

ORIGINAL RESEARCH ARTICLE

Smart tourism destination initiatives in the city of Natal-RN: A qualitative approach

Holliver Breno Barbosa de Freitas*, Luiz Mendes Filho

Universidade Federal do Rio Grande do Norte, Natal 59078-970, Rio Grande do Norte, Brazil. E-mail: holliverbb@hotmail.com

ABSTRACT

The objective of this research is to analyze the Smart Tourism Destination [STD] initiatives present in the city of Natal-RN, Brazil. The study is based on the model of State Society for the Management of Innovation and Tourism Technologies, Spain, in which there are four dimensions to be developed in destinations in order to consolidate as a STD: Innovation, Technology, Universal Accessibility and Sustainability. For data collection, a semi-structured interview script was used, with ten open questions, applied to managers and researchers from the public and private sectors of the city. A documental analysis of Natal's Master Plan was also carried out, verifying elements of Accessibility and, to a lesser extent, notions of Sustainability and Innovation. The interviews showed that Natal has incipient Technology, Innovation and Accessibility initiatives, however, it still lacks a larger number of Sustainability projects in order to consolidate itself as a STD. Thus, it deserves attention from stakeholders in the sense of improving the initiatives and acting together so that the essential dimensions are evolved in the city.

Keywords: tourism; Smart Tourism Destination; Natal; RN; Brazil

1. Introduction

The dynamics of the tourism market and its demographic, political, economic and social changes pose new challenges to cities, which need tools based mainly on Information and Communication Technologies [ICT] to manage information exchange in tourism destinations^[1]. Travel agencies, airlines, and hotels have been being impacted by new technologies^[2,3]. For example, technologies such as cloud computing, big data, GPS, and the Internet of Things have been used to better manage tourist destinations, as they allow capturing data

from tourists and turning it into information to know visitors better and thus deliver a better quality service^[4,5].

New ICT infrastructures such as these, allow tourism-related entities to coin technology-based services, creating mechanisms to access data that provide insights into how travelers visit a city^[6]. And this has been characterizing the concept of Smart Cities, becoming a relevant topic for society.

While the focus of a Smart City is its citizens, a Smart Tourism Destination [STD] focuses on improving the tourist experience, facilitated by the

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in-tegration and use of ICTs in cities^[7]. Boes et al. explain that a STD “can be perceived as places that use available technological tools that enable demands and offerings to co-create value, pleasure, and experiences for the tourist, as well as wealth, profits, and benefits for tourism organizations and destinations” (p. 394). Technology is therefore a key driver of change in tourism activity, the importance of which is emphasized in smart technologies that help the management of the city and the destination, approaching the idea of a smart city^[8]. The new paradigm brought by STDs has been challenging companies in the industry to make significant investments in new technologies^[9].

Guo et al.^[10] argue that STDs are a relevant part of building the smart city system, as they depend on the city’s technological infrastructure, the use of information resources, and the development of data intelligence. STD can be perceived as a system linked to visitors and citizens to interconnect all local organizations, and get services in real time^[11]. The development of a STD facilitates direct access to value-added services, such as access to real-time information about the public transportation network, and enriches tourism experiences and destinations, increasing their competitiveness^[5,7].

Given this context, this research aims to analyze STD initiatives in the city of Natal, Rio Grande do Norte, Brazil. Natal’s municipal efforts have been geared towards making the city a STD, with the Natal Smart and Human City Program^[5], through the signing of a term of cooperation between the Municipal Government, represented by the Municipal Secretariat of Planning, the Federal University of Rio Grande do Norte [FURN] and the Brazilian Network of Smart and Human Cities. There was the launching of two work plans for the beginning of the program, in the city: (1) Open data, where an open data portal for the municipal government is being developed, in order to make public activities and spending available to the population, giving greater transpar-

ency for oversight, control, and participation of public sector activities^[5]; (2) Smart tourism, in which a tourist app was developed, called Visit Natal, developed by FURN, aiming to improve the traveler’s experience at the destination, as the tourist activity contributes significantly to the city’s economy^[12].

To conduct the present research, the dimensions of STD brought by State Company for the Management of Innovation and Tourism Technologies^[13] were taken as a basis. These dimensions are: Innovation, Technology, Universal Accessibility, and Sustainability. The study analyzed the standards of the Spanish Association for Standardization and Certification (Aenor), used by the Spanish Government through Segittur, as well as the Master Plan of Natal, constituting the main regulatory framework of the city, in order to realize similar guidelines to the STD dimensions of Segittur. Finally, six managers and researchers were interviewed, to understand the STD initiatives in the management of the studied Municipality, based on the four STD dimensions of Segittur.

2. Smart tourism destinations

A city can be thought of as smart as sustainable economic growth and high quality of life are achieved through investment in human capital, adequate level of government participation and infrastructure, supporting adequate dissemination of information throughout the city^[14]. Boes et al. explain that “the Smart City, as a strategic concept, introduces Information and Communication Technologies within a given urban area, incorporating urban processes in contemplation of increasing the city’s competitiveness while improving the quality of life of its citizens”.

Taking advantage of the concepts that emerged with Smart Cities, STDs focus on visitors and aim to increase the quality of their lived experiences^[7]. Therefore, the notion of STDs emerged by expanding from the concept of Smart Cities^[15]. In this sense,

challenges arise to destinations that intend to become smart, which are the integration of ICTs advances, the democratization of access to information, in addition to the essential support of a Human Capital that, among other actions, are able to base strategic decision-making to STDs^[15].

ICTs make cities more accessible and enjoyable for residents and visitors through interactive services that interconnect all local organizations to provide real-time services and use data centrally for better coordination^[12]. Smart tourism increases the shared vision of residents and visitors, and provides the support needed to maintain the competitive advantage of smart destinations^[16]. A STD's competitive advantage increasingly emerges through its relationship with smart tourists, innovative and interconnected organizations, and destination resources facilitated by networked organizations^[17].

The competitiveness of a destination lies in the ability to utilize more technologies^[18] in the direction of creating an ecosystem in STD^[4]. Therefore, the use of technologies, especially mobile, has provided new forms of experiences to travelers in an instantaneous and innovative way. There is then feedback from the user, with the potential to influence the decision of new travelers. Besides tourists, companies and organizations in the tourism trade have seen in this possibility, opportunities to draw the attention of customers and potential customers to create and add value to their products and services, thus improving their offer.

That said, a STD can be understood as a place that uses available technological tools to enable demand and supply to create value, pleasure and experiences for tourists, as well as the creation of wealth,

profit and benefits for organizations and for the destination as a whole^[19]. Moreover, as Santos and Gândara^[20] recall, "this conception meets the one proposed by Gretzel et al. on value co-creation, which is a co-responsibility of the destination and the visitor in the intense sharing of information (p. 442). Thus, smart tourism can provide practical initiatives for all stakeholders involved in value cocreation in destinations, including tourists; local residents; municipal, provincial and national governments; city, regional and tourism planning authorities; destination management organizations; travel agencies and tour operators; hospitality, leisure and cultural heritage organizations; businesses and institutions in general; and universities^[21].

In 2016, the Spanish Association for Standardization and Certification (Aenor) edited the UNE 178501 standard, dealing specifically with the Management System of Smart Tourism Destinations. This standard, commissioned by Segittur, represents a guiding framework for destinations that intend to consolidate smart tourism practices, being one of the most complete documents ever prepared in the world with this purpose. Therefore, this study is based on it, extracting from it the essential dimensions of the STD brought by the Spanish agency, namely: Innovation, Technology, Universal Accessibility, and Sustainability (**Figure 1**).

Figure 1 illustrates summary of the characteristics of each dimension. For example, Innovation covers introduction of techniques aimed at improving services, processes, marketing methods or organization in Destination Management and its relationship with residents and tourists, in order to improve competitiveness^[13].

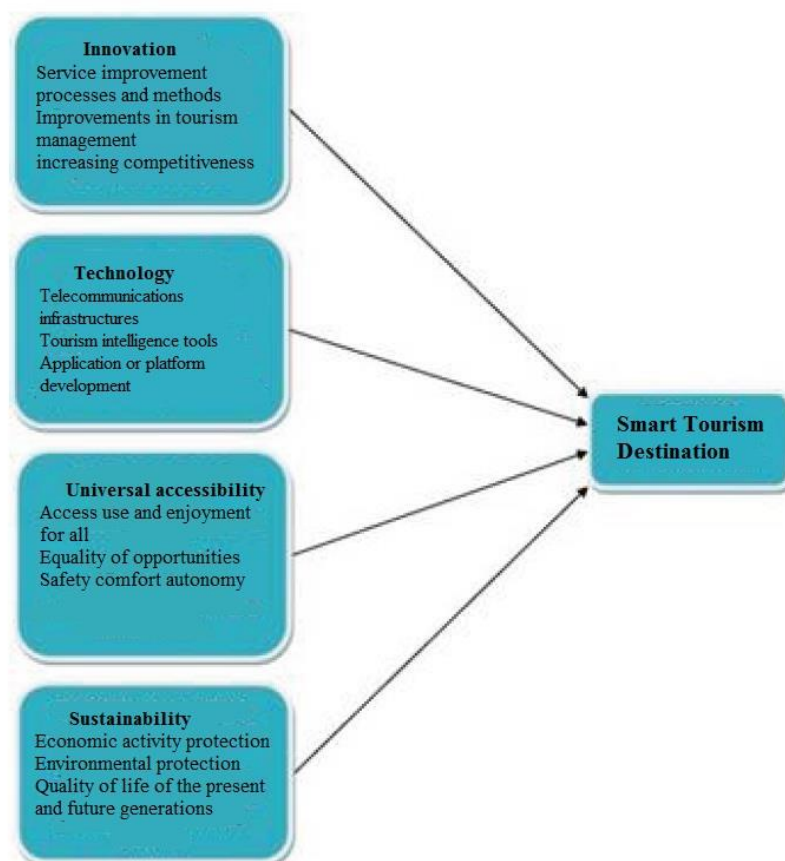


Figure 1. Characteristics of STD Dimensions. Adapted from Segittur (2016)

The technology dimension is treated, on the one hand, referring to the use in general, such as collecting and processing sociodemographic and sociocultural data. On the other hand, it concerns the degree of usefulness and its responsiveness to tourists' desires, such as technological tools that help in satisfying their needs^[13]. Universal Accessibility comprises the development of a tourism that allows access, use and enjoyment to all people, without exclusions, ensuring the right to equal opportunities in the enjoyment of environments, goods, services, products, technologies, etc. In the safest, most comfortable, autonomous and natural way possible. While the Sustainability dimension is based on a tripod that encompasses the following aspects: The economic, linked to competitiveness; the social, related to quality of life; and the environmental, with an efficient management of natural resources^[13].

3. Methodology

As for the objective, the research is classified as

exploratory, and it is expected that the study of the STD dimensions will identify the main ones existing in the city of Natal. According to Cervo and Ber-vian^[22], "exploratory studies aim to become familiar with the phenomenon or obtain a new perception of it and discover new ideas" (p. 63). The study has a qualitative approach and semi-structured interviews with open-ended questions were applied in depth, allowing ample exploration of each interviewee. The semi-structured interview is formed by a set of questions about people, processes, culture and technologies, in which the researcher allows himself to leave the interview script to clarify possible doubts, being able to transform the interview into a dialog between the interviewee and the researcher^[23].

Combined with this, there was documentary survey in norms and regulations, both locally, the Master Plan of the City of Natal [Complementary Law No. 082, of June 21, 2007], and internationally, the Aenor norms, especially UNE 178501, of April

2016, used by the Spanish Government, through Segittur, a state society dedicated to the management of innovation and technologies in tourism. As for the field of study, six managers/researchers from Natal were interviewed: From the public power were one from the Municipal Secretariat of Tourism and two representatives from the Metr pole Digital Institute; from the private initiative was heard one from the Natal Travel Agency; and from non-profit organizations, one from the Brazilian Service of Support to Micro and Small Companies in Rio Grande do Norte and another from the Natal Convention Bureau.

The objective of the interviews was to analyze the STD initiatives in the city of Natal, based on the four dimensions of the Segittur model [Innovation, Technology, Universal Accessibility and Sustainability]. The interviewees are people of respectable knowledge, with technical conditions and/or experience to answer the questions in a reliable way, contributing in a closer way to the reality of the destination. The collection instrument was developed according to the STD dimensions standardized by Segittur^[13], with ten open questions and applied in person. The interviews had an average time of approximately forty minutes. According to the respondent's authorization, the conversation could also be recorded, facilitating dialogue transcription and, consequently, data tabulation. For this, the Authorization Term for Voice Recording was used.

Regarding data analysis, content analysis was used. According to Bardin^[24], Content Analysis consists in systematizing a set of manifested content data, ordering the steps, classifying and categorizing the data [treatment], and making inferences, conclusions, and applications. Thus, the interpretation of the data followed the order of phases, also proposed by the author. In the first [pre-analysis], the content collected in the interviews was organized, selected and structured, and a lexical analysis of the content was performed, verifying which terms or vocabulary predominated in the answers. The second phase was exploration, when procedures were implemented, dividing the data into categories that coin-

cide with the dimensions proposed by Segittur. Finally, the data treatment phase, when the researcher performed inferences, arriving at the research results, conferring validity or not to what was collected and inferring if it is reliable or not.

4. Analysis of the results

The analysis of the research data was divided into two parts. The first deals with the Segittur dimensions present in Natal's Master Plan. For this, two documents were read: The Aenor standards used by the Spanish Government through Segittur, to better understand about the dimensions: Innovation, Technology, Universal Accessibility and Sustainability, and thus be able to analyze the Natal Master Plan. While in the second part of the results, an analysis of the STD initiatives identified in Natal is performed, from the perception of the six managers/researchers interviewed and based on the four STD dimensions of Segittur.

Segittur dimensions present in Natal's Master Plan—When confronting the dimensions of the Segittur model with the main regulatory framework of the city of Natal, the Master Plan in effect, which is the Complementary Law, from June 21st 2007, similar guidelines were noticed. For example, in chapter I, title I of the document, we noticed a consonance with the Sustainability dimension, when it is written that the socially fair and ecologically balanced use of the territory will be a guarantee assured by the Plan. Moreover, in art. 3, clause I, the norm also states sustainable elements, promoting incentive to sustainable economic activity and protection to the city's historical and cultural heritage^[25]. **Table 1** presents a summary of the main passages observed in Natal's Master Plan regarding Sustainability.

Table 1. Sustainability perceived in the Natal Master Plan

Sustainability
Art. 2—The Master Plan has as its objective the full development of the social and environmental functions of the city and property, guaranteeing a socially fair and ecologically balanced use of its territory, in order to assure to all its inhabitants, conditions of quality of life, well-being and safety, as provided in articles 118 and 119 of the Organic Law of the Municipality of Natal. “Art. 3 rd the harmonization of the use of the city to obtain the quality of life of its inhabitants, ensuring its use compatible with sustainable development.”

Another dimension identified was Accessibility, in the guideline of adequacy of collective spaces to urban accessibility for all its citizens^[25]. It is worth noting that the concept of accessibility imposed by the municipal norm is in line with that of Segittur, as it is universal, that is, extended to all citizens. Still regarding Accessibility, it was noticed an urban mobility policy, even being a theme of title IV of the municipal rule, with some ingredients of sustainability also present. For example, art. 58 of the Law deals specifically with this theme, as an instrument of social inclusion, which must promote physical access to public services and equipment, leisure and social integration^[25]. **Table 2** illustrates the excerpt observed in Natal’s Master Plan referring to Universal Accessibility.

Table 2. Universal Accessibility perceived in Natal’s Master Plan

Universal Accessibility
“Art. 3 the reduction of the need for displacement between housing and work and the adequacy of collective spaces to urban accessibility for all its citizens.

Elements of Innovation were identified in the regulatory framework, mainly regarding participatory management. This is what is written in subsection VII, of art. 3, being assured the participation of the citizen in the process of building the city^[25]. **Table 3** shows a passage observed in the Natal Master Plan referring to Innovation.

Table 3. Innovation perceived in the Natal Master Plan

Innovation
Article 3 VII the participation of the citizen in the process of building the city.

On the other hand, no elements were identified that could be related to the Technology axis, in the Natal Master Plan. Finally, it should be stressed that Segittur^[13] explains that for a destination to consolidate as a STD it must undergo changes at all levels, starting with the tourism strategy that must lead to a new model of innovative, accessible and sustainable destination. Complementing, it teaches being useless the use of new technological applications if there are no real changes in the destination’s tourism management^[13]. In other words, management is, therefore, the central element of STD transformation, and it is

in vain to have modern and advanced concepts in its standards, but which cannot be applied in the daily management of the destination.

STD initiatives in Natal as perceived by the interviewees—In the questions related to the Innovation and Technology dimensions, we tried to extract from the respondent’s experience and/or knowledge which specific initiatives or projects for tourism the city of Natal has already developed or would be developing and that would be related to those dimensions.

Regarding Innovation, the NCVB representative considered the Marketing Plans of the Municipality of Natal and of the State of Rio Grande do Norte as innovative; and one of the IMD representatives mentioned the BID UrbanLab project, which is a university contest aimed at searching for creative solutions and innovative ideas for urban problems in Latin America and the Caribbean, in Natal developed in the Ribeira district, the main historical center of the destination. The other four respondents did not mention innovative initiatives or projects, and the Agency representative was emphatic in stating that Natal has nothing innovative in its tourism projects. Boes, Buhalis and Inversini^[11], in an analysis of case studies on smart cities, identified fundamental constructs as essential conditions for a city to be considered smart. Innovation is present in all of them.

Castillo-Vergara et al.^[26] state that innovation is intensely related to the dispersion of knowledge and the trust that exists between the various actors that are part of the productive system. Therefore, STDs are not only considered as a result of the innovative process, but also as innovation ecosystems that enable the cocreation of communities to the conception of innovative life, resulting constant innovation and commitment to all stakeholders^[4]. Reinforcing this idea, Guardia and Mendes Filho^[27] corroborate that “this intimate link between tourism and innovation is framed and in line with the so-called knowledge triangle of which innovation, education, and research form the three pillars” (p. 82).

Table 4 offers a summary of the main statements that portray the perception of the interviewees regarding Innovation.

Table 4. Innovation perceived by the interviewees

Innovation
Another point that came up now, and that we became aware of, was the UbanLab project, which is focused on encouraging the participation of the population in projects for Ribeira, which is a historic neighborhood, important for the city (IMD representative). The State Tourism Office was also done... it was a company from Mexico with the United States that was elaborating a Marketing Plan and, within that, they renewed the logo and the slogan of the destination to try to give another face to the State (NCVB Representative).

In the Technology dimension, five of the respondents (SETUR, SEBRAE, NCVB, and two from IMD/UFRN) cited the Visit Natal app as a destination project that contains components of technological advances. Only the Agency representative stated that Natal does not have any action or project in this sense. The Visit Natal app was launched on August 25, 2017, in the noble hall of the Natal City Hall, in the presence of the mayor and other authorities, with the proposal of being a tool that will help, in a free, easy and practical way, the tourist to live a better experience of visiting the Potiguar capital^[28]. At this point, it is worth analyzing that the important march of the city towards STD practices occurred with the signing of the partnership between the Municipal Government of Natal and the Imd-Ufrn, seeking the consolidation and use of a specialized and prepared human capital, favoring the process of collaborative innovation, in an attempt to perform consistent readings of information coming from ICT, in addition to the support to implement them^[12].

Besides the application, the initiative PayTour [remembered by the representative of Sebrae], which is a platform for marketing tours, developed by a startup, with the help of IMD; and the project MapaTur, mentioned by the representative of NCVB, a project of the Convention Bureau itself, which consists of an application linked to a tourist map [delivered in all associated hotels], which can be downloaded by tourists to find tourist services and other information about the city. As it is known, it is not enough for the city to advance in technology to consolidate itself as a STD, just as isolated and spaced

initiatives are not enough, but it is necessary to build an interconnected and constantly evolving infrastructure that allows the intensive use of technological tools. In this sense, Gomes et al.^[29] teach that tourism information, for public tourism organizations, should serve both as a tool to strengthen relations with the local population, and as a way to communicate the destination to tourists or potential visitors.

Tourism has the challenge of integrating a destination's ICT advances and equipping them with intelligence that facilitates the generation of authentic visitor experiences^[20,21]. There is a need in destinations for technologies, such as data mining, big data and cloud computing, due to the intense growth in the volume of data, as well as a greater use of digital and mobile communication, the use of sensors and geolocation, the interaction of visitors with the place through social networks, among others, being necessary storage, analysis and management of these data, transforming them into knowledge that helps in the destination management^[4,5]. **Table 5** illustrates a summary of the main quotes that depict the respondents' perception of Technology.

Table 5. Technology perceived by respondents

Technology
“Ein question of technology, we have the app that came from IMD (Instituto Metropole Digital, from UFRN), and now, with una partnership with the City Hall, we are, finally, launching, that and FindNatal.” Tan the application that we are developing in partnership with the City Hall, the Find Trip, which is about to be launched now, Viva Natal, so we have a great expectation in relation to this application as a source of data, so that it can support the decisions of the tourism managers, (IMD representative). “There is also an initiative called Natal Play, which is from a group of people dedicated to this area of start taps, who created a game that works with technical content in the format of games that allowed the user to download vouchers and exchange them for discounts in some registered stores” (SEBRAE representative). “Here at the Natal Convention Bureau we developed, recently, about three or four months ago, an application (the MapaTur Natal) that is linked to a tourist map, we delivered it in all the associated hotels, the application can be downloaded by the tunstas to find services.” (NCVB Representative).

Accessibility was addressed in the interview, with the purpose of extracting from the respondent's experience and/or knowledge which initiatives or specific projects for tourism that the city of Natal has

already developed or would be developing and that would be related to that dimension. In this question, three of the respondents said they were not aware of any action that contemplates accessibility guidelines, being the two representatives. The representatives from Setur and Sebrae mentioned the Tourist Signaling project implemented for the 2014 FIFA World Cup, which had Natal as host city, and which has been updated with the replacement of deteriorated signs. The Setur representative affirmed that, in his conception, even with these initiatives, the tourist signaling can still be improved. For the representative from Sebrae, Natal has a signaling project that meets the needs of the visitor.

Besides, the respondents from Setur, Sebrae and the Agency mentioned the project Natal Praia Inclusiva, from the Sociedade dos Amigos dos Deficientes, which made Ponta Negra the first inclusive beach in Rio Grande do Norte, and consists of volunteers going on weekends to provide access to the sea for the disabled. The action is supported by the City Hall of Natal and has the collaboration of the Mapfre Foundation, the Banco do Brasil insurance company, and Uninassau. Also, the Agency's respondent recalled the recent action of the City Hall that resulted in the change of traffic on the streets of Ponta Negra, near the beach, with the creation of traffic binaries. Grinover^[30] brings a salutary contribution when he states that, for good accessibility, it is not enough good management, reasonable local economic development or effective urban planning, but the presence in these processes of democratic values and cultural rights, such as thinking, creating, acting, imagining and dreaming with freedom, in short, the right of each one to create and recreate their own existence.

It is important to remember that, for Segittur^[13], the concept of accessibility takes into account a more universal aspect, that is, with a wide range of scope, from the existence or not of access to tourist attractions of the destination, through the urban mobility system, agile and efficient public transport, to the aspect of inclusion of people with special needs, ensuring the right to equal opportunities in the enjoyment of environments, in addition to access and use, the

pleasure to all people, without exclusion. The Aenor standard itself establishes that accessibility encompasses aspects such as the accessibility of the surroundings, technology, and services offered to tourists^[13]. Going further, the standardization provides that universal accessibility must be present throughout the tourism chain [surroundings, transportation, services, activities, new technologies, and attention to the public] and at all stages of the trip^[13]. **Table 6** presents two excerpts observed in the interviewees' speeches, according to Universal Accessibility.

Table 6. Universal Accessibility perceived by the interviewees

Universal Accessibility
At the time of the FIFA 2014 World Cup, there was a work for signaling the city's tourist attractions, according to the legislation, (Setur representative). "There is an initiative that has been reported in the press. I believe it is from the City Hall, related to the accessibility for people with special needs, to make it easier for them to go to the beach, there in Ponta Negra". (Sebrae Representative).

Finally, the Sustainability dimension was directly addressed with the purpose of extracting from the respondent's experience and/or knowledge, which specific initiatives or projects for tourism the city of Natal has already developed or would be developing and that would be related to it. Of the six interviews, five said they were unaware of projects or initiatives at the tourist destination Natal that take into consideration the concepts of sustainability, with only the representative of Setur mentioning the creation of the Environmental Protection Areas [EPA] of the Genipabu Dunes, in the Municipality of Ex-tremoz - RN, and the Dunes Park in Natal-RN. In this field, Monge and Perales^[31] warn that sustainability in tourism should be treated as a product, but it is a philosophical basis to provide support and guidance to develop tourism in destinations, and thus make good use of natural and cultural resources of the place.

In general, the respondents considered that Natal is in an initial phase regarding the implementation of sustainable guidelines, information that met the perception also reported by them, in which the purpose was to understand to what extent the tourism development guidelines contained in a regulatory framework [Master Plan, for example] are applied in

the studied destination. In this question, all the interviewees were emphatic in saying that Natal does not apply in practice the concept of sustainability in its initiatives and projects. It is worth noting that, for Segittur^[13], a sustainable development is one that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. In this sense, it refers to the integration of the goals of a high quality of life, health and prosperity with social justice, and the maintenance of the earth's capacity to conserve the diversity of life.

Moreover, studies relate the concept of sustainability to the use of technologies, to the increase of the destination's competitiveness and to the satisfaction of its visitors^[7,32], insofar as activated Smart systems improve the tourism experience and the effectiveness of resource management, maximizing both the destination's competitiveness and consumer satisfaction, since they demonstrate its long-term sustainability. **Table 7** brings an excerpt about ponderings that reflect the interviewee's perception regarding Sustainability.

Table 7. Sustainability perceived by the interviewees

Sustainability
The dunes are part of an APA-Environmental Protection Area, so the agencies that take care of it, carry out some protection actions. Already in relation to the City Park, which is the responsibility of the City Hall, it has sustainability resources, it has a library, an auditorium, a museum with technological resources, and it is also an environmental protection area, having all the concern to educate regarding the environmental appeal.

Finally, in a more direct way, helping to achieve the objectives, the interviewees were asked if they knew the ITD diagnosis model used by Segittur. Making room for them to give their opinion on whether Natal can or cannot be considered a STD, and to raise possible obstacles, in order to know the respondent's understanding of the correlation between a STD and the destination Natal, and stimulate reflection on possible obstacles that may be preventing Natal from becoming a STD. Regarding the method created by Segittur, all respondents stated that they were not aware of the model. In relation to Natal being or not being a STD, unanimity also emerged when all affirmed that the city cannot be

considered as a Smart Tourism Destination, because it lacks many attributes necessary for this.

The IMD representatives said that the most important thing for Natal to become a STD is for there to be participative management, with Public Management as a motivating source, but with intense citizen participation. The other representative mentioned the difficulty of having to bring together many stakeholders, the need for everyone to work together. A point also raised by the representative of NCVB, who said that the Municipal Tourism Council exists, but in practice it is not active, failing to create a direction for all the agents involved. Besides, he talked about the lack of concrete and reliable statistical data to better understand the tourism market. The representative from Sebrae, on the other hand, said about the dependence of the private initiative on the government for planning and promotional actions, that is, he considers that the management of the destination is centralized. While the representative of the Agency said that there is a lack of basic initiatives, especially in relation to innovation, considering that the government's methods of marketing and creating tourist products at the destination are quite outdated.

5. Final considerations

Investigating further the research of Smart Tourism Destinations, using the model developed by Segittur from the dimensions [Innovation, Technology, Universal Accessibility and Sustainability], it can be concluded that the general objective of the research was reached, which was the analysis of the STD initiatives in the city of Natal. From the content analysis, it can be concluded that the challenge remains for Natal to consolidate STD, deserving attention from the agents involved in the sense of improving practices and acting together so that the essential dimensions are evolved in the city.

According to the results, some axes deserve more attention than others. At innovation, participative management is still considered deficient, mainly because the Municipal Tourism Council does not bring a satisfactory effect to the agents involved.

It was verified that there is an imminent need to improve the functioning of this body, in order to achieve a more inclusive and democratic management of the agents, creating a creative and innovative environment for the destination. For other destinations that wish to become a STD, it is very important to invest in the improvement of services for tourists and residents, making use of new innovative technologies, in order to increase the competitiveness of the destination.

When it comes to Sustainability, only the Setur representative identified projects, mentioning the creation of the APAs. However, these are insufficient initiatives for a STD, because it demands constancy and transversally in the application of the concepts of this important axis. Therefore, cities in other regions that have the focus on STD, need to understand that in Sustainability it is necessary to consider not only environmental aspects, but also economic and social ones, in the STD initiatives at the destination. In the Accessibility axis, it was found that Natal still has incipient initiatives, despite the ample repertoire in the regulatory framework, so much so that half of the interviewees did not know how to cite any action or project at the destination that would refer to this dimension. Tourist destinations that intend to invest in STD initiatives need to follow the recommendations of Segittur^[13], which talks about the guarantee of the right to equal accessibility for all, regarding goods, services, and products, in a safe and as natural as possible way.

Technology initiatives like these used in Natal, can serve as an example for other destinations that plan to become a STD, as they allow tourists to use technological tools in order to satisfy their needs on destination information.

In terms of contribution, it is hoped that this work will help establish a guideline for the development of a STD Master Plan for tourist destinations in other regions and countries, precisely based on the evaluation model developed as part of the research, that is, the development of goals and initiatives in each of the dimensions needed for a STD, especially

those in which unsatisfactory results were obtained. In this sense, the application of the evaluation in the city of Natal-RN may offer interesting results to design action programs according to the needs of the Municipality, besides being able to refine the evaluation indicators, providing a basis for developing a STD in other tourist destinations in Brazil and abroad.

Finally, it is understood the considerable scarcity of exploratory studies related to this theme, especially regarding the analysis of the tourist destination Natal, which will open a range of opportunities, embryonic with this study, so that it can be improved. In this sense, we intend to carry out comparative analyses of the results achieved in Natal with other Brazilian and foreign destinations that may have gone through a similar evaluation.

Conflict of interest

The authors declare no conflict of interest.

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