

Other ITs related to Tourism





E-TOURISM

Also the term "E-Tourism" was coined to indicate the convergence of tourism and e-commerce (buying or selling products online).







E-TOURISM

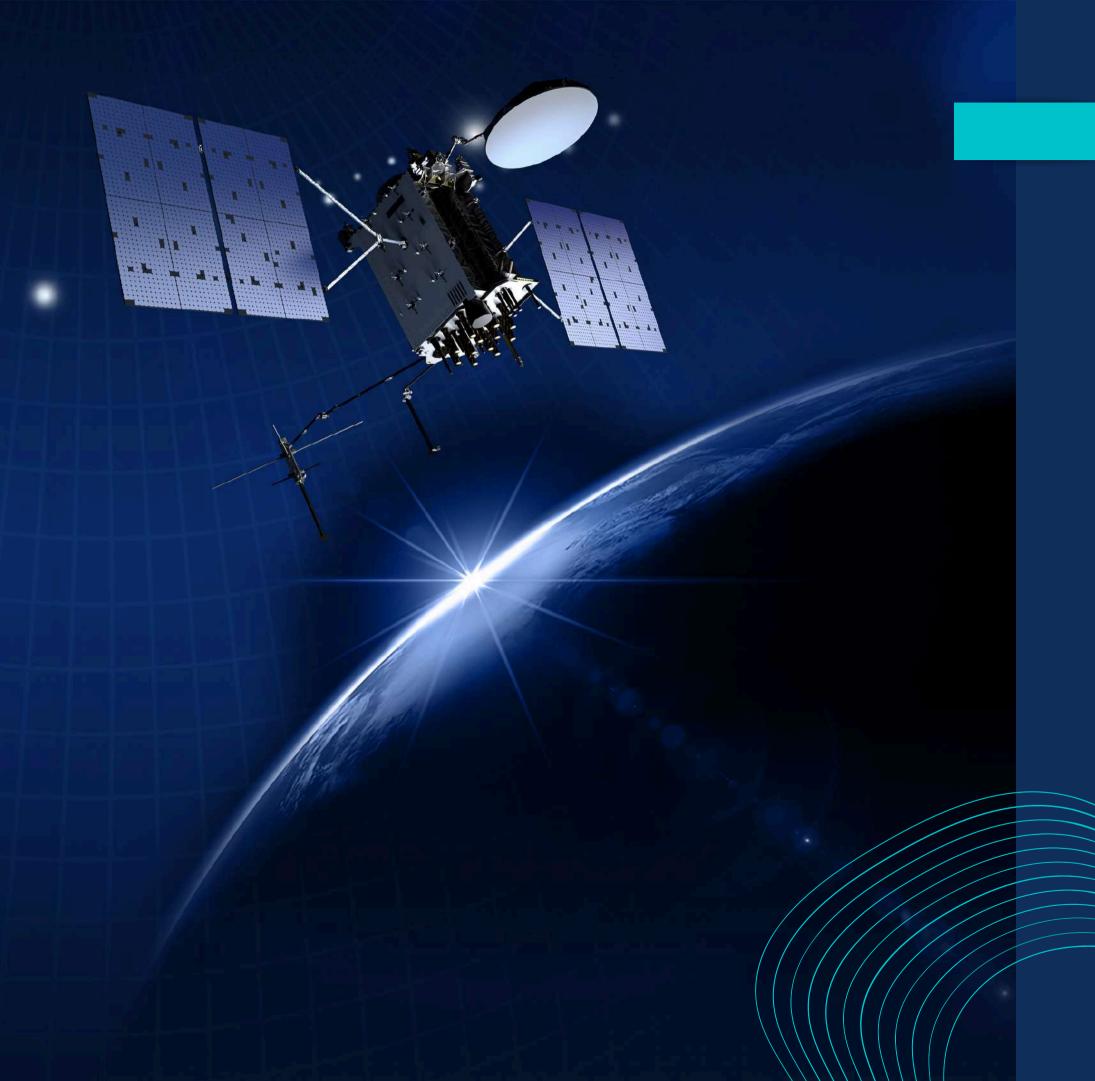
E-commerce allowed the creation of online marketplaces as Amazon, eBay, Alibaba and of online travel agencies







Mobiles have become a necessity for tourists. They improve the travel experience by making tourists much better informed than before.







Global Positioning System provides geolocation and time information to a GPS receiver anywhere on or near the Earth. At present its accuracy is of 3 m, but for civil uses it drops to 20



ARTWORK DIGITALIZATION

The biggest advantange is the improved accessibility: everyone now can access to high resolution copies of the originals. Art becomes freer and more democratic



ARTWORK DIGITALIZA TOC

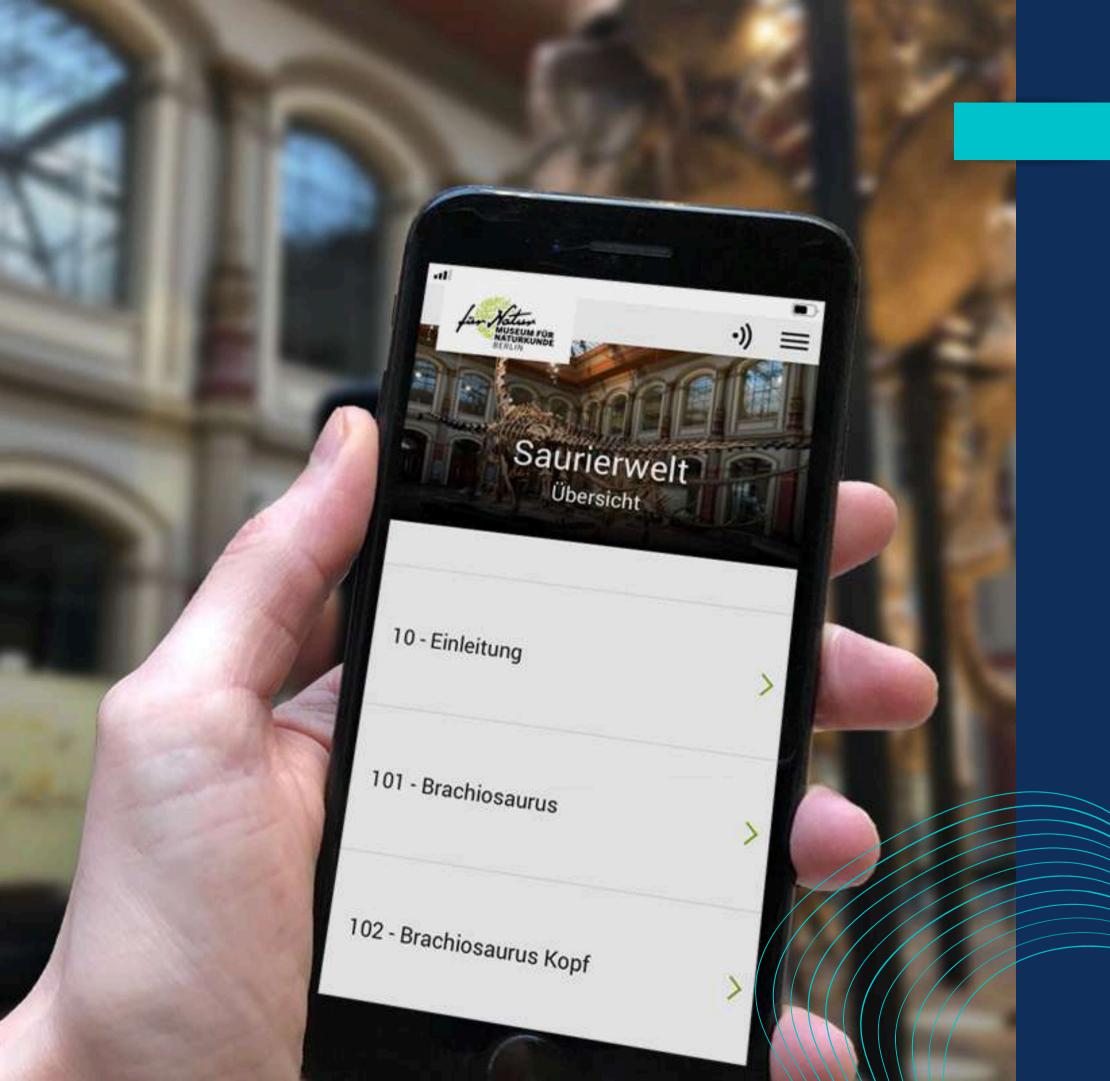
Multi-touch tables are accessible to many people at the same time







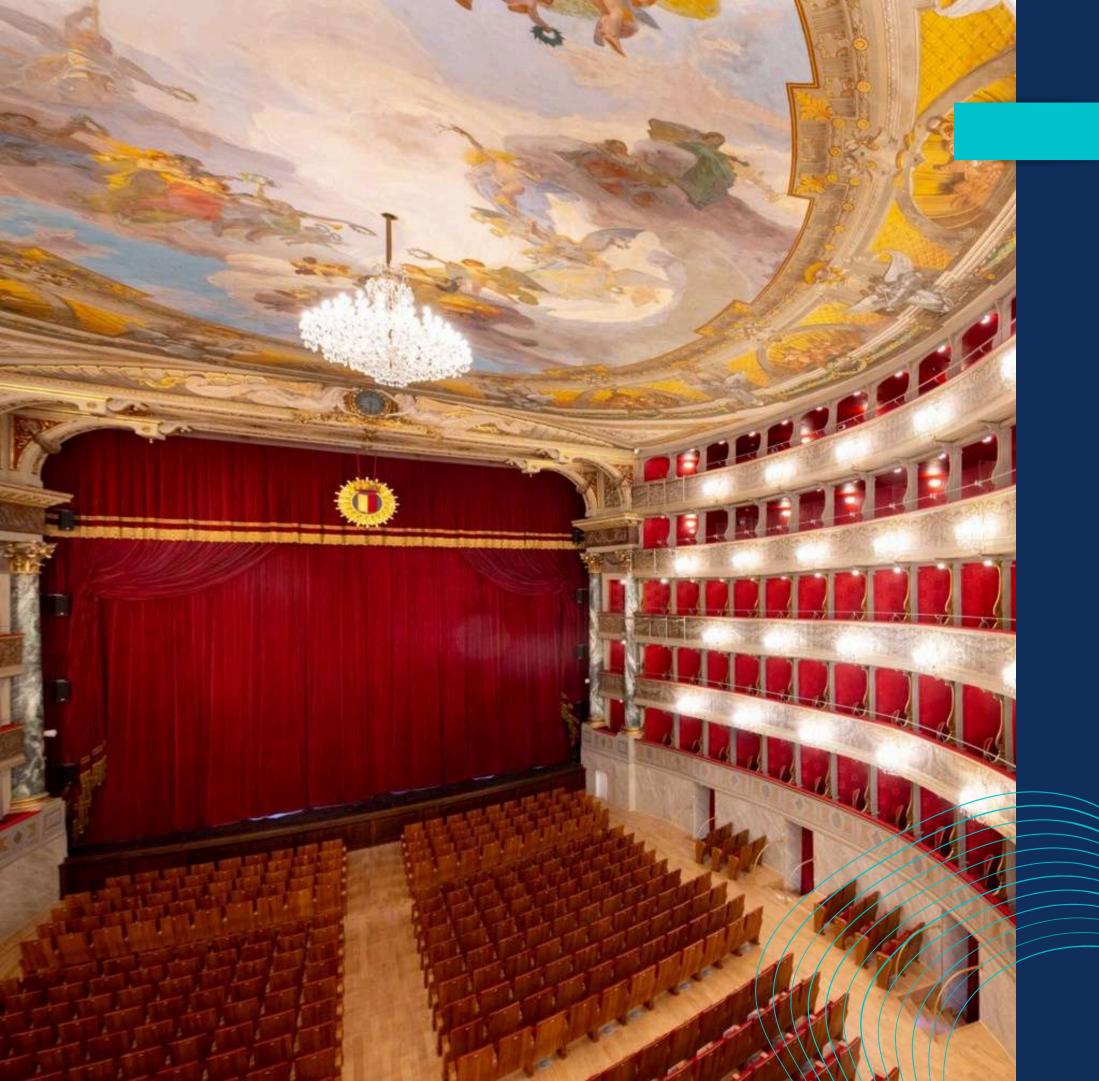
Not only art can be digitalized, but there does exist also digital art that wouldn't exist without IT, or museum that only show digital arts





ONLINE TICKETS

Digital platforms already manage online tickets, cancellation management, time slot tickets, flexible pricing, ...



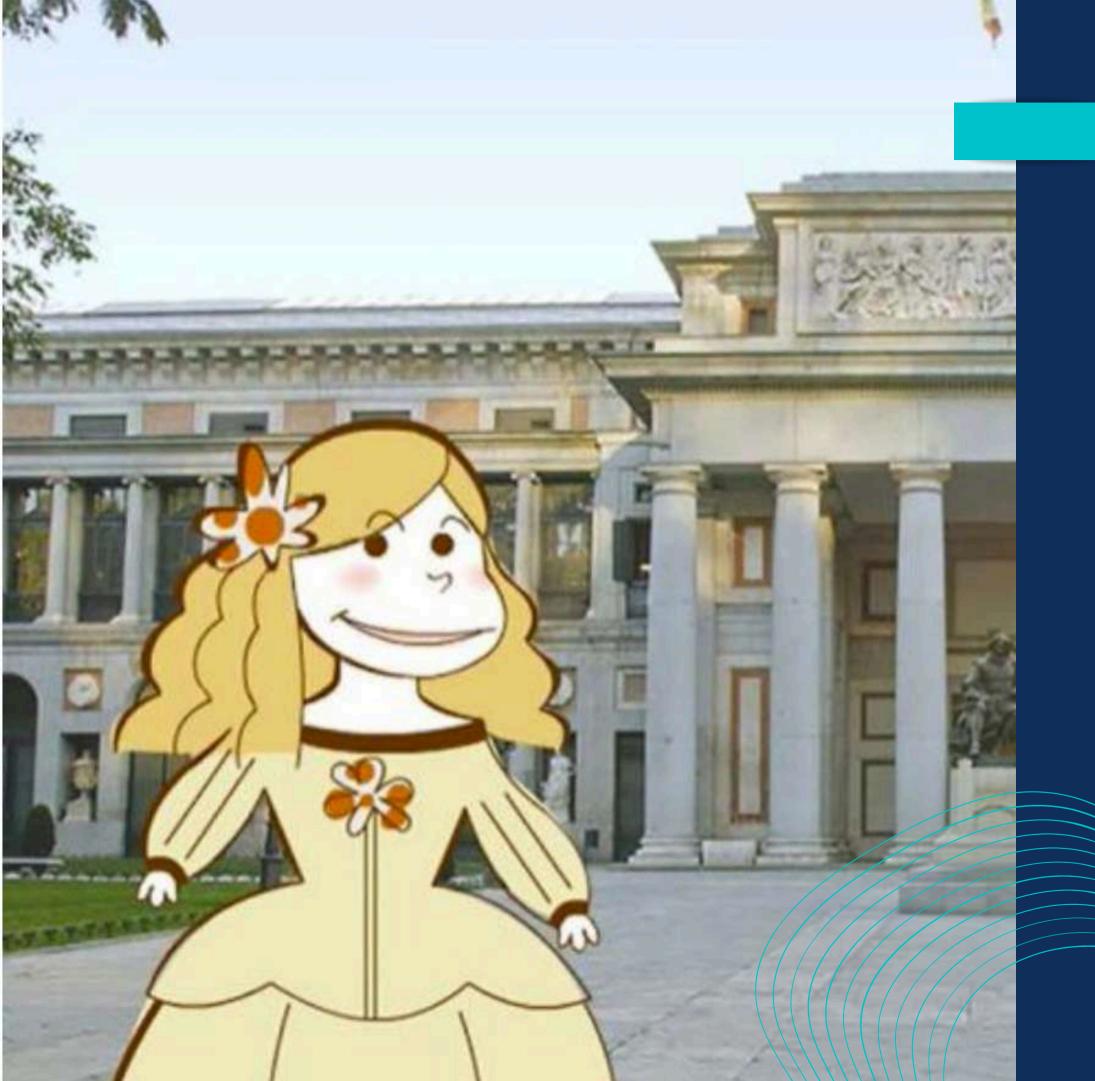
ARTWORK DIGITALIZA

Even Bergamo
Theatre has an app
to manage bookings
with free audio tours
of the theatre



ARTWORK DIGITALIZA TOC

During lockdown museums had to reinvent themselves with virtual exhibitions, guided tours, conferences, web contests and popular challenges



ARTWORK DIGITALIZA

Prado Museum
(Madrid) even
proposed online visits
for children



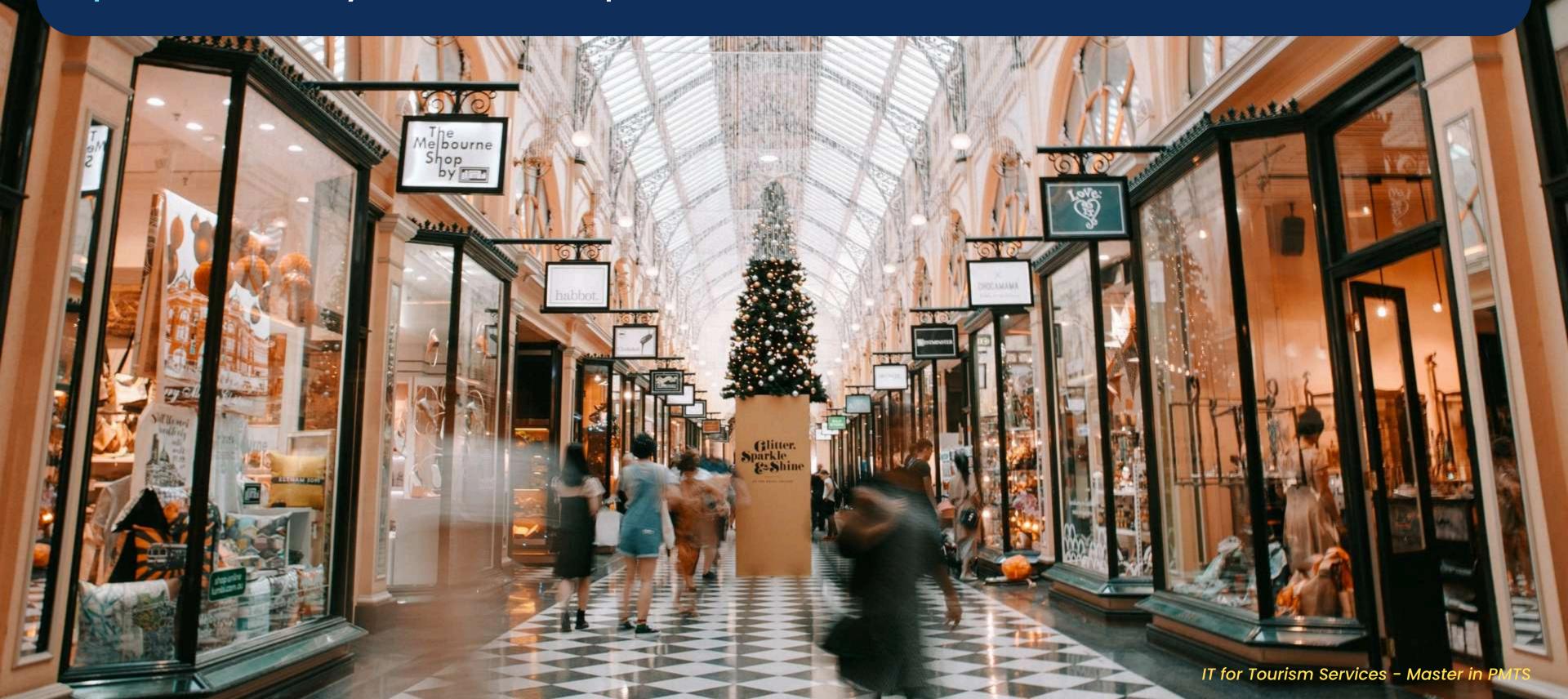
ARTWORK DIGITALIZA

Louvre increased its online visitors from 40.000 to 400.000

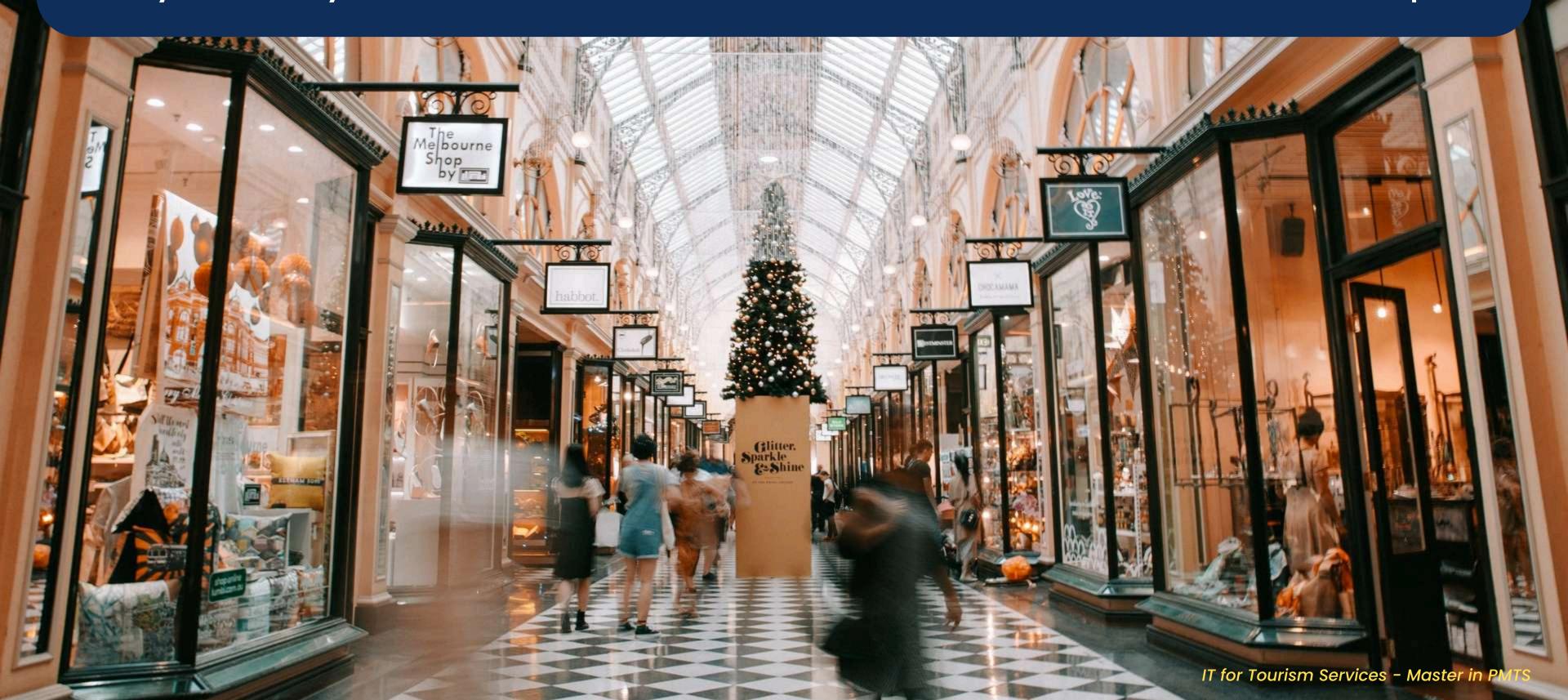


Small devices called beacons that send to the smartphones of the tourists specific information via bluetooth, when they are close to a particolar location.

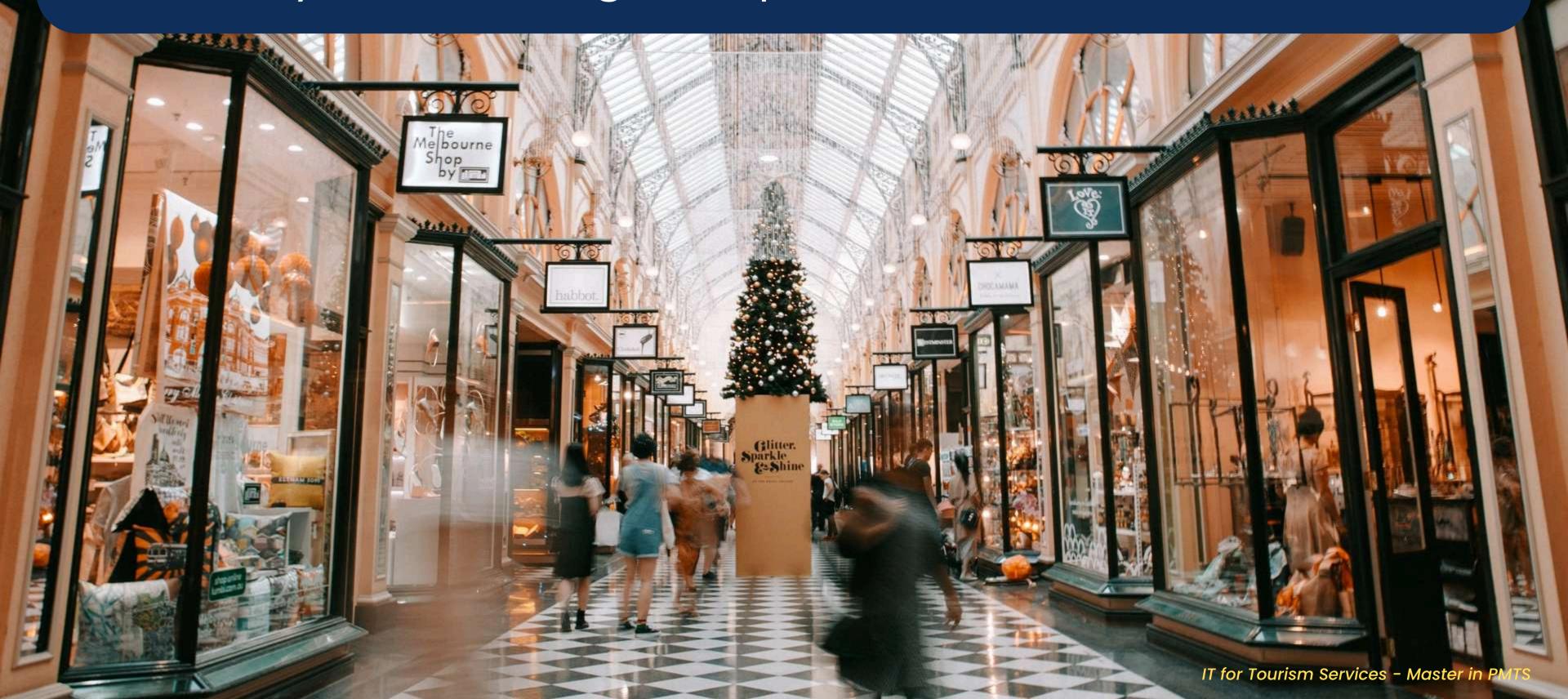
Imagine you are doing shopping and you google the word "jacket" on your smartphone



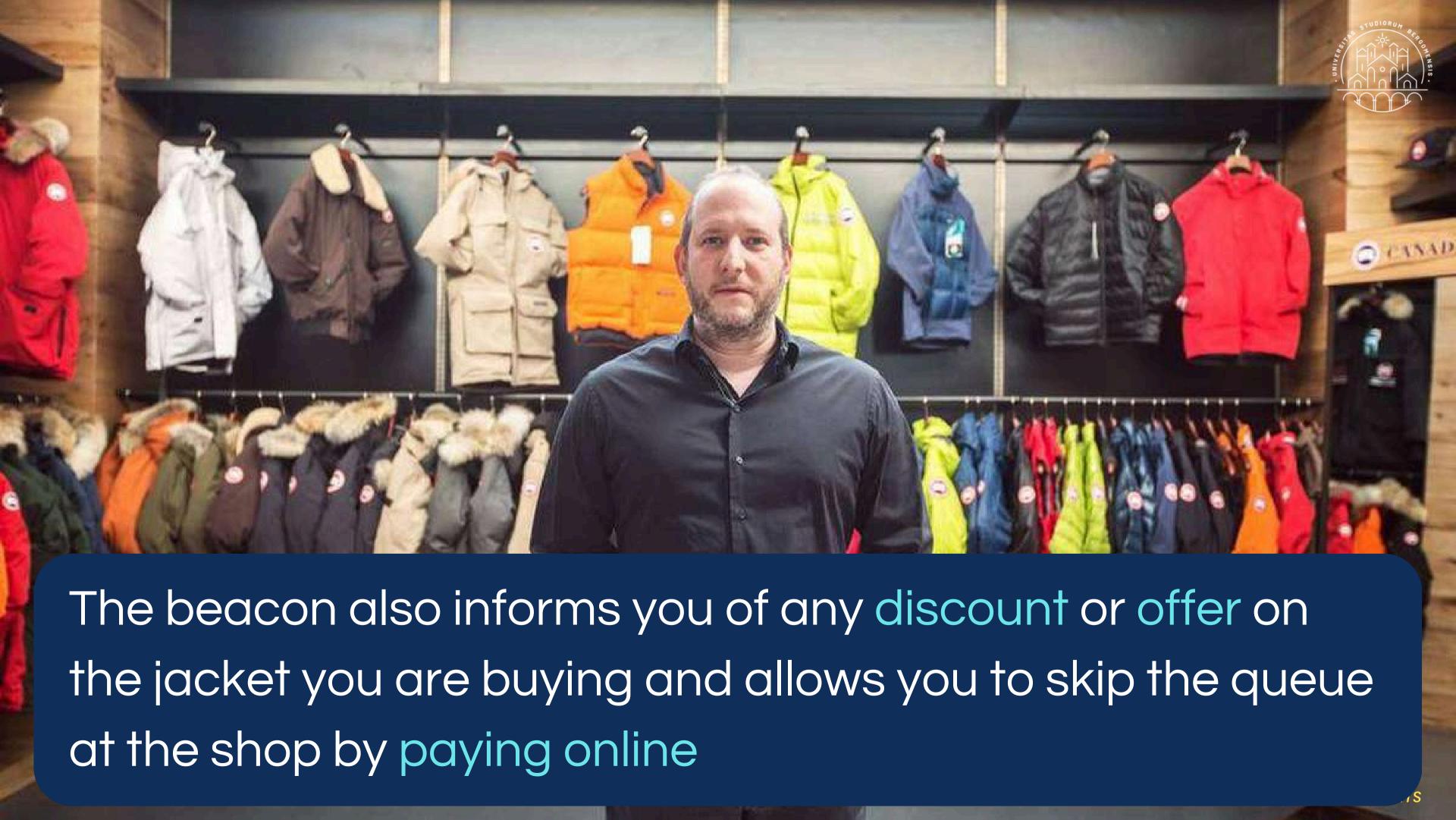
If there are nearby beacons from shops that sell jackets, they send you a notification and the direction of the shops



The beacon also contacts the shops to warn of your arrival and that you're looking for a jacket







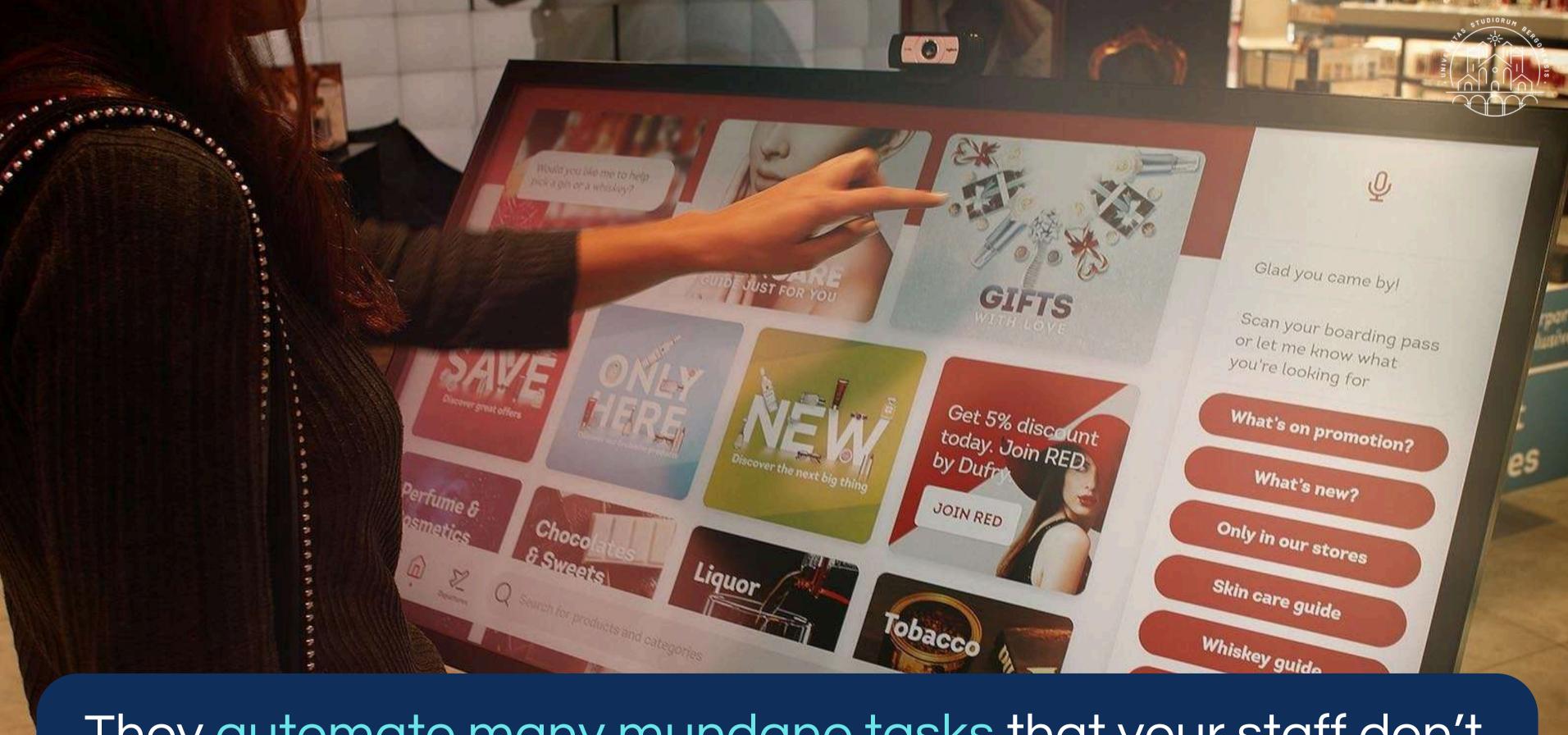


Beacons also tell you when a bus is arriving to your bus stop





Digital kiosks or Totems are standalone screens that passersby or customers can interact with on the spot, asking information and reducing the work of the staff



They automate many mundane tasks that your staff don't really need to be spending any more efforts



NEVERENDING TOURISME

ITs are used to extend the touristic experience in time and space, before and after the real travel occurs: tourists attend to online courses in the same places they visited



NEVERENDING TOURISMENT

For example, the portal of Discover Puerto Rico offers cooking lessons with a famous local cook and yoga lessons on the ocean

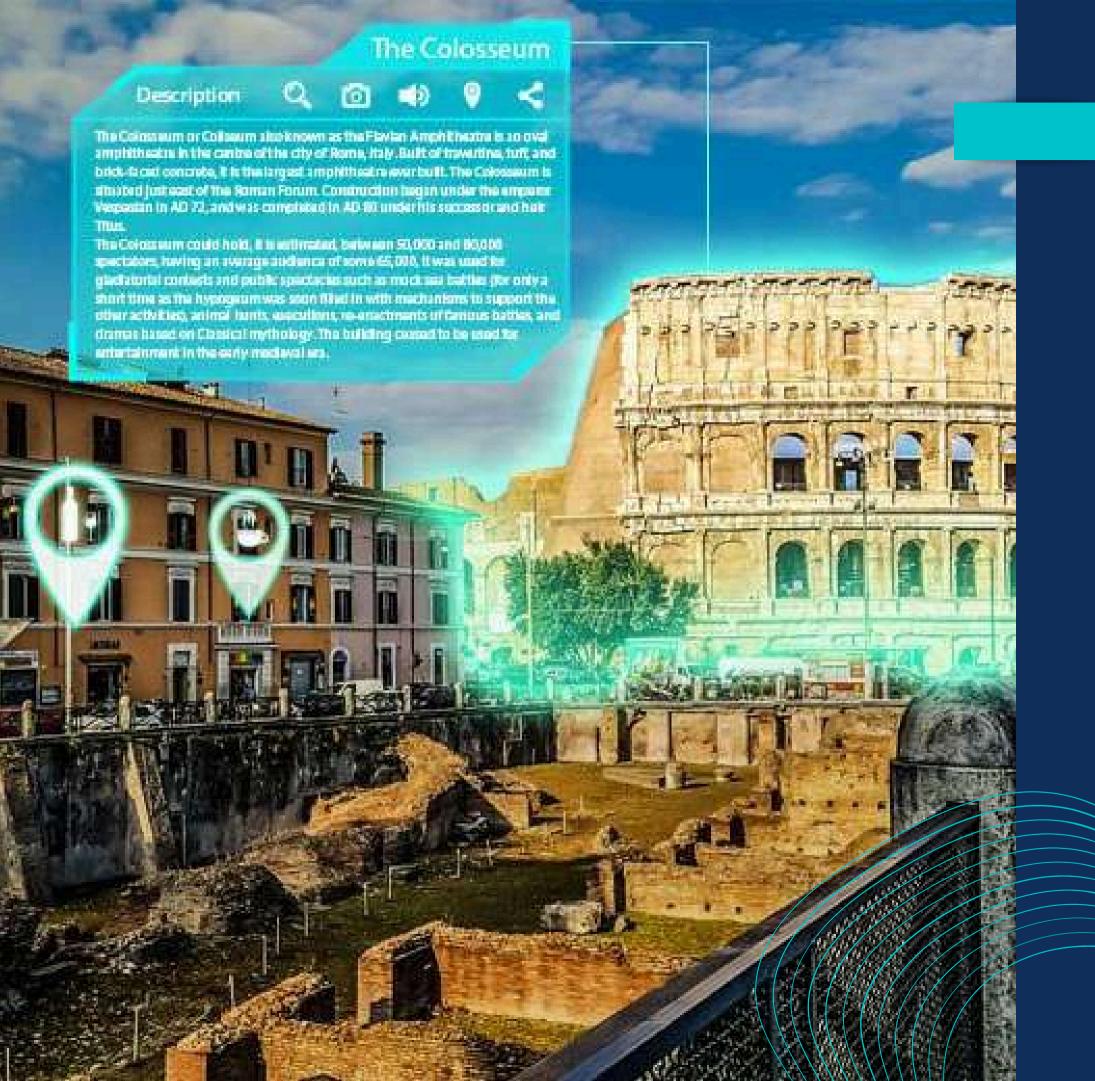




E-GOVERNMENT/

Application of IT to public services that may also benefit tourism:

- Public municipal Wi-Fi
- Smart Destinations
- Management of overtourism

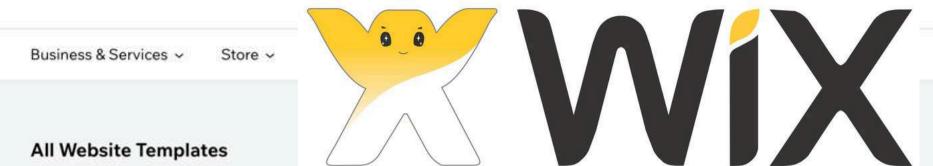


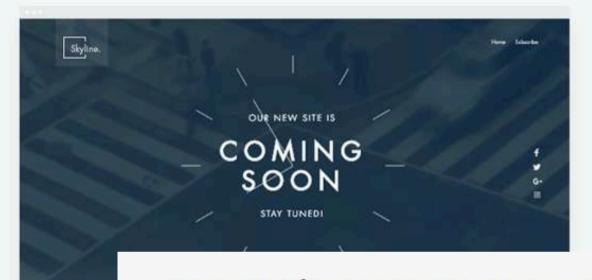


SMART TOURISM

It is the application of IT to improve tourism by enhancing the touristic experience: AR, mobile tourism, smart destinations, workation, totems...

Pick the Website Template You Love







Google Sites: create your website in 10 minutes

G-Suite ? May 23, 2019



Coming Soon







Two of the most employed platforms to develop web sites are WiX and Google Sites



INTERNET OF THINGS



loT is a network of physical objects with sensors, processors and/or software. Each object has a unique identifier







They connect and exchange data between them, over the Internet or other networks



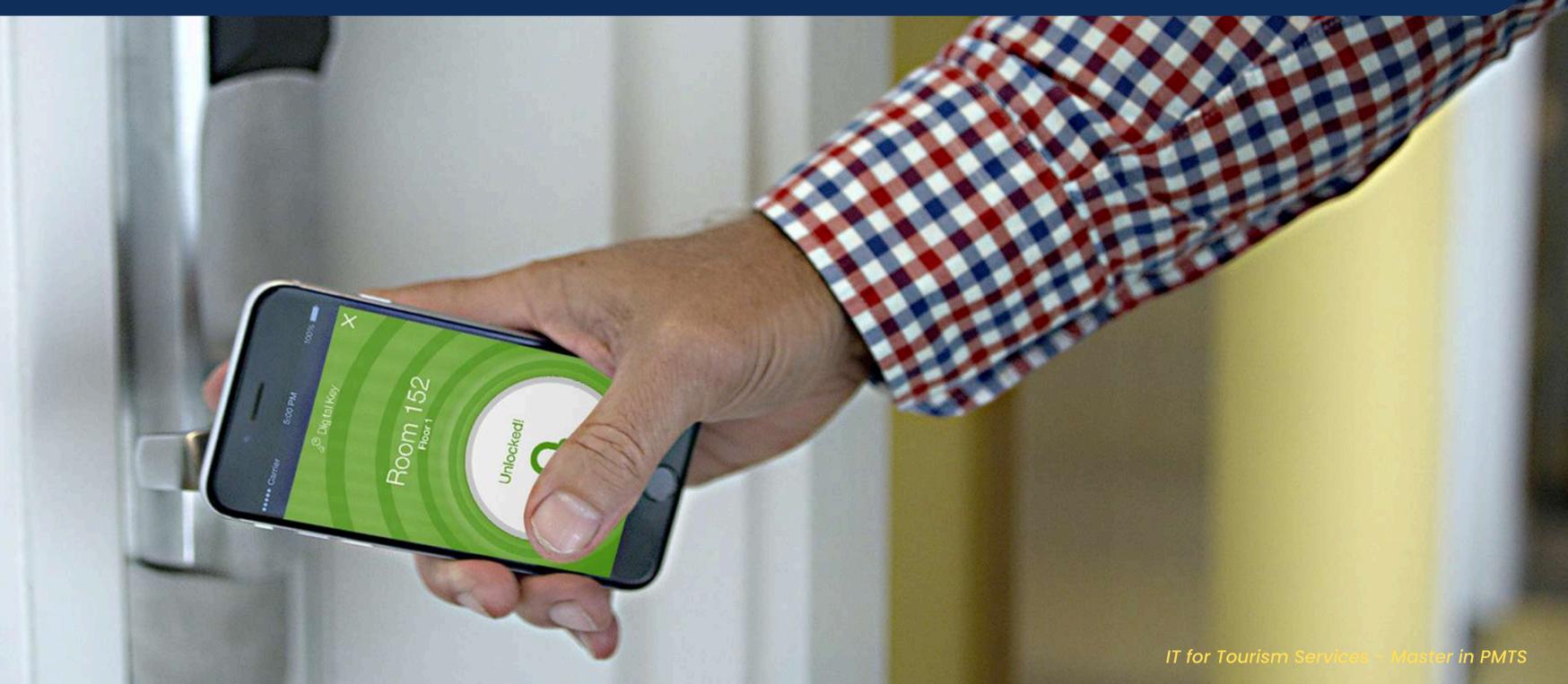


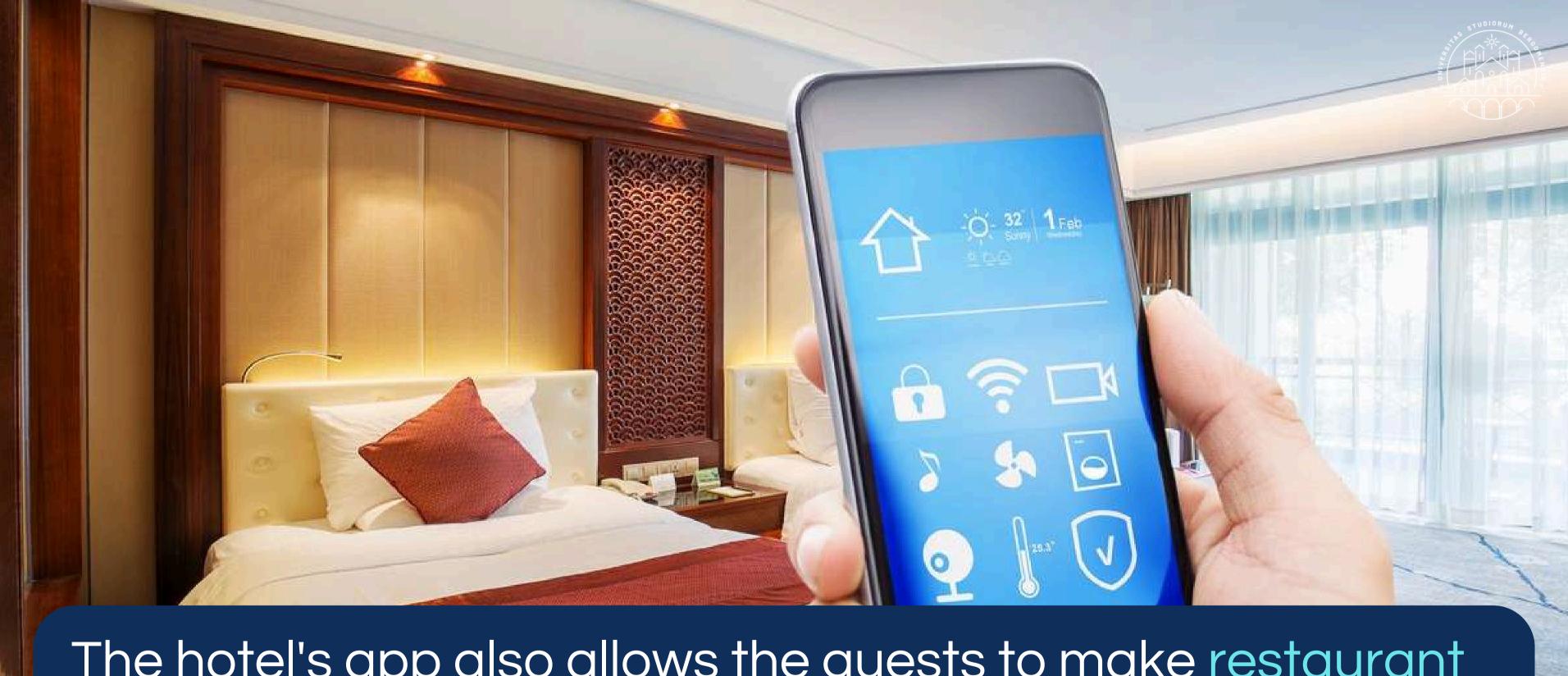
• Swith off lights when no one is present in the room

Smart Hotels

- Open/close window curtains
- Al regulates temperature and it remembes guests' preferences
- TV welcomes guests with their own names. They can automatically access Netflix / Spotify with their own account, and play your favourite music

Electronic key cards can be sent by the hotel on the guests' smartphones to open the room directly without wasting their time in the reception





The hotel's app also allows the guests to make restaurant reservations, book spa appointments, and order additional activities within the hotel (even through voice)







Big data means a large amount of data that cannot be analyzed or managed with traditional tools





BIG DATA

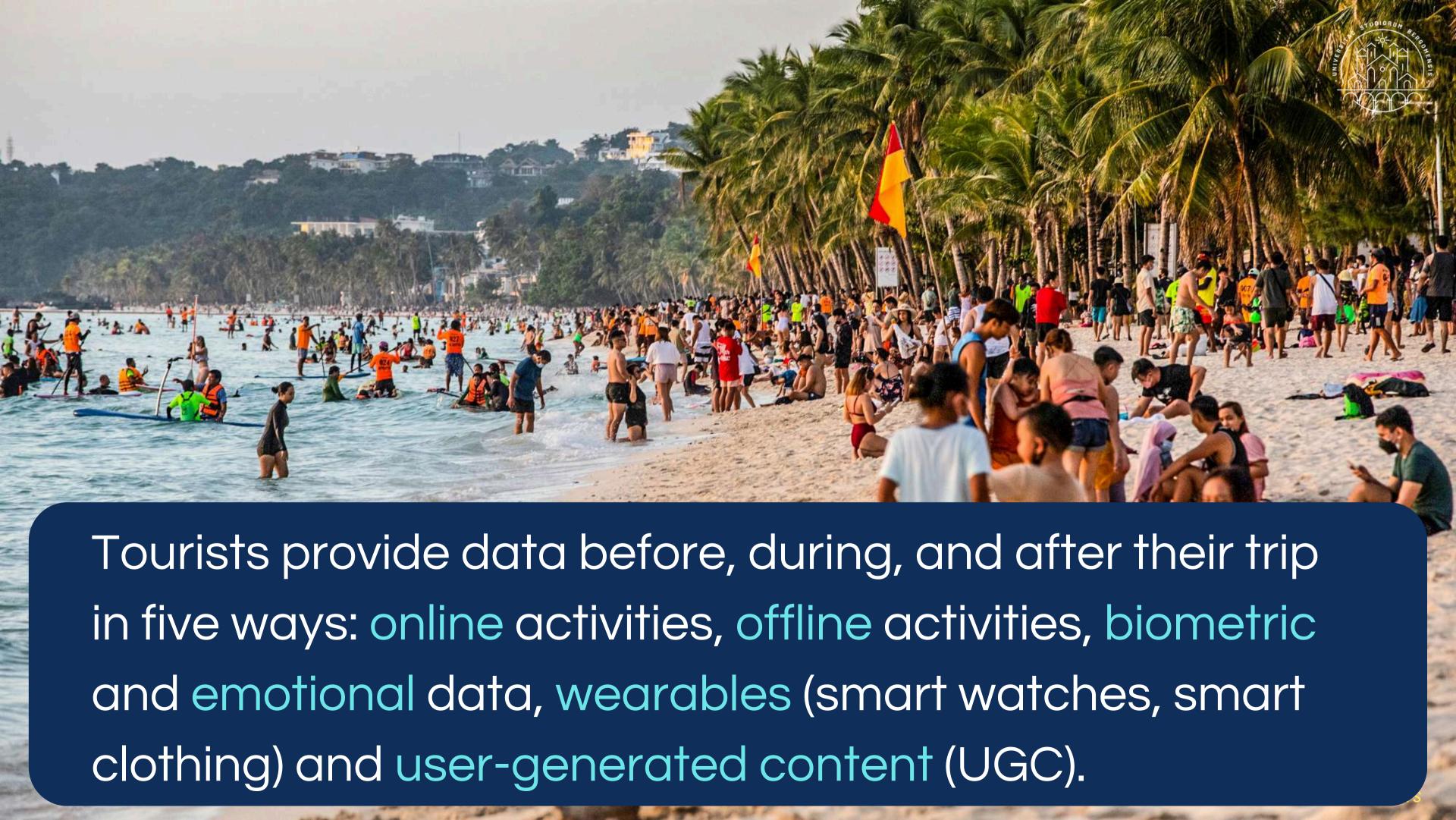
A proper definition would be 'any unmanageble, unstructured, ever growing dirty mess of data'



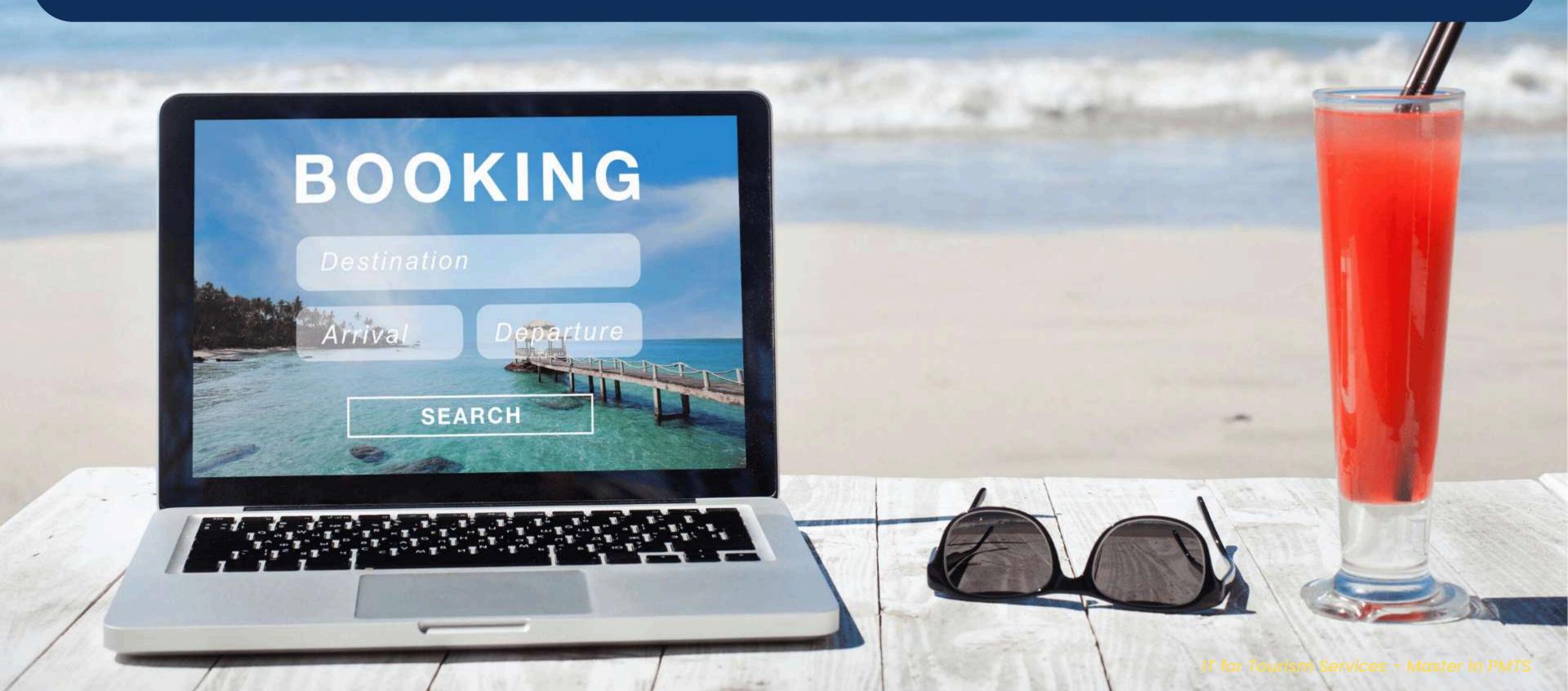




The environment is the source of meteorological data, events occurring at the destination, real time information obtained from sensors, Internet of Things (IoT)



Before and during the trip, users search and book services online, and their digital footprint can be tracked

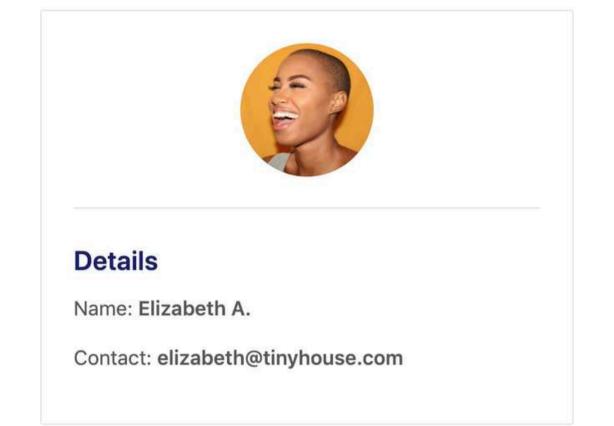




During the trip, users also leave offline traces like movements, bookings, and consumption, that are captured by GPS data, mobiles and Bluetooth devices like beacons, IoT, and for electronic payments at shops, face recognition



User-generated content (UGC) is generated during and after the trip: online reviews, comments in social networks, and pictures and videos posted online



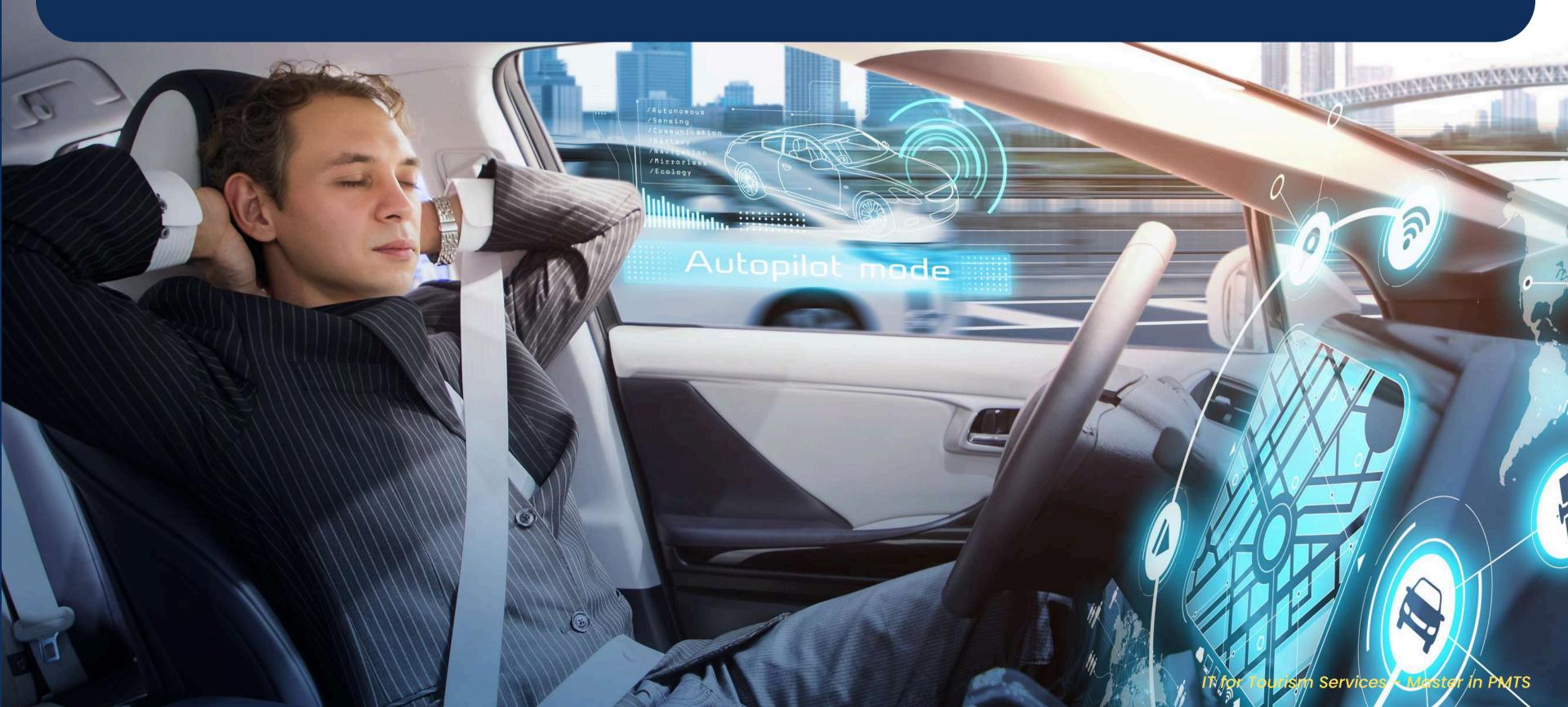
Listings

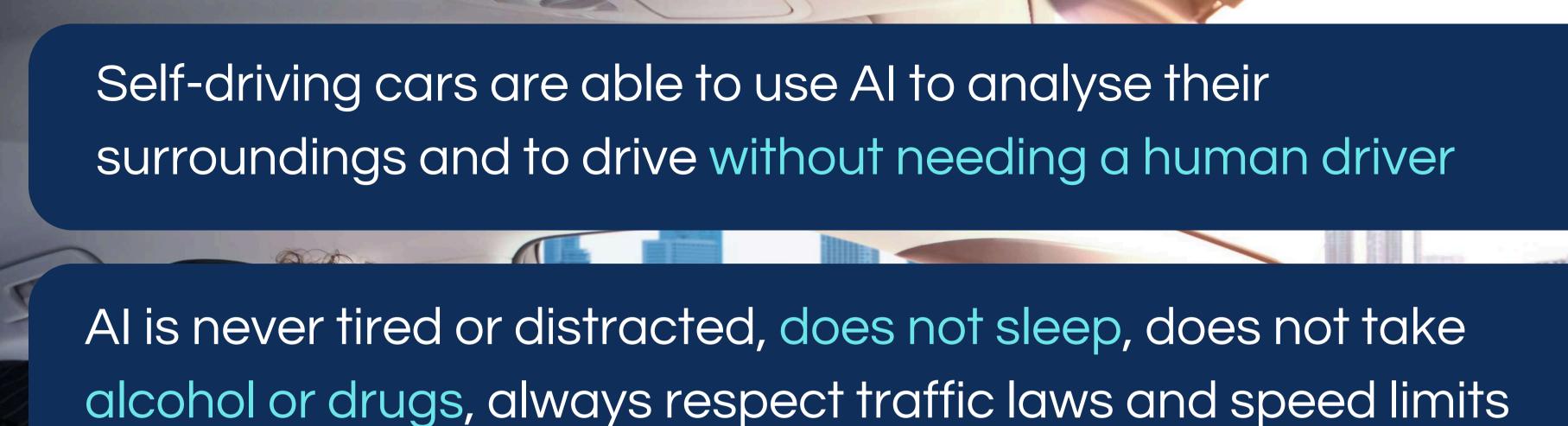
This section highlights the listings this user currently hosts and has made available for bookings.



A user profile is created by joining these data sources together. This profile can then be used to recommend products and services that are tailored to the user's needs

Self-driving cars are able to use AI to analyse their surroundings and to drive without needing a human driver





Self-driving cars are able to use AI to analyse their surroundings and to drive without needing a human driver

Al is never tired or distracted, does not sleep, does not take alcohol or drugs, always respect traffic laws and speed limits

Without human errors, car crashes'd decrease of 90% and emissions of 80%

Self-driving cars are able to use AI to analyse their surroundings and to drive without needing a human driver

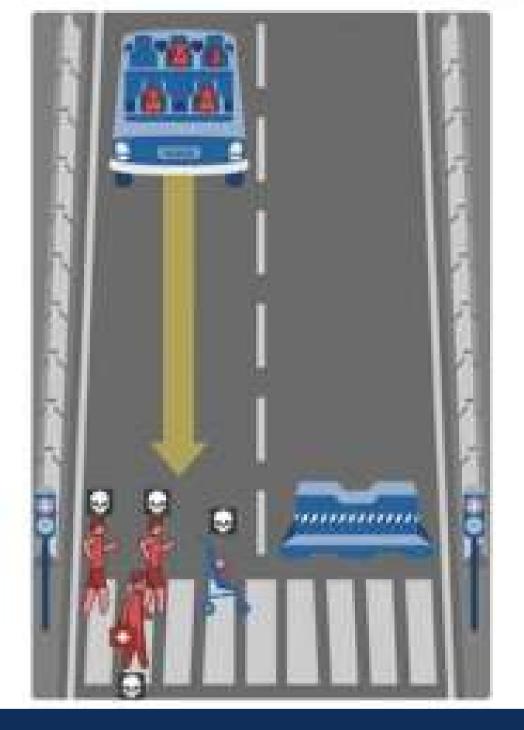
Al is never tired or distracted, does not sleep, does not take alcohol or drugs, always respect traffic laws and speed limits

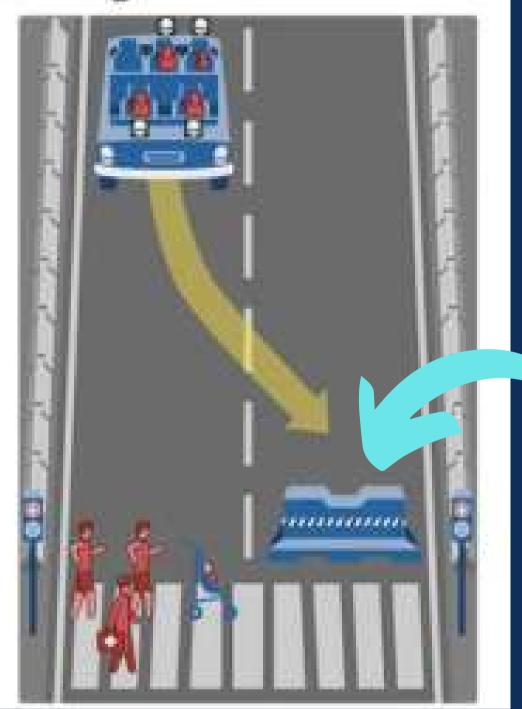
Without human errors, car crashes'd decrease of 90% and emissions of 80%

It will also decrease the cost of the car insurance and the freight transport and increase the number of tourists

What should the self-driving car do?







Scenario B: car
crashes on the
barrier risking the
life of its
passengers

The biggest issue to solve is not technical but ethical: self-driving cars may have to take moral decisions, e.g. choosing which life to save in case of emergency



More probable is the widespread adoption of Al-based driving assistants to insert the auto-pilot on the highway



At present the only publicy available self-driving cars are a few robotaxis in San Francisco

LIST OF IT IN THE WRITTEN EXAM



- Social Media**
- Online travel agencies (OTA)*
- Mobile Tourism (e.g: digital maps)
- Artificial Intelligence (AI)**
- LLM (e.g: ChatGPT)
- Global Positioning System (GPS)
- Workation
- Big Data
- Smart Tourism
- Smart Destinations*
- Smart Hotels*
- Virtual Reality
- Augmented Reality

- Neverending Tourism*
- E-Tourism*
- E-Government
- Beacons
- Web 1.0, 2.0 and 3.0
- Internet of Things
- Self-driving vehicles
- Metaverse
- Blockchain (e.g: bitcoins, NFT)
- Totems / Digital kiosks
- Artwork Digitalisation

*IT developed explicitly for tourism. All others are transversal to tourism

** also in the 2nd semester module "Tourism Management" of prof. Roberta Garibaldi and Angel Herrero





DATA SIZES

10^3: Kilobyte (kB)

10^6: Megabyte (MB)

10^9: Gigabyte (GB)

10^12: Terabyte (TB)

10¹5: Petabyte (PB)

10¹⁸: Exabyte (EB)

10²1: Zettabyte (ZB)

10²⁴: Yottabyte (YB)

byte = 8 bits

Mbps = 1 MB per second

EXAM



There are 7 dates for the written exams in 2025, the first two are:

- Thursday 9th of January from 17.00 to 18.00 in Room 1 Via Salvecchio
- Friday 7th of February from 15.00 to 16.00 in Room 3 Via Salvecchio

Bring your ID card and a pencil

The written test has a total of 20 questions. In order to be approved, 12 or more right answers are needed. There are no grades, only approved or not approved



PROJECT WORK #1

- Every week, each admin should publish a new post or poll
- Every week, each admin should ask a question in the travel community immediately after his/her group
- Every week, every group should publish a welcome post
- Admin should always answer all questions of their members
- Every week, every one should post a question in the travel community of "Naples for Beginners"



PROJECT WORK #2

- Send me an email when you finish your Canva project
- Join the two TikTok channels of the Time Travelers: https://www.tiktok.com/@time.travelers.official https://www.tiktok.com/@timetravelers.it
- Join the YouTube channel: https://www.youtube.com/@time.travelers.official
- Join the Instagram channel:
 https://www.instagram.com/time.travelers.official

Workshop:



ITs and regeneration strategies in the Alps

