

# DATA QUALITY IN TOURISM STATISTICS

Presented by: Frankseco Yorke
Statistician
Statistics Department Montserrat
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- **✓** Definitions
- **✓** Attributes of Data Quality
- **✓ Data Quality Issues**
- ✓ Montserrat at a Glance

#### LET'S THINK FOR A WHILE

#### **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.

## ATTRIBUTES OF DATA QUALITY Accuracy

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

THE WRONG & STRONG PHENOMENON ACCURRACY VS PREGGOMMODATION

## 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 10<sup>th</sup> 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)

REFERENCE MONTH	IMMIGRATION TO CSO	CSO DATA ENTRY COMPLETED	DATA ENTRY CHECKS	DATA DISSEMINATIO N
JANUARY	2 <sup>ND</sup> WEEK IN FEBRUARY	LAST WEEK IN FEBRUARY	1 <sup>ST</sup> WEEK IN MARCH	10 <sup>TH</sup> MARCH

## ATTRIBUTES OF DATA QUALITY 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



## 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

#### CAUSES OF POOR DATA QUALITY

#### **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 o decrease in reputation
- ✓ Impedes decision making
- ✓ Incorrect results
- ✓ Data rendered unusable

#### WHERE DO YOU FALL?



ATTRIBUTE	SCALE
ACCURACY	?
TIMELINESS	?
COMPLETENESS	<b>.</b>
RELEVANCE	<b>.</b>
ACCESSIBILTY	<b>.</b>
COHERENCE	?

#### IT CAN BE DONE - LET'S GET CRACKING



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



#### THE END

#### THANK YOU