

Innovation tourism types: What are they and how Morocco use them as a solution after Covid-19

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Abstract

The COVID-19 pandemic is an unprecedented event in our lifetime. It has disrupted the economic, financial and social systems of most countries and its consequences will be difficult to assess; therefore, any factor that hinders travel, holidays can have a profound impact on the tourism industry. This includes pandemics such as COVID-19. It is therefore necessary to think carefully about the tourism crisis and its management post Covid. Indeed, the development of tourism under uncertainty conditions requires. Therefore, the article aims to study the importance of innovation on the Moroccan tourism industry.

Keywords: COVID-19, poste Covid, Moroccan tourism industry.

I. INTRODUCTION

The COVID-19 pandemic is an unprecedented event in our lifetime. It has disrupted the economic, financial and social systems of most countries and its short- and long-term consequences will be difficult to assess. the tourism industry saw a dramatic decline, a real catastrophe for a sector that handled more than 1.5 billion tourists per year, grew significantly faster than the world economy, contributed more than 10% of global GDP (Gross Domestic Product), and employed more than 300 million people (UNWTO, 2020) [1].

In Morocco, the tourism sector follows the same global trend in terms of impact, this sector contributing largely to increase prosperity and the reduction of unemployment, the Moroccan tourism ecosystem is composed of 20 international airports, 4000 classified accommodation establishments, 1980 tourist transport companies, 1500 travel agencies, 550000 direct jobs, 3,900 tourist guides, 866 classified restaurants, in fact it is the second contributor to the national GDP (11%) (CNT, 2020). Moreover, given that the event related to the COVID-19 is

still evolving and the situation is largely unknown, the development of tourism necessitates the reinforcement of innovation In order to create new values and ensure a long-term recovery.

In recent years, the term "innovation" has been more frequently used to describe how tourism businesses have been acting. However, this growing application has usually ignored the reality that innovation is in fact a central issue in a research tradition that has gained recognition in the social sciences. For all that, the

traditional theories of innovation have much to offer tourism research [2].

This article presents in the first part a literature review to describe the most popular concepts in tourism innovation, We then examine the level of innovation in the tourism industry, analyze the market's motivations and typology in Morocco, and to do so, a second part will be devoted to the

research methodology, and then a third part will be devoted to the results and recommendations.

II. Literature review

a. Theories of innovation

Innovation is viewed as the primary driver of economic growth. The term "innovation" is derived from Latin and refers to the introduction of something new, a reform based on innovation, which means "renewal," or innovation, which means "renew" (Kopaliski, 1978, p. 433) [3].

As a result, innovation issues have been addressed in many publications, the most important of which are those of Schumpeter, considered the founding father of innovation theory with his work *The Theory of Economic Evolution* (1935); Schumpeter considers small businesses to be the main source of technical progress and triumphs the heroic entrepreneur as the engine of innovation.

The main topics of interest to researchers around the world interested in innovation issues in the economy are:

- Innovation policy (Furman et al., 2002; Grupp & Mogee, 2004; Balezentis & Balkiene, 2014);
- Drivers of innovation in the economy (Hollenstein, 2003; Gault, 2011), including users (Urban, 2013);
- The innovative activity of firms (mainly production firms), (Tuominen et al., 2004; Perunovic & Christiansen, 2005), paying particular attention to technological progress and R&D expenditures and their roles in the innovation process (Aw et al., 2011; Urban & Czerska, 2016);
- Sectoral research on innovation in the economy (Garcia & Hollanders, 2009); Gallouj (2002), Gallouj & Windrum (2009) and Gault (2011, 2013) should be considered the leading researchers on service innovation issues at the international level;

- The innovative spirit of some sectors, such as tourism companies' enterprises (Hjalager, 2010; Szymańska, 2009, 2013);
- Innovative capacity in the context of a knowledge-based economy and in the process of globalization (Rycroft, 2003; Ejdys et al., 2015);

The research theses on innovation have been designed in accordance with the considerations reported in the literature [4]. As a result of these considerations, eight models of various types of innovation processes have been developed. *Table 1* lists them in the order in which they appeared in the economic literature on innovation theory, beginning in the 1950s (linear systems) and ending in the last decade (UDI and diffuse systems).

Tab. 1. Innovation processes

NO.	INNOVATION PROCESSES	CHARACTERISTICS OF MODELS
1.	Science pushed	A linear model of the innovation process <i>pushed by science</i>
2.	Pulled by the market	A linear model of the innovation process <i>pulled by the market</i>
3.	Conjugated	Interaction models where the connections among the individual elements result from the couplings between science, market, and enterprise
4.	Integrated and networked systems	Integrated systems based on networked connections – flexible, based on the system of a response related to the consumer, continuous innovation
5.	Parallel	Parallel-internal integration of the company and cooperation with suppliers and consumers, with emphasis placed on linkages and alliances
6.	Open innovation	The concept is based on the conviction that companies may, and even should, seek ideas and ways of creating innovations, not only within their structures but also their environment – among external partners (companies, organisations, and customers)
7.	User-driven innovation (UDI)	Demand-based approach to innovation – based on the conviction that consumers (users) have an increasingly large influence on the available commercial offers, participating in the process of creating products and services which they purchase
8.	Diffuse innovation process	Focus on open innovations inside and outside the organisation. Innovation is created (higher value is generated) by establishing an efficient knowledge flow system (inside and outside)

Source: Szymanska, 2013

Initially, innovation processes were viewed as a simple result of change (market needs or research findings) - see Table 1 points 1 and 2. They can be described as linear. The linear model of innovation, which considers that innovation has four successive phases, exemplifies this viewpoint. Indeed, innovation starts with basic research, followed by applied research and development, and ends with production and diffusion [5].

Kline and Rosenberg (1986), recognized that these processes could be more complex and developed the *chain-linked model of innovation*. This model views innovation as an interaction between external elements (the market) and internal resources (the knowledge base and the means) that can be subdivided into a number of sub-processes. The progression of the innovation chain, from conception (design) to development to production and market launch, is a backward process involving all stages and influencing parties, and it is frequently necessary to return to earlier stages to overcome difficulties. Thus, The success (or failure) of an innovation project will therefore depend on how well the phases of the innovation process are linked (Organisation for Economic Cooperation and Development OECD, 1997) [6].

Following that, the studies became significantly more complex, and from the 1990s onwards, they all involved advanced computer technologies.

Open innovation (Chesbrough, 2003) began to influence innovation processes by combining their sources (including knowledge) available on the market by sharing

and optimizing them: the UDI concept was created on this basis.

Active customer involvement, which includes *co-creating* innovations (new goods and services), appears to be the best course of action for both consumers who communicate their needs and ideas during the creation process and for business owners who want to fill those needs because it increases their sales certainty.

Researchers demonstrate that the concept of customer co-creation is not only applicable to the creation of innovations, but can also be used to improve service quality (Urban & Czerska, 2016). It should be mentioned that the current change in innovation is based from technology-driven innovation to innovation driven by customers and other external parameters outside the enterprise.

Up until the present process, which started after 2000 and is characterized by a major focus on knowledge management, for example, a diffuse one, innovation processes developed linearly throughout the first half of the 1960s, through more complex systems. Open, UDI, and diffuse are three of the processes listed in the table that highlight the significance of consumers in the innovation process [5].

b. Innovation in SMEs: A brief overview of research on innovation in SMEs

Many scientists have proposed that the innovation activities of SMEs are significant determinants of their success (Rotwell, 1991; Joyce et al., 1994; Moore, 1993). Act and Audretsch's (1998) study of innovation in American SMEs. They proposed that innovation and research and development (R&D) are positively correlated with innovation. The effect of innovation on sales is a crucial indicator of innovation potential, according to Tether (1998).

For SMEs, the impact of innovation on sales is lower than that of large firms (Tether, 1998). In a similarly, Harris et al. (2003) discovered that big businesses are more inventive than SMEs. In the manufacturing sector, Mole et al. (2001) discovered that large enterprises adopt new technology more frequently than SMEs. Some investigations have discovered that SMEs' product/service innovation activities are more significant than their process innovation efforts (Pratten, 1991; Vaux et al, 1996; Goh and Ridgway, 1994).

c. Innovation in services

In the majority of OECD economies, the service sector is the most productive one. Recently, a number of authors (Sundbo 2001, 2007, Sundbo et al. 2007, Gallouj 2002, Schianetz et al. 2007, Miles 2005, Hjalager 2002, and Carvalho 2008) has done research on services. The variety of activities included in the service sector makes it difficult to describe the service. Initially, services were categorized as unproductive activities. Service products are defined by economists as "*anything sold in commerce that cannot be dropped on the foot*" (Hauknes, 1998, p.6). Table 2 provides some definitions of service innovation.

Services innovations are often small adjustments of procedures and thus incremental and rarely radical. Services innovation processes are normally very practical.	Sundbo and Gallouj (1999)
Service innovation is by definition multidimensional. Compared to, for example, manufacturing, service innovation is characterized by much more emphasis on the organizational dimension of innovation (new service concepts, new client interface and new delivery systems) relative the technological options.	Van Ark et al, (2003)
Services innovation is mainly an incremental process, which includes two components: - A non-technological component, dependent on the intangible human resources, organizational structure and factors that can add value to customer service (marketing, distribution channels, etc.); - A technological component, nowadays inseparable from the first component, that depends on technology, especially Information and Communication Technologies (ICT).	Carvalho (2008)

Tab 2. Innovation in services

Service innovation involves changes in many areas, and sometimes process innovation and product innovation cannot be separated; in "most cases, they cannot be stored, they must be produced in the dynamics of consumption" (Gronroos, 1990): A new service product, a new manufacturing or service procedure, a new organizational structure, or the introduction of new technology.

We adhere to Sundbo and Gallouj's classification of service innovation (1999). Sundbo and Gallouj (1999) define service innovation as "four categories: product innovation, process innovation, organizational innovation, and market innovation" (p. 8). Organizational innovations were defined as "new general forms of organization or management, such as the introduction of self-directed groups, etc" (p.8). Process innovations are defined as "renewals of normative procedures for production and service delivery" (p.8) and can be classified as either production (back office) or delivery (front office) processes. Market innovations are new market behaviors, such as the creation of a new market segment or the entry of a competitor into an existing market [7].

d. Innovation in tourism

Tourism innovation research is still in its early stages. The low number of scientific studies in this sector is due to multiple reasons, including its heterogeneous nature and the difficulty in defining an adequate tourism product.

Schumpeter (1935)	Abernathy et Clark (1985)	Hjalager (2002)	OECD (2005), Hall (2009)	Hjalager (2010)	Aldebert et al. (2011)	Gomezelj Omerzel (2016)
Product innovation	Revolutionary innovation	Product innovation	Product innovation	Product or service innovation	Product or service innovation	Product / service innovation
Process innovation	Regular innovation	Process innovation	Process innovation	Process innovation	Process innovation	Process innovation
Market innovation	Niche innovation	Management innovation	Marketing innovation	Marketing innovation	Marketing innovation	General innovation
Organizational innovation	Architectural innovation	Logistics innovation	Organizational innovation	Organizational innovation of management (managerial)		Mix of innovations
Supply innovation (input)		Institutional innovation		Institutional innovation		Institutional innovation

Tab 3. Types of innovation in tourism

In fact, the tourism product is considered to be the provision of a combination of complicated tangible and/or intangible services (Chiadmi et al., 2009). For their part, Cacomo and Solonandrasana (2006) believe that the combinatorial nature of the tourism product is revealed on two levels: first, it combines private goods and services with public goods and services (natural heritage and spaces, infrastructure, etc.); second, it is presented as a set composed of market goods and services (reservations, transport, accommodation, catering, visits, etc.).

Despite this, the transversality of tourism, which includes production and service sectors with divergent innovation trajectories, makes studying innovation in the tourism industry particularly challenging (Damanpour, 1996). As a solution to the problem of service innovation, Djellal and Gallouj (2009) offer a technique made up of three approaches termed called the "*ADS*" approach (*assimilation, differentiation, synthesis*). The assimilation approach studies innovation in services, including tourism services, in the same way that it studies innovation in industrial goods; the differentiation approach suggests that services, including tourism services, should be treated differently and specifically than industrial goods; and the synthetic approach proposes analyzing tourism services using methods that integrate both goods and services.

Furthermore, as tourism is not limited to the production of goods or services, Weiermair (2006) defined a tourism product as an experience. People as individuals embody a number of intangible characteristics. The sociological and cultural characteristics of the local population, as well as tourist behavior, can all have an impact on the tourism experience [8].

Other difficulties are related to the characteristics of a tourism product, such as combined production and consumption (Weiermair 2006) and coterminality (Miles 2005): the tourism sector has a high level of heterogeneity. International hotels and golf courses are not comparable to family lodgings or small restaurants. According to some studies on innovation and entrepreneurship, hotels and restaurants have a lower survival rate because they are generally industries with very low barriers to entry, making it simple for people to start a new business on a non-innovative basis (Sundbo and Gallouj, 1999). The market characteristics of the high competitiveness sector force firms to innovate in order to maintain competition and protect their competitive advantage (Hall and Williams, 2008). (Porter, 1998).

e. Types of innovation in tourism

Given the difficulty of defining the concept of innovation in tourism, several typologies have been developed (see Table 3 for a summary of these typologies). In general, these typologies are inspired by Joseph Schumpeter's pioneering work, on which the emerging literature on tourism innovation is based (preparatory phase). Product innovation, process innovation, market innovation, organizational innovation, and supply innovation were all

mentioned by this author (1935: 319).

The Organization for Economic Cooperation and Development (OECD) proposes four types of innovation based on Schumpeter's work: product, process, marketing, and organizational (2005: 16).

One of the typologies that differs from the « Schumpérianne » typologies is the one proposed by Benedict Abernathy and Kim B. Clark (1985: 8): breakthrough innovation, regular innovation, niche innovation and architectural innovation.

The typologies developed by Hjalager propose five types of innovation in tourism. A first version of the author (2002) proposes the following categories: product innovation, process innovation, management innovation, logistic innovation and institutional innovation (Novelli et al., 2006: 1143). Hjalager revised this typology in 2010, proposing the categories product or service innovation, process innovation, marketing innovation, organizational/managerial innovation, and institutional innovation (2010: 2).

In the case of Gomezelj Omerzel (2016), she bases her analysis on Hjalager (2010). She identifies the following types of innovation: product and service innovation, process innovation, general innovation, innovation mix, and institutional innovation (Gomezelj Omerzel, 2016: 526) [9].

There are certain limitations to Hjalager's (2010) typology, It is generally difficult to discern between the process and the product, which makes it challenging to utilize the conventional typologies (Gomezelj Omerzel, 2016: 522) because the categories are difficult to identify and are not exclusive (they are connected) (ibid.: 542). Since the tourist participates in the process, the tourism product is frequently a "tourism service" (see below about the characteristics of tourism services). This comparison makes it possible to highlight the particularities of each of the typologies of innovation, but above all their great similarity. The criticisms made, particularly with regard to the difficulty of distinguishing between categories of innovation and the relationships between them, therefore apply to most of these typologies. Therefore, the typologies' utility might be questioned because they include too many categories and make it difficult to comprehend the idea of innovation in tourism.

III. Research Methodology

a. Objective of the research

As mentioned above, the COVID-19 event is still evolving and the situation is unknown. However, there hasn't been much study on the innovation of tourism enterprises in the literal sense. In this paper, we aim to examine the innovation activities of travel agencies, hotels and individual entrepreneurs.

In order to make a benchmark between the literature and the empirical we aim to examine the degree of innovation in the tourism sector, to analyze the typology and the motivations on the Moroccan market, we proceeded in two steps: first to evaluate the demand during the pandemic, then to examine the efforts deployed by the

stakeholders of the tourism sector mainly in terms of innovation [10].

b. Data collection

The data was obtained by launching two electronic questionnaires during the period from November 2021 to January 2022, the first addressed to travelers, who were asked various questions regarding Frequency of travel in the last 12 months, mode of contact with the service provider;

The second was addressed to travel agencies, hotels and individual entrepreneurs who were asked questions about the media used to publicize their activities, the use and impact of ICT (Information and Communication Technologies) and the degree of innovation introduced in the company [11].

From travelers-clients we received 77 questionnaires, 51 of whom had traveled in the previous 12 months. The analysis of the responses will be completed by this group of people.

For the actor part, we received 55 questionnaires between travel agencies, individual entrepreneurs and hotels. Of these, 23 hotels and 17 travel agencies and 15 individual entrepreneurs were found.

IV. Results and lessons learned

a. Customer Survey

Table 4 presents the profile of the respondents according to certain demographic characteristics and their travel habits.

We note that the majority of respondents are **men (70%)** and the most represented age groups are, in order, **26 to 35 years old (75%)**, we consider that it is from this age on that people acquire a certain autonomy [12] and can look at the health effects of the pandemic covid19, because this age group has the highest proportion of respondents who will be more interested in traveling or who will not change their travel habits once the pandemic is over. They seem to represent the less risk-averse or perhaps more adventurous travelers who have suffered from restrictions on (or prohibitions against) tourist travel. As for the **36-45-year old (15%)** and the **18-25-year old (10%)**.

Profile of respondents

Gender	%
Woman	30
Male	70
Age group	
18 to 25 years old	10
26 to 35 years old	75
36 to 45 years old	15
46 to 55 years old	0
56 to 65 years old	0
Frequency of travel with at least one overnight stay, in the last 12 months %.	
1 trip	70
2 trips	25
3 journeys and more	5

Tab 4 Profile of respondents and frequency of travel

The first question was aimed at valuing the tourist demand from which we find that the majority (70%) have

made at least one trip in the last 12 months. 25% have made 2 trips, 5% have made 3 trips. This demand was oriented more towards the region of Tangier-Tetouan-Al Hoceima with (67%).

b. Survey Actors

For the actor part, we received 55 questionnaires between travel agencies, individual entrepreneurs and hotels. Out of this number, 23 hotels and 17 travel agencies and 15 natural person entrepreneurs were found.

Having presented the sample and the profile of the respondents, we will now begin to comment on and interpret the results of the survey in relation to the direct object of our article, the measurement of the degree of innovation in Moroccan tourism enterprises.

The first aspect that interests us is the mode of communication used with the clients. In the first question, the actor is asked if he uses one or several communication channels [13]. The method of contact and "discovery" of the service provider is important to judge the degree of innovation integrated by this service provider. The question of how you knew your service provider (travel agency or hotel), in fact the method of contact by internet comes first with about 66% followed by the traditional method of advertising which is posters (14%) and to a lesser extent magazine with (13%) (See table below).

Contact mode	%
Internet	66
Display	15
Mobile telephony	3
SMS	3
Newspapers	0
Magazine	13

The presence of the Internet as a means of communication par excellence already tells us the degree of integration of new technologies as a mode of contact with potential customers. ICTs have facilitated access to information and increase the demand for alternative and more sophisticated products, so innovation in e-tourism is a crucial tool for the development of sustainable tourism [14].

The issue of innovation in the tourism sector can be seen from several angles and each provider uses it according to it means its experiences and its know-how always with the aim of keeping a competitive advantage over its rivals. In this approach that we asked the question: how your activity is differentiated from other providers in the tourism sector, so were the answers:

Types of structure	Hotels	Travel agency	Contractor natural person
Number	41%	30%	26%
Service/ product/ activities/ proposed	<ul style="list-style-type: none"> Human services. Add new services to the existing range. Add new payment methods. Proposal of new products programs , environmentally sustainable accommodation facilities and events based on local tradition. and events based on local tradition. Central Reservation System. Improving quality standards, for example, from a two- to three-star rating. Organization of gastronomic visits. Redefinition of infrastructures, for example in response to environmental regulations. Let's improve pricing services 	<ul style="list-style-type: none"> Add new payment methods. Setting up commercial alliances, e.g. with specialized tour operators to access new customer groups. Proposal of new tourist products. Improve promotional methods and tools 	<ul style="list-style-type: none"> Exchange of experiences. Thematic and cultural visits. Guided tours by artists Social and ethical tourism

In direct relation with our problematic: to make a benchmark between the literature and the empirical we will examine the different types of innovation used by our sample in the table above:

Types of innovation	Innovation of product and service	Innovation of process	Innovation organizational	Innovation in marketing
Hotels/ Travel agency/ Individual contractor	<ul style="list-style-type: none"> Services à services. Proposal of new tourist products. Social and ethical tourism. Exchange of experiences. Setting up commercial alliances. Setting up commercial alliances. Central Reservation System. 	<ul style="list-style-type: none"> Organization of gastronomic visits. Visits guided by artists. Add new services à the existence range. 	<ul style="list-style-type: none"> Improving quality standards by example in from a two to three star rating. Redefinition of infrastructures. 	<ul style="list-style-type: none"> Improve the pricing of services. Improve the methods and tools of promotion.
Total Items	7	3	2	2

By analyzing the table below, we notice that the three structures are for and predisposed to the adoption of innovation in their commercial approaches: **07 items** for a type of product and service innovation, **3 items** for a type of process innovation, **2 items** for an organizational or architectural innovation and **2 items** for a so-called marketing innovation.

Thus the most prevalent type of innovation for our case is a type of innovation based on "products" or more exactly "services" 07 items, which is also well justified according to the results of studies by Pratten (1991), Vaux et al (1996) and Goh and Ridgway (1994), which they find that travel agencies and hotels, as stakeholders in the tourism

industry, rely on service innovation rather than on process innovation [15] [16].

V. CONCLUSION

Restarting tourism is very important for countries that rely heavily on this industry. There are economic reasons for countries to reopen their doors, but at the same time, the risk of new epidemics is high, and science has not yet found an effective solution to combat the virus. It is therefore important to encourage travelers to rationalize their decisions, balancing the need to travel with the risk involved.

Most countries have adopted measures to stimulate the economy (fiscal and monetary measures) as well as measures to support employment (UNWTO, 2020e). In this same context, the World Tourism Organization has identified innovation and sustainability as the seventh priority for reviving tourism (May 28, 2020).

Every segment of tourism is, in fact, affected by the pandemic. Moreover, innovation by improving an existing service or by making an existing service more accessible to the greatest number of people is another benefit resulting from this crisis. Adapting through innovation is thus a key lever for reaching a resilient tourism industry [17] [18].

References

- [1] <https://www.e-unwto.org/toc/wtobarometereng/19/4>
- [2] Chiadmi, N., Gallouj, C., Le Coroller, C. (2009), L'innovation Dans Le Tourisme, Logiques, Modeles Et Trajectoires, Conference Paper, Dijon.
- [3] Hjalager, A. M. (2009). Innovations In Travel Medicine And The Progress Of Tourism-Selected Narratives. Technovation,29(9), 596-601.
- [4] Kline S. J., Rosenberg, N. (1986). An Overview Of Innovation.In R. Landau, N. Rosenberg (Ed.), The Positive Sum Strategy: Harnessing Technology For Economicgrowth (P. 289). Washington: National Academy Press.
- [5] Szymańska, E. (2016). Consumer Participation in The Health Tourism Innovation Process .Economics And Management, Volume 8 • Issue 4 • 2016.
- [6] OCDE (Organisation de coopération et de développement économiques), « Coronavirus: The World Economy at Risk », OECD Economic Outlook, Interim Report, mars 2020. URL :<https://www.oecd.org/economic-outlook/>.
- [7] Weiermair, K. (2006). Product Improvement Or Innovation: What Is The Key To Success In Tourism. In Innovation And Growth In Tourism. (Pp. 53-69).
- [8] Suzana Stojanović Entrepreneurship Innovations In Tourism Industrija, Vol.46, No.4, 2018.
- [9] Camal Gallouj, Erick Leroux E-Tourisme, Innovation Et Modes D'organisation. Management Prospective Ed. | « Management & Avenir » 2011/2 N° 42 | Pages 213 A 231.
- [10] Hilal Abdelmajid Et Bouaouinat Asmae (2020) : « La Dynamique Touristique Et La Croissance De L'hébergement Informel A La Commune De Sidi Kaouki», In Revue Cinq Continents, Revue Romaine De Géographie, Volume 10/ N° 22, P.P. 232-234.
- [11] ICAO (International Civil Aviation Organization), « Effects of Novel Coronavirus (Covid-19) on Civil Aviation: Economic Impact Analysis », ICAO, 23 avril 2020. URL :<https://www.icao.int/sustainability/Documents/COVID19/ICAO%20Coronavirus%202020%2004%202023%20Econ%20Impact.pdf>.
- [12] Isabel Babou, Philippe Callot : Tourisme et Covid-19 : quand la contrainte devient force d'innovations. 20th International Marketing Trends Congress, Venise 2021.
- [13] B. Debata, P. Patnaik, and A. Mishra, “COVID-19 pandemic! It's impact on people, economy, and environment,” J. Public Aff., vol. 20, no. 4, p. e2372, 2020.
- [14] Jiang, Y., & Ritchie, B. W. (2017). Disaster Collaboration in Tourism: Motives, Impediments and Success Factors. Journal of Hospitality and Tourism Management, 31, 70-82.
- [15] Lange B. & Schüßler E. 2018. Unpacking the Middleground of Creative Cities: Spatiotemporal Dynamics in the Configuration of the Berlin Design Field. Regional Studies, January, 1–11, Vol. 52, 1548-1558
- [16] Laboratoire D'innovation En Tourisme.Etude De Viabilité 1ère Édition | Belo Horizonte – 2018.
- [17] Stefan Gössling, Daniel Scott & C. Michael Hall (2021) Pandemics, Tourism and Global Change: A Rapid Assessment Of COVID-19, Journal of Sustainable Tourism, 29:1, 1-20.
- [18] Forbes. (2020). What will travel be like after the coronavirus? Retrieved March 31, 2020, <https://www.forbes.com/sites/christopherelliott/2020/03/18/what-will-travel-be-like-after-the-coronavirus/#4febdd623329>.