DATA QUALITY IN TOURISM STATISTICS

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✓ Definitions
✓ Attributes of Data Quality
✓ Data Quality Issues
✓ Montserrat at a Glance
Some Questions

✓ What is Data Quality?
✓ Why is Data Quality important?
✓ What are the causes of poor Data Quality?
✓ What is the effect of poor Data Quality?
WHAT IS DATA QUALITY?

Quality measurement of tourism statistics is concerned with providing the user with sufficient information to judge whether or not the data are of adequate quality for their intended use, i.e. to judge their “fitness for use”.

Data are of high quality if they are fit for their intended uses by customers in operations, decision making, and in planning.
The accuracy of tourism statistics is the degree to which the data correctly estimate or describe the quantities or characteristics they are designed to measure.

- Length of Stay (Intended vs Actual vs Est Intended)
- VES – 1997
- Purpose
- Accommodation
ATTRIBUTES OF DATA QUALITY

Timeliness (Data Age)

The timeliness of tourism statistics refers to the delay between the end of the reference period to which the data pertain, and the date on which the data are released and available to the public.

MONTSERRAT TOURISM STATS
✓ Immigration – 2-3 wks
✓ CSO Data Entry – 2-3 wks
✓ CSO Checks 1 wk
✓ CSO Dissemination 10th of Month

With a 1 month lag in between

“......SORRY I AM LATE FOR SCHOOL. MY DAD HELD ME UP WITH A LECTURE ON PUNCTUALITY”
## ATTRIBUTES OF DATA QUALITY

### Timeliness (Data Age)

<table>
<thead>
<tr>
<th>REFERENCE MONTH</th>
<th>IMMIGRATION TO CSO</th>
<th>CSO DATA ENTRY COMPLETED</th>
<th>DATA ENTRY CHECKS</th>
<th>DATA DISSEMINATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>JANUARY</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt; WEEK IN FEBRUARY</td>
<td>LAST WEEK IN FEBRUARY</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; WEEK IN MARCH</td>
<td>10&lt;sup&gt;th&lt;/sup&gt; MARCH</td>
</tr>
</tbody>
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Completeness

The component of completeness reflects the extent to which the statistical system in place answers the users’ needs and priorities by comparing all user demands with the availability of statistics.
IS THIS ENOUGH????
Completeness - MNI Monthly Stats

1. Arrivals to Date by Month & Mode of Travel
2. Arrivals by Country of Residence
3. Cruise Visitors & Cruise Ship Arrivals
4. Arrivals by Sex
5. Arrivals By Age Group
6. Arrivals By Place of Stay
7. Arrivals By Purpose of Visit
8. Yacht Calls to Date
9. Estimated Visitor Expenditure
ATTRIBUTES OF DATA QUALITY

Relevance

Relevance in statistics is assured when statistical concepts meet current and potential users' needs. Identification of the users and their expectations is a must.

Emphasis needed Here!!!

Not all stakeholders needs are met

MTB data needs

Little Bay Development data needs
ATTRIBUTES OF DATA QUALITY
Accessible & Unambiguous

Statistical data are most valuable when they are:
✓ Easily accessible by users
✓ Available in the form users desire
✓ Adequately documented – accompanied by good metadata
ATTRIBUTES OF DATA QUALITY
Accessible & Unambiguous

Statistical data are most valuable when they are:
✓ Access – Call, Email, Walk-in, Not published on a website
✓ Excel
✓ Currently no accompanying detailed metadata is provided at dissemination. Provided if queried
ATTRIBUTES OF DATA QUALITY

Coherent

Coherence reflects the degree to which the data are logically connected and mutually consistent.
CAUSES OF POOR DATA QUALITY

Technical Aspects

✓ Inaccurate measuring or counting device
✓ Errors in the data storage process
✓ Missing data fields
Human Aspects

✓ Unintentional errors in data entry
✓ Lack of understanding
✓ Poor Training
✓ Intentional/malicious incorrect data entry
✓ Poorly defined or out-of-date collection process
✓ Multiple levels of data entry
CAUSES OF POOR DATA QUALITY

Organizational Issues

✓ Merging of databases – mergers and acquisitions (CTOMist -> OTRIS)
✓ Non-merging of databases
✓ Lack of collaboration with time requirements of various stakeholders (IMMIGRATION, PORT AUTHORITY, MCW&L -> STATS -> ECCB)
✓ Lack of awareness of data quality issues
EFFECTS OF POOR DATA QUALITY

- Data is not fit for the purpose it was intended
- Decrease in user/customer satisfaction
- For the CSO
  - Decrease in reputation
- Impedes decision making
- Incorrect results
- Data rendered unusable
<table>
<thead>
<tr>
<th>ATTRIBUTE</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCURACY</td>
<td>?</td>
</tr>
<tr>
<td>TIMELINESS</td>
<td>?</td>
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<tr>
<td>COMPLETENESS</td>
<td>?</td>
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<tr>
<td>RELEVANCE</td>
<td>?</td>
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<tr>
<td>ACCESSIBILITY</td>
<td>?</td>
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<tr>
<td>COHERENCE</td>
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IT CAN BE DONE - LET'S GET CRACKING

LET'S GO 'GREEN' - Hit the Green Button
THE END

THANK YOU