How much is it? An innovative methodology to measure room rates across OTAs and online platforms

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Ministry of Tourism (Mexico)
Current situation

The Ministry of Tourism developed in 2001 a system called “DataTur” to measure hotel occupation, monitoring hotels in 70 turistic centers through surveys in which data is collected via:

- Telephone
- Online research
- Visiting the establishment in person

What is the challenge?

- Convince hotel managers to provide information systematically
- Lack of room rates information or similar
- Not able to get information from other kind of establishment
What we gain with this project

- Constant update of the accommodation directories and its geo-referenced position
- Number of the total offer of the establishment
- Hotel and non traditional accommodation rates in real time
- The possibility to know the Revenue Per Available Room (RevPAR)

Make better policy decisions
What did we do?

Extract monthly information from the following OTA's (Online Travel Agencies):

- Booking.com
- BestDay.com
- PriceTravel
- Hotels.com
- Expedia

Also an online platform:

- Airbnb

The information obtained is public and available on the day of the consultation.
Processes to collect information

**Web search and extraction:** Search of the websites of interest and extract the available information from the accommodations

**Data processing:** Execute text processing techniques to obtain only the variables of interest

**Storage:** The variables are stored in a database for further analysis
Set of variables

Directory of traditional accommodation

- **Name**: Name of the accommodation by which they are offered in the OTAs.
- **Category**: It is based on the rating that each OTA gives to the accommodation, and may or may not coincide with the classification used by the Ministry.
- **The number of rooms**: The number of rooms that exist in the accommodation facilities according to the OTAs.
- **Location**: Address shown in the accommodation description.
- **Geo-referenced position**: Position in latitude and longitude available on the web page.
- **An average weekly rate**

Directory of non-traditional accommodation (plus these variables)

- **Type**: Type of accommodation, for example: a full house, shared room, apartment, among others.
- **The number of guests**: Number of persons allowed to stay.
- **The number of beds**: Number of beds of the establishment.
First test: traditional directories

In the 70 centers measured, 35% of the sampling frame of traditional establishments is represented by the 3 stars category, being the most representative followed by the 4 stars category with 30% of the total

There is no direct relationship between distribution by establishments than by number of rooms; the most significant case is that of 5 stars establishments, whose measurement remains in 4th place (12%), while measure by the number of rooms gets the 2nd place with little more than 242 thousand rooms
Variation of data, now measuring three types of accommodation: house / apartment, shared room and private room

Also the number of beds (NOT always available for all types of accommodation)
Methodology for measuring room rates

Rates are obtained from 3 Meta search engines (traditional) and 1 OTA (non-traditional) twice a month. The rates are public and are generally observed by tourist destination:

The average rates are obtained from the number of total observations of each tourist center. It can be average up to three times that obtained from one establishment.

It was determined that the rate was based on a standard room and double occupancy.

The query is set to a target week (Monday to Sunday) averaging all of your days. This allows to tie the information with the measurement of the Ministry of Tourism (Monday to Sunday).

The extraction does NOT include lodging taxes or other charges.

The RACK Rate is not included.
## Report on rates from traditional accommodation

### Table of Rates

<table>
<thead>
<tr>
<th>Destino turístico</th>
<th>Número de datos</th>
<th>Tarifa mínima</th>
<th>Tarifa máxima</th>
<th>Media (promedio)</th>
<th>Desviación estándar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acapulco</td>
<td>136</td>
<td>$378.00</td>
<td>$10,500.00</td>
<td>$1,854.84</td>
<td>$1,421.59</td>
</tr>
<tr>
<td>Aguascalientes</td>
<td>97</td>
<td>$458.00</td>
<td>$4,359.00</td>
<td>$1,171.98</td>
<td>$790.87</td>
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<tr>
<td>Akumal</td>
<td>52</td>
<td>$710.00</td>
<td>$7,209.00</td>
<td>$2,368.69</td>
<td>$1,670.47</td>
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<tr>
<td>Bahías de Huatulco</td>
<td>100</td>
<td>$350.00</td>
<td>$4,830.00</td>
<td>$1,161.19</td>
<td>$912.74</td>
</tr>
<tr>
<td>Cabo San Lucas</td>
<td>102</td>
<td>$757.00</td>
<td>$38,956.00</td>
<td>$4,703.04</td>
<td>$6,173.57</td>
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<tr>
<td>Campeche</td>
<td>94</td>
<td>$320.00</td>
<td>$5,066.00</td>
<td>$934.46</td>
<td>$779.94</td>
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<tr>
<td>Cancún</td>
<td>498</td>
<td>$239.00</td>
<td>$17,487.00</td>
<td>$2,211.42</td>
<td>$2,404.43</td>
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<tr>
<td>Celaya</td>
<td>72</td>
<td>$347.00</td>
<td>$1,487.00</td>
<td>$810.65</td>
<td>$235.92</td>
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<tr>
<td>Chihuahua</td>
<td>162</td>
<td>$155.00</td>
<td>$28,725.00</td>
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<td>$5,171.46</td>
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<tr>
<td>Ciudad de México</td>
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<td>$210.00</td>
<td>$11,235.00</td>
<td>$1,791.62</td>
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<tr>
<td>Ciudad Juárez</td>
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<td>$175.00</td>
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<td>Colima</td>
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<td>$238.00</td>
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<td>$998.78</td>
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<td>Comitán de Domínguez</td>
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<td>$200.00</td>
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<tr>
<td>Cozumel</td>
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<td>$335.00</td>
<td>$21,425.00</td>
<td>$3,050.01</td>
<td>$3,005.80</td>
</tr>
</tbody>
</table>
With the test data of the second week target of May 2018-05-07 to 2018-05-13, we present the top five destinations with lower and higher rates, as well as information from 69 tourist destinations observed with an average of $1,985 Mexican pesos.
With data from the target week of 2018-05-07 to 2018-05-13, we present the top five destinations with lower and higher rates for non-traditional accommodation (Airbnb), as well as information from 68 tourist destinations observed with an average of $1,240 Mexican pesos.
Thank you