contributions provided by the UN WTO (2017) on the SDGs. One of the main theoretical contributions is a critical analysis conducted by Hall (2019) on criticisms related to the development of sustainable practices in the tourism sector. Specifically, the author underlined the ineffectiveness of new forms of regulation or policies such as the SDGs in tourism. However, other studies pointed out positive externalities related to the formalization of sustainable policies. A study conducted by Sriarkarin and Lee (2018) revealed that the adoption of managerial systems within a national park favored the development of competitive advantage. Similar results have been provided by Pascual-Fernández et al. (2018) regarding the positive impacts that stemmed from the development of a social relationship with

282 local communities. Furthermore, other studies highlighted a positive correlation between the
283 adoption of sustainable business models and biodiversity (Tremblay et al., 2020; Yang et al., 2018).

284 Climate change's risks represent another central topic within the Green Cluster, related to the direct
285 connection between climate change and the Anthropocene (Moore, 2019). Thus, the implementation
286 of sustainable business models represents an obvious factor that could mitigate the negative
287 externalities caused by the development of tourism activities in natural areas (Hall, 2019a). The
288 literature provides several insights which could be useful to identify ways to manage climate
289 change's risks. In particular, several studies analyzed the possible implications related to the
290 adoption of digital systems to evaluate supply chain's performance (Peeters et al., 2019; Xiao et al.,
291 2018). The need to develop more sophisticated monitoring system has been also underlined by Galli
292 et al. (2018), who conducted a case study on Montenegro in order to evaluate the main strengths
293 and weaknesses related to the implementation of sustainable policies in tourism. Furthermore,
294 another perspective of analysis regards the development of sustainable practices based on a
295 destination's characteristics (Connell, 2018; Gordon et al., 2018). Thus, the literature confirms the
296 as evidenced by the UN WTO (2019b) regarding the need to distinguish tourism destinations from
297 enterprises in policymaking.

298 **4.2. Red Cluster**

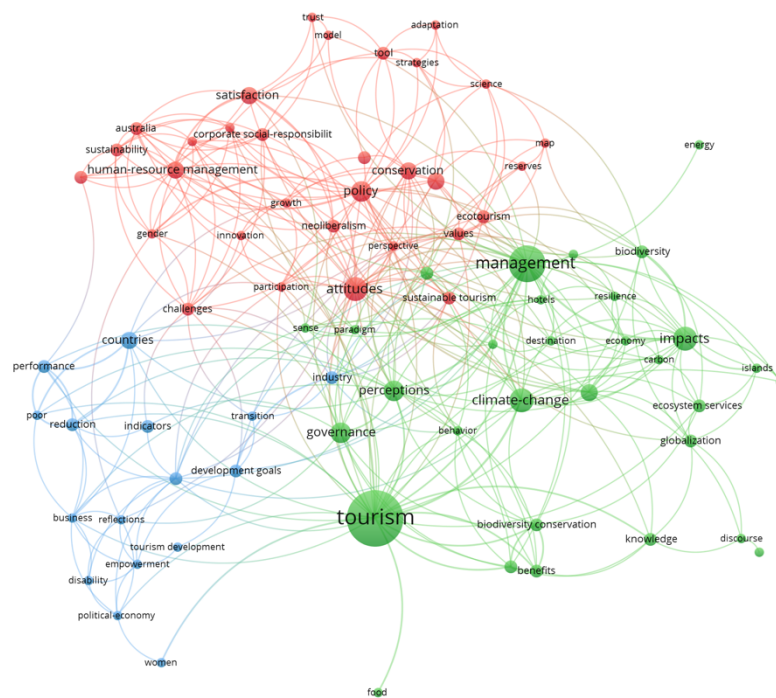
299 A total of 31 articles that describe different forms of sustainable models in Tourism compose the
300 Red Cluster. These papers analyze the phenomenon from both managerial and theoretical
301 perspectives. In fact, as revealed in keyword analysis, some authors have introduced to the debate
302 theoretical foundations such as the paradigm of neoliberalism. The neoliberal paradigm is related to
303 the potential that tourism enterprises will encourage the economic transition of developing
304 countries. On this point, the critical analysis conducted by Scheyvens and Hughes (2019) reveals
305 how tourism could enable the achievement of SDG1 (Eradication of poverty) as it generates
306 positive externalities that impact a local community's wellbeing. Furthermore, the same evidence
307 has been supported by Winchenbach et al. (2019), who underlined in their study the need for
308 tourism enterprises and regulators to support the achievement of SDG8 (Decent work). Thus, these
309 two contributions voice a call to rethink tourism enterprises' business models in order to favour the
310 achievement of the SDGs. However, this transition to more sustainable models can be complex. On
311 that point, Musavengane (2019) discusses asymmetries between managers' orientation toward
312 sustainability and actions. Furthermore, a study by Nguyen et al. (2019) suggests that the
313 implementation of strategies inspired by the SDGs requires the direct involvement of external
314 stakeholders. In this way, the adoption of sustainable models is influenced both by internal and
315 external actors.

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317 **4.3. Blue cluster**

318 Finally, 16 articles that regard non-financial performance evaluation compose the Blue Cluster.
319 Comprehending the main drivers and outcomes of tourism enterprises can be a complex activity for
320 management scholars due to the multidimensional character of the tourism and hospitality sector.
321 However, their comprehension represents a main challenge for evaluating the contribution provided
322 to SDG achievement. In fact, comprehension of the performance achieved by a country can not be
323 separated from comprehension of the role played by private enterprises (Scheyvens et al., 2016b).
324 Accordingly, several studies have been conducted to evaluate the role played by SMEs and MNEs
325 that operate in the tourism sector. In particular, these studies have shown the necessity to evolve

326 from a concept of sustainable development as the mitigation of environmental risks to an integrated
 327 approach based on multidimensional items. A study by Alarcón and Cole (2019) states that tourism
 328 enterprises cannot achieve a truly sustainable paradigm without the integration of further concepts
 329 such as SDG5 (Gender equality). In addition, the authors found interrelationships between gender
 330 equality, SDG6 (Clean water) and SDG8 (Economic growth). Furthermore, Scheyvens and
 331 Biddulph (2018) draw attention to how tourism enterprises can encourage the social inclusion of
 332 local communities. Other studies have been conducted to evaluate the role of cultural factors. An
 333 example is the case study conducted by Stumpf and Cheshire (2019) regarding SDG15 (Land use).
 334 In detail, the authors report that for Micronesian entrepreneurs the concept of “land use” is different
 335 because they perceive the islands as a cultural factor and not as an economic asset. Another
 336 example comes from the analysis conducted by Scott et al. (2019b) on 181 countries. The authors
 337 found that tourism enterprises’ contributions to SDG 13 (Climate Change) are influenced by their
 338 geographical location. Thus, it is unreliable to attempt to understand the SDGs without a deep
 339 analysis of the factors that have impacts on their achievement. Furthermore, criticism exists
 340 regarding the comparability of SDG achievement between countries or regions.



341
 342 **Figure 9 Network analysis of keywords.**

343 **5. Toward an interpretative framework**

344 The market demand for sustainable tourism experiences has encouraged rapid growth in this sector
 345 (Center for Responsible Travel, 2019; UN WTO and UN DP, 2017). Thus, firms have started to
 346 reorganize their strategies in order engage in more effective ways with stakeholders. Policymakers
 347 have encouraged the transition to these new forms of organization through the provision of specific
 348 policies and guidelines (UN WTO, 2019b, 2019a). This has encouraged the development of new
 349 firms inspired by organizational paradigms such as the circular economy and sharing economy
 350 (D’Amato et al., 2017; Gössling and Michael Hall, 2019; UN WTO, 2019a). However, “sustainable
 351 tourism” has not been clearly identified or defined amid a diversity of perspectives about its

352 realities. These perspectives come from many coexisting stakeholders who are interdependent with
353 the activities of tourism enterprises, policy makers and other stakeholders (Waligo et al., 2013;
354 Walker and Moscardo, 2016). To fully comprehend this phenomenon requires an integrated
355 approach based on the conjoint analysis of different pressures from all stakeholders considered
356 together interdependently in a co-evolutionary dynamism that forms the tourism ecosystem (Badola
357 et al., 2018; Kristjánsdóttir et al., 2018; Zhang, 2016).

358 On one hand, much of the literature supports the thesis that tourism enterprises could enable the
359 achievement of sustainable development. An increasing number of studies have analyzed the impact
360 of tourism enterprises on the SDGs. These studies have contributed to the scientific debate through
361 the analysis of different indicators, such as the eradication of poverty and the development of better
362 work conditions (Boluk et al., 2019; Robinson et al., 2019; Scheyvens and Hughes, 2019). In
363 particular, poverty reduction through foreign direct investment (FDI) by MNEs represents a main
364 subject for which evidence has been collected over the years (Cheer and Peel, 2011; Smith et al.,
365 2014). Other studies have analyzed the adaptive capacity of tourism enterprises to create strategies
366 to withstand the negative effects caused by global warming (Scott et al., 2019a). On the other hand,
367 other studies have highlighted the impossibility of discussing “sustainable tourism” within the
368 recent scenario due to the absence of a two-way relationship between sustainable development and
369 economic growth (Pigram and Wahab, 2005). In particular, several authors have examined the
370 economic factors that have an impact on a firm’s decision to be “green” (Bramwell and Lane,
371 2011). Moreover, the author denoted the difficult for policymakers to discuss about rise of a new
372 tourism market in a historical period characterized by an overall decrease of the natural resources
373 available (Higgins-Desbiolles, 2018). Another limit highlighted by the literature is represented by
374 the negative impacts on local communities. Unlike in other sectors, tourism enterprises are
375 negatively perceived by local communities due to their direct impacts on society and the
376 environment, despite the economic contribution to regional development (Olson, 2012). The
377 insights collected by academics have highlighted cultural barriers related to the background of the
378 local communities (Iazzi et al., 2020; Mbaiwa, 2011).

379 Finally, the bibliometric analysis reveals the existence of possible win-win strategies between
380 natural resource conservation and tourism. In detail, the analysis highlights the existence of an
381 interdependencies between firms’ strategies, policies and society toward a co-evolutionary dynamic
382 ecosystem (Table 6). On the point, this evidence confirms as evidenced by Scheyvens et al. (2016b)
383 about the need to involve different entities within the processes related to the 2030 Agenda. In
384 addition, the same idea was supported by Sachs (2012). Although the existence of paradoxes related
385 to the impacts caused by Tourism enterprises on natural resources, policy makers could favor the
386 diffusion of strategies useful to encourage the transition to more sustainable practices both by local
387 communities and tourism enterprises. Furthermore, even local communities and tourism enterprises
388 could enable other stakeholders to adopt sustainable practices. In this sense, the achievement of an
389 adequate contribution made by Tourism enterprises requires the involvement of all the stakeholders
390 interested by the potential externalities caused by their activities. However, the absence of
391 cooperation between the stakeholders could impact negatively on those practices due to the multi-
392 stakeholders character of Tourism sector (Waligo et al., 2013).

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396 **Table 6: Interpretative framework of multi-stakeholder's interdependencies.**

	<i>Tourism enterprises</i>	<i>Policy makers</i>	<i>Stakeholders</i>
<i>Tourism Enterprises</i>	Development of cooperative practices in order to generate economic benefits for all	Provision of financial incentives to sustain green practices	Release of a "Social License to Operate"
<i>Policy makers</i>	Contribution to the management of natural areas	Development of common policies	Participation to public consultations
<i>Stakeholders</i>	Implementation of new services	Regulatory activities to protect natural resources.	Awareness-raising activities on sustainable development.

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398 **6. Conclusions**

399 Five years after the introduction of 2030 Agenda, the SDGs still represent an ambitious target. Their
 400 achievement is made complex by interlinkages between goals that make it difficult to develop win-
 401 win strategies (van Vuuren et al., 2015). An example is represented by the tourism sector, where
 402 conflicts between stakeholders are a limiting factor for the effective transition to sustainable
 403 economic models (Waligo et al., 2013). Policymakers must develop further initiatives in order to
 404 favor the voluntary adoption of new practices by tourism enterprises inspired by the need to actively
 405 contribute to the SDGs. In fact, the achievement of these ambitious goals requires an active
 406 contribution by the private sector that remains the main actor within the worldwide economic
 407 scenario (Scheyvens et al., 2016b).

408 The analysis confirms the criticism put forward by Pigram and Wahab (2005) regarding the
 409 impossibility of engaging in an effective way with all the stakeholders involved in the tourism
 410 sector. Since, sustainable tourism indicators give a helpful tool for monitoring and managing
 411 tourism sustainably (Choi & Sirakaya, 2005, 2006), this study examined how each initiative has
 412 both positive and negative impacts both on stakeholders and the environment. Similarly, the
 413 existence of three standalone clusters categorized by different approaches to the SDGs suggests that
 414 tourism enterprises cannot satisfy all the 17 SDGs through their actions, any more than other sectors
 415 can (Schaltegger, 2018).

416 The theoretical contribution of our paper is represented by the extension of the scientific debate
 417 around the possibility for the tourism sector to be truly sustainable (Hall, 2019b; Manomaivibool,
 418 2015). Tourism aids to the economy and the wellbeing of communities by providing economic
 419 chances, but, at the same time, tourism development brings negative social and environmental
 420 impacts, including creating pollution, waste, and greenhouse gases (Legrand, et al., 2013). The
 421 development of the interpretative framework, which shows how the interdependencies among the
 422 various stakeholders could be embedded in sustainable models for the tourism sector, can help both
 423 academics, managers and policymakers to collaborate, from a co-evolutionary point of view, to the
 424 creation of a sustainable ecosystem in tourism (Scheyvens and Hughes, 2019). Indeed, the leverage
 425 of the interdependencies among the actors of the in a sustainable fashion may be among the key
 426 actions to support the achievement of SDGs.

427 The managerial contribution of our paper is represented by the development of new insights regard
428 the opportunity for firms to increase their competitive advantage through the adoption of
429 sustainable practices. In particular, our findings reveal the existence of positive externalities related
430 to the transition to sustainable business models. Thus, the transition to sustainable business models
431 does not represent only a way to be ethical and sustainable but also a way to create value.

432 Future research will be addressed to extending and integrating the scientific debate characterized by
433 a lack of studies regarding the relationship between SDGs and tourism. The contribution of
434 academics will be relevant due to the high degree of interconnectivity, highlighted in our analysis,
435 between theory and practice. Several studies have been developed from the contributions provided
436 by supranational institutions such as the UN WTO, UNESCO and the United Nations. Thus, the
437 future challenge for academics will be the revision of this relationship through their active
438 contribution to decision-making processes. So, in the future the policies should combine human
439 welfare with the enhancement of ecosystem services. In this way, it is essential to manage
440 ecosystems and to create future economies that foster both sustainable ecosystem services supply
441 use and the promotion of human well-being (Pandey et al., 2018). The limitations of our research
442 stem from the novelty of the debate. Future research will be addressed to fill this gap through the
443 analysis of different time periods. Furthermore, the adoption of different research methods will
444 contribute to the development of new scientific knowledge on the relationship between the SDGs
445 and tourism.

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