A Web-based Regional TSA Information System - The case of Guangdong, China

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Guangdong province
Outline

• Background
• Guangdong TSA information system
• Future development plan

Background

• China government has been more and more realizing the importance of TSA
• Besides national level, regional TSA has been continuously adopted in China
• Guangdong is the largest province in China regarding resident number, GDP, international tourism receipts, and tourist arrivals
• Guangdong first compiled its regional TSA in 2012
  • By Guangdong Tourism Administration
  • Research team comprises scholars from Sun Yat-sen Business School in China, Hong Kong PolyU and Guangzhou University in China
Background

• Problems encountered during TSA practice in China:
  • Costly and time consuming
  • One-off work
  • Cannot analyze and trace the dynamics longitudinally

  • Guangdong TSA (GDTSA) information system

GDTSA information system

• Both software and hardware of the system are built up
• Compile the TSA accounts more efficiently and regularly
• An effective way to manage tourism statistic data
• Conduct tourism statistic analysis automatically
• The first attempt to compile the quarterly TSA in China
### Inbound and Domestic non-Guangdong Tourism Expenditure in Guangdong (Unit: 10,000 Yuan)

<table>
<thead>
<tr>
<th>Item</th>
<th>Inbound Tourism Expenditure</th>
<th>Domestic Guangdong Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Same-day visitors</td>
<td>Tourists</td>
</tr>
<tr>
<td>1. Tourism características products</td>
<td>-</td>
<td>-</td>
</tr>
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<td>2. Accommodation service</td>
<td>-</td>
<td>-</td>
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<td>3. Hotels and other accommodation services</td>
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<td>4. Private or free-to-use vacation homes</td>
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<td>5. Food and beverage services</td>
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<td>6. Railway transport service</td>
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<td>27968</td>
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<td>7. Road transport and Public transport services</td>
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<td>9. Public transport service</td>
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<td>63116</td>
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<tr>
<td>10. Water transport service</td>
<td>179</td>
<td>1572</td>
</tr>
</tbody>
</table>

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### Statistics of Tourists in Guangdong

- **Tourists:** 85.725%
- **Same-day visitors:** 14.275%

- **Statistical Details:**
  - **Same-day visitors:** 997 (unit: 10,000)
  - **Tourists:** 3583 (unit: 10,000)
General Framework of GDTSA Information System

On-line Survey Data of Tourism Expenditure by Guangdong Residents

Off-line Simulated Household Survey Data of Tourism Expenditure by Guangdong Residents

National Account Data (Guangdong Statistic Bureau)

Survey Data of Tourism Expenditure (Guangdong Tourism Administration)

Tables of GDTSA
1. Tourism Expenditure by Foreign and Domestic non-Guangdong Tourists in Guangdong Province
2. Tourism Expenditure by Guangdong Residents in Guangdong Province
3. Tourism Expenditure by Guangdong Residents in Foreign and non-Guangdong Domestic Tourism
4. Regional Tourism Consumption of Guangdong Province
5. Production Account of Tourism and other Industries of Guangdong Province
6. Total Tourism Supply and Regional Tourism Consumption of Guangdong Province

Quality Control of External Data

Data Center

Statistics and Analysis
- Analysis of the Seasonal Fluctuation
- Analysis of the Tourism Geography Distribution
- Analysis of the Travel Rate
- Analysis of the Tourism Consumption
- Analysis of the Distribution of Tourism Expenditure by Residents

The Flowchart of the developed functions of the GDTSA Information System
System demonstration

Future development plan

• Continuously compile the quarterly TSA every year
• Further calculate indirect and induced contribution based on the TSA results
• Add tourism demand forecasting function into the information system
• Explore the use of big data in TSA
• Hold TSA research forum in China, e.g. April in Guangzhou, China
Thank you for your kind listening!

Comments and suggestions are welcome!