



XII INTERNATIONAL TOURISM CONGRESS
The Image and Sustainability of Tourism Destinations



SMART TOURIST ATTRACTIONS: A METRIC PROPOSAL

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Introduction – The world is facing a new challenge_(1/4)

Before Covid 19

- **New profile demand:** high-tech, looking for new experiences and a more in deep engagement (Buhalis & Leung 2018; Boztas & Hadwick, 2019).
- **Destination managers seek higher competitiveness** while assuring sustainability and the quality of the destination (Xiang, 2018; Shafiee, Hasanzadeh, Ghatari, Jahanyan, 2019).
- **Increasingly important economic impact of tourism in the Portuguese economy**, with a significant contribution of Lisbon as a tourism destination.

After Covid 19

- **The situation is unprecedented.** Within the space of months, the framing of the global tourism system moved from overtourism (e.g. Dodds & Butler, 2019) to nontourism, vividly illustrated by blogs and newspaper articles depicting popular tourism sites in 'before' and 'after' photographs (Cond_e Nast Traveller, 2020).
- **Travel is absolutely central to epidemiology and disease surveillance.** This also means recognizing that travel and tourism is both a contributor to disease spread and its economic consequences and is dramatically affected by it because of nonpharmaceutical interventions (NPIs) (Gössling, S., et al. 2020).



Introduction – The world is facing a new challenge_(2/4)



Executive Summary

- The world is facing an **unprecedented** global health, social and economic emergency with the COVID-19 pandemic.
- Travel and **tourism is among the most affected sectors** with airplanes on the ground, hotels closed and travel restrictions put in place in virtually all countries around the world.
- In an unprecedented blow to the tourism sector, the COVID-19 pandemic has cut international tourist arrivals in the first quarter of 2020 to a fraction of what they were a year ago.
- Available data points to a **double-digit decrease of 22% in Q1 2020**, with **arrivals in March down by 57%**. This translates into a **loss of 67 million international arrivals** and about **USD 80 billion in receipts**.



Introduction – The world is facing a new challenge_(3/4)



Executive Summary

- This is by far the **worst result in the historical series of international tourism** since 1950 and would put an abrupt end to a 10-year period of sustained growth since the 2009 financial crisis.
- Sentiment expressed by the **UNWTO Panel of Experts points to a start of the recovery of international demand mostly in 2021**. According to Panel Experts from around the world, domestic demand would recover faster than international demand.
- Considerable **challenges remain** ahead, starting with the unknown duration of the pandemic and travel restrictions, in a context of global economic recession. Countries around the world are implementing a wide range of measures to mitigate the impact of the COVID-19 outbreak and to stimulate the recovery of the tourism sector.



Introduction – The world is facing a new challenge_(4/4)

Future

- The general belief is that tourism will rebound as it has from previous crises. However, there is much evidence that COVID-19 will be different and transformative for the tourism sector.
- The COVID-19 crisis should be seen as an opportunity to critically reconsider tourism's growth trajectory;
- The role of domestic tourism in the recovery and the longer-term transformation to more resilient destinations;
- The behavioral demand responses of tourists in the short- and longer-term, including (1) business travel and widespread adoption of videoconferencing; (2) avoidance of spaces that are more prone to infection; (2) **growing importance of smart technologies that promote well-being, trust and less human contact**



Objectives

Main objective:

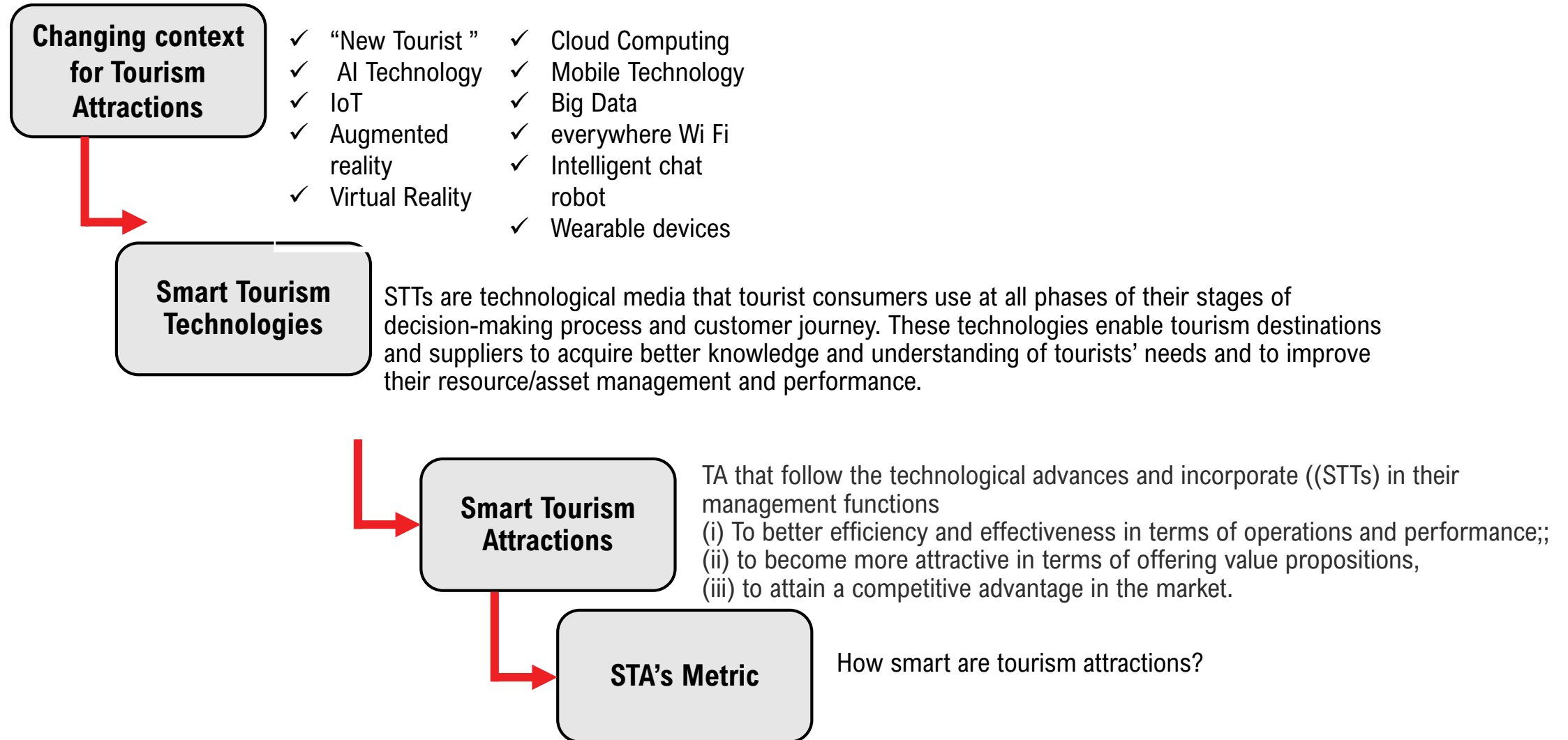
- ✓ **How important are the smart technologies in tourist attractions from the tourist point of view?**

Specific aims:

- #1 Identify the smart technologies that optimize the tourist experience when visiting a touristic attraction;
- #2 A metric proposal to evaluate “the smartness degree” of an attraction tourist;



Theoretical background





A metric proposal

Main aspects

✓ The Technological context

High Tech and Low Touch environments to support multiple activities (e.g. telework; teleconference; distance learning; home entertainment; e-health) to avoid human exposure to hazardous situations;

✓ The “after covid” tourist;

Over the last two decades, the widespread adoption and extensive use of ICTs (Web 2.0 tools, the extensive use of mobile technologies, Apps, smart devices, context and location-aware services have resulted in a radical shift of the tourist consumer behavior: more independent and skilled; more active and demanding; co-creators of unique tourist experiences; creating and sharing information and attempting to influence other users.

- More sensitive to health and to sustainability issues, tourist will tend to visit places free from infection hazards (e.g. virtual visits) or “safe places” and that respects the environment and contributes to the economic development and social well fare.



A metric proposal

Main aspects

- Mapping the tourist journey (pre visit; visit ; after visit)

Before their visit experience, tourists use smart technologies to search for information on relevant tourism services and select the tourist attractions that meet their own requirements from a large number of tourist attractions and make their reservation and book in advance all tourism products and services needed for their visit or trip;

During the visit itself, on site at tourist attractions, smart technologies (e.g. mobile tourism guides, mobile recommendation systems, navigation systems, congestion management systems) can be influential in all actions and interactions enhancing tourists' ability to co-create and co-manage their visit experience process;

After visiting, smart technologies (e.g. social networking sites) will be used to post tourist's experiences that can later be revived, comment on and recommend in order to form a complete chain of opinions that will influence their peers and potential visitors.



A metric proposal

1. ELECTRONIC / DIGITAL INFORMATION ABOUT TOURISM ATTRACTION

1.1. Tourism attraction's website / app	Utilization of the website / app for obtaining information about the tourism attraction.
1.2. Blogs of tourism information	Utilization of blogs for obtaining information about the tourism attraction.
1.3. Websites / Apps of tourism information	Utilization of other websites / apps for obtaining information about the tourism attraction.
1.4. Virtual communities of tourism information	Utilization of virtual communities for obtaining information about the tourism attraction.



A metric proposal

2. VISIT

2.1. **Virtual Reality**

Opportunity to virtually visit the tourism attraction.

2.2. **Augmented reality**

Opportunity to obtain virtual and interactive information on the tourism attraction.

2.3. **Customized visit**

Opportunity to create itineraries, accordingly with own preferences, to visit the tourism attraction.



A metric proposal

3. INFORMATION AVAILABLE AT THE TOURISM ATTRACTION

3.1. Events and activities schedule	Provide information (e.g. schedule, location, ...) about events and activities at tourism attraction.
3.2. Queuing-time forecast	Forecast and provide queuing time associated to tourism attraction's points of interest.
3.3. Electronic touch screen	Station that provides information about the tourism attraction.
3.4. Intelligent-guide system	Orientation systems that provides support and information about tourism attraction's points of interest.
3.5. Station with e-tour map	Station that provides information about the location and directions of tourism attraction's points of interest.
3.6. Quick response code (QR code)	Provides information when visiting the tourism attraction.
3.7. Short-messaging service and multimedia-messaging service	Text support system when visiting the tourism attraction.
3.8. Electronic touch screen	Station that provide useful information (e.g. weather, traffic, transportation, ...).



A metric proposal

4. TICKETING, ENTRANCE AND PAYMENTS

4.1. Electronic-ticketing system	Entrance system that allows to purchasing tickets (e.g. website, app, e-mail).
4.2. Electronic ticketing station	Electronic station that allows to purchase tickets.
4.3. Electronic-entrance guard system	Entrance system based on electronic devices (e.g. tickets).
4.4. Mobile payment	Payment system (e.g. tickets, products or other services) through mobile.
4.5. Smart card	Pre-paid card (e.g. band) that contains information about purchases made when visiting the tourism attraction.
4.6. Online coupons	Electronic system that provides promotions.
4.7. Electronic parking payment	Electronic station that allows to pay parking.



A metric proposal

5. ADDITIONAL SERVICES

5.1. Wi-fi	Wireless and free Internet connection.
5.2. E-complaint handling	Electronic channels that deal with visitors' feedback and complaints.
5.3. Smart protection, safety and emergency response system	Electronic system that assures visitors' safety in routine and emergency situations.
5.4. Smart environment	Energy optimization system that leads to sustainable management of the tourism attraction's available resources.



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Thank you!

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