

Making use of BIG DATA for visitors analytics

17 November 2021



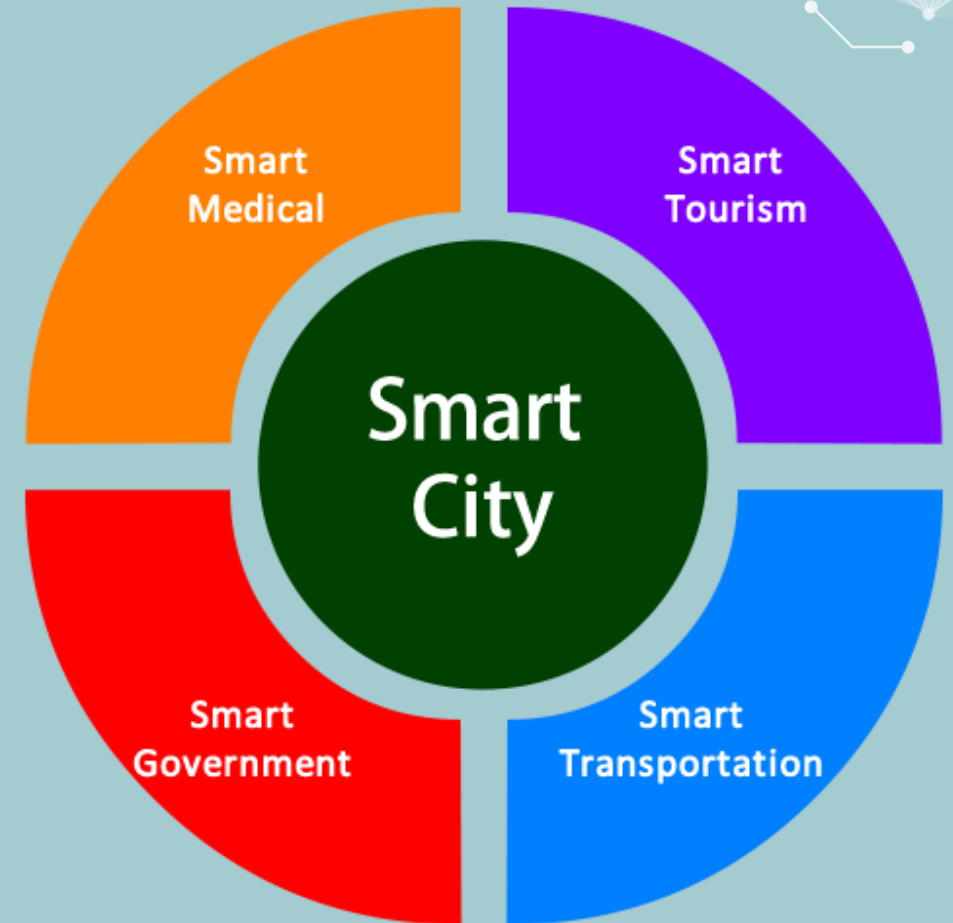
Macao Government Tourism Office



Background of Macao Smart City

In August 2017, Macao Government signed an agreement with the Alibaba Group to further develop Macao as a smart city, namely by using Alibaba's big data processing capabilities to enhance the quality of the city's public services.

The parties would gradually launch projects with big data services in order to accelerate Macao's development in certain areas, namely: tourism; transportation; medical services; and public services management.





Understanding our Visitors' Profile

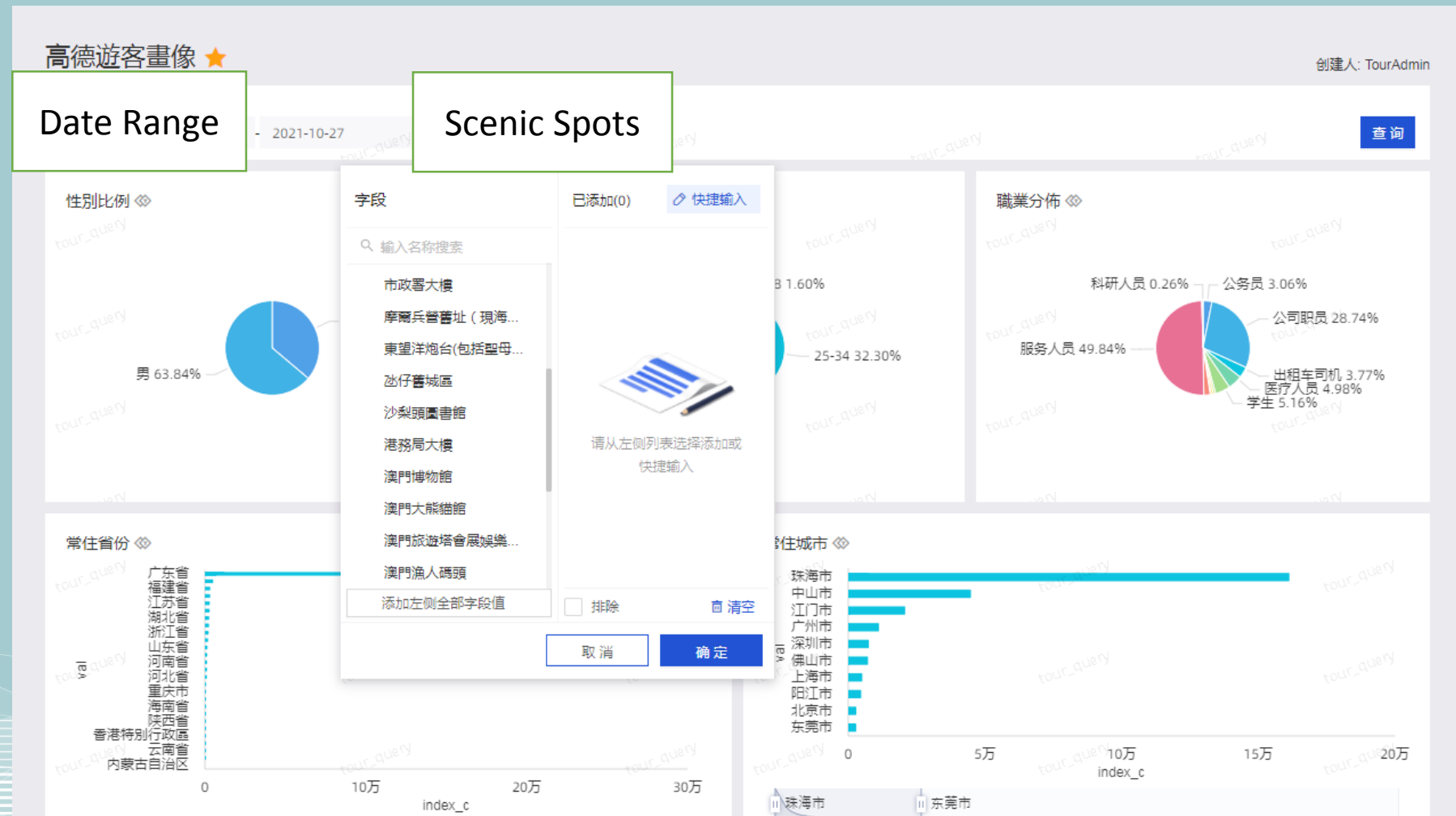
Understanding Our Visitor Profile

- With the Macao Government Share Data Platform, different government bureaus could share useful data.
- MGTO is able to use real-time visitor arrivals data from Public Security Police to build a [Dashboard](#) to show the real-time status.



Understanding the Visitors' Profile

Amap visitor history data allows us to understand the visitors' demographics (gender, age, occupation, place of resident, family status, preference of travel time, etc.) of visitors in specified POI/date.



Understanding the Visitors' Profile

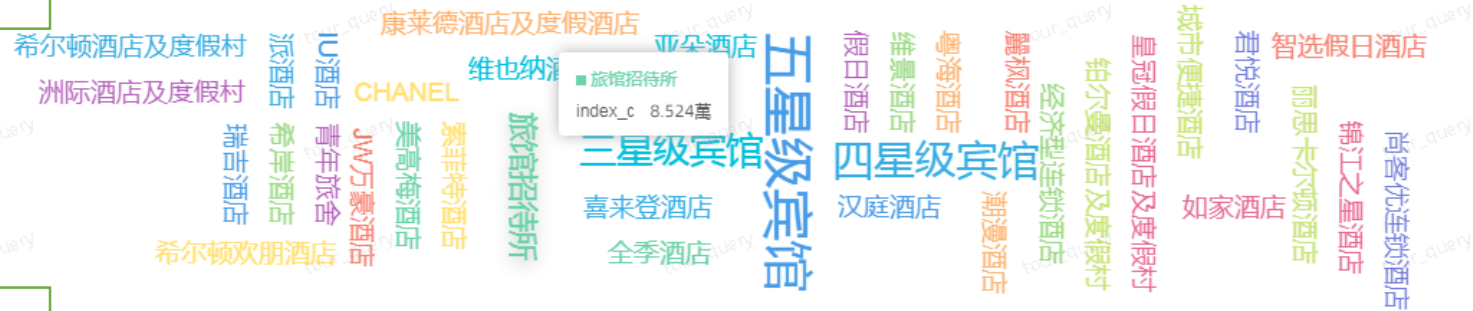
Has a child?



Owning automobile?



Interested hotels?



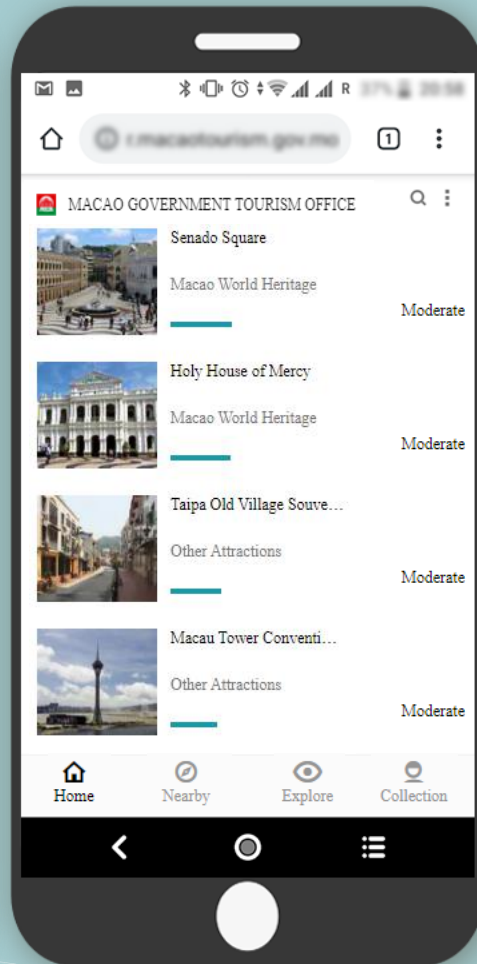
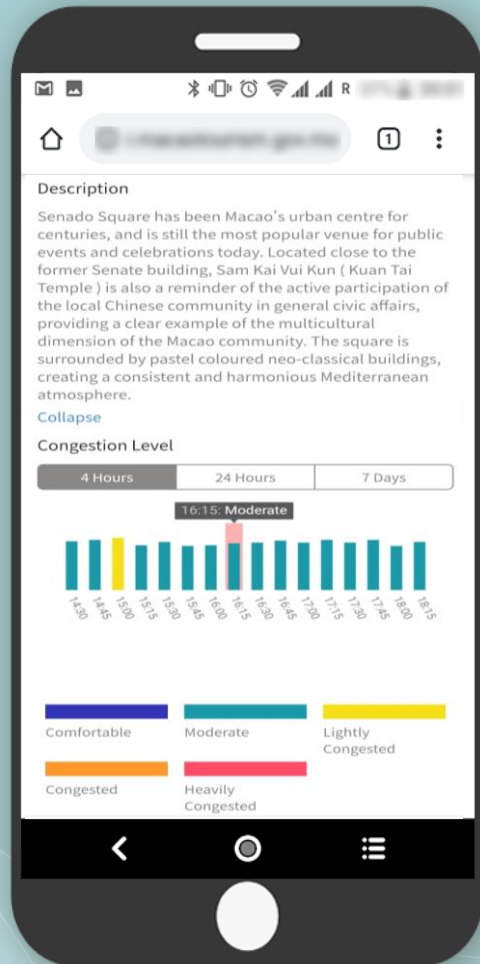
Interested scenic spots?





Enhancing Visitors' Experience

“Smart Application for Visitor Flows”



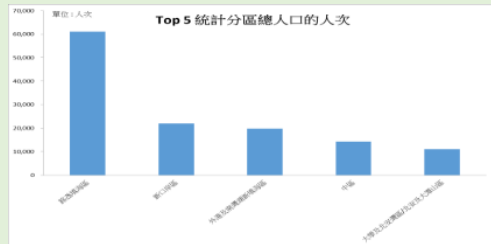
- “Smart Application for Visitor Flows” predicts the density of visitor flows at **20** major tourist attractions within **4** hours, **24** hours and **7** days, and categorizes the forecast results at various levels from “**comfortable**”, “**moderate**”, “**lightly congested**”, “**congested**” to “**heavily congested**”, to create greater convenience for visitors and industry operators in their itinerary arrangement.
- Application can be accessed on:
 - <https://poimonitor.macaotourism.gov.mo>;
 - MGTO’s WeChat ID “MGTOweixin”.



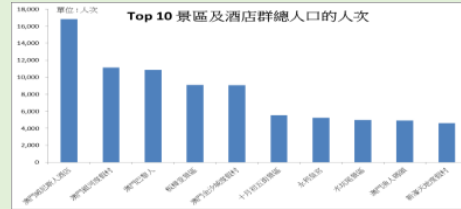
Analyzing Visitors' Behavior

Big Data Usage

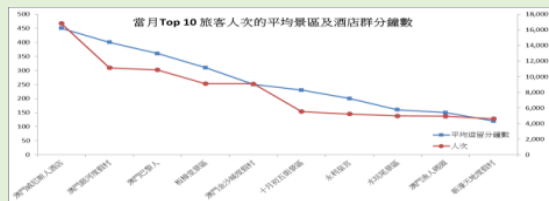
No. of Visitors by Districts



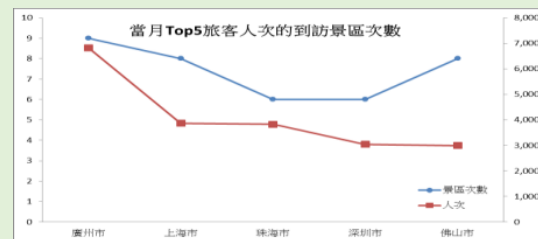
No. of Visitors in Scenic Spots & Hotels



Length of Stay in Scenic Spots & Hotels



No. of revisiting



- Through the local telecom service provider, collect big data on the flow of people, allow us to:
 - ✓ Analyze the flow of people in the statistical area sorting by place of residence;
 - ✓ Analyze the flow of people in key scenic spots and hotels sorting by place of residence
 - ✓ Analyze the number of visits in key scenic spots and length of stay by place of residence;
 - ✓ Analyze the number of revisiting visitors by place of residence, etc.
- Usage of data in future:
 - ✓ Conditionally, part of the data could be released to the industry and all stakeholders in society, so that they can use the data as a reference for their business decision-making.
 - ✓ The data will be used to optimize tourism promotion strategies & product development.



Macao Government Open Data Platform
<https://data.gov.mo>



Application for visitor flow
<https://poimonitor.macaotourism.gov.mo>



Macao Tourism Marketing Website
<https://www.macaotourism.gov.mo>



Macao Tourism Data Plus
<https://dataplus.macaotourism.gov.mo>

~Thank you~

