TABLEAU
CONFERENCE
Welcome
A Practical Guide to Guided Analytics

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Tableau | EMEA
Eat. Sleep. Repeat.
Demo
Information overload!

Way too long to load!
A Practical Guide to Guided Analytics

New to Tableau | Intermediate | Advanced | Jedi
Composition Performance
Guided Analytics
A modular approach to creating intuitive, insightful and scalable dashboards
The Core Principles

A modular approach to creating intuitive, insightful and scalable dashboards

1. Intuitive
Simple enough for new users to immediately become familiar and understand

2. Insightful
Prescribe key info but still allow users to interactively pursue deeper insights

3. Scalable
Provide good performance at all levels of analysis, irrespective of data volumes
Agenda

1. **Intuitive**
   - Design for the audience
   - Refine the message
   - Arrange by priority
   - Instruct with titles and tooltips
   - Fix size

2. **Insightful**
   - Use BANs
   - Provide interactivity with filter actions
   - Enrich insight with viz-in-tooltip tips
   - Maintain context with highlight actions
   - Guide users to relevant detail

3. **Scalable**
   - Start right with data connection
   - Adopt a tiered approach
   - Aggregate extracts
   - Link tiers with x-data source actions
The Data Set

Registered house purchases in England

January 1995 to August 2018

~22 million records

Key fields:
- Date
- Address
- Property Type
- Price Paid

Contains HM Land Registry data © Crown copyright and database right 2018. This data is licensed under the Open Government License v3.0.
1. Intuitive
Simple enough for new users to immediately become familiar and understand
Design for the intended audience
Design for the intended device(s)
Refine the message

Raw Data

Clear Information

The Design Squiggle by Damien Newman
Arrange according to priority

- Emphasized
- Neither emphasized nor de-emphasized
- Emphasized
- Neither emphasized nor de-emphasized

Prioritize sheets and arrange accordingly.
Boost performance with fixed size
Instruct your users with titles and tooltips
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18BI-033 – Breakout – Dashboards & Design – Advanced

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Instruct your users with titles and tooltips
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Practical
Any intelligent fool can make things bigger and more complex… It takes a touch of genius to move in the opposite direction.

Albert Einstein
2. Insightful
Prescribe key info but still allow users to interactively pursue deeper insights
Give people BANs
Enrich the view with viz-in-tooltips
Maintain context with highlight actions
Make it interactive with filter actions
Limit the use of traditional filters
Limit the use of ‘quick’ filters
Guide users to relevant detail

The rise of house prices in England

Transactions: 925K YTD | -4% YOY

Average Price: £351K YTD | 12% YOY

Maximum Price: £708M YTD | 615% YOY

Price Paid History
Select a year to filter

Country Map
Select a county to filter

Most Active Counties:
1. Greater London
2. Greater Manchester
3. Hampshire
4. Kent
5. Essex

Most Expensive Counties:
1. Greater London
2. Surrey
3. Hertfordshire
4. Bath and North East...
5. Berkshire

Record Spending Cities:
1. London
2. Liverpool
3. Oldbury
4. Wimborne
5. Winchester
Reduce marks with expanding drill-downs
Practical
The human scale of data
3. Scalable

Provide good performance at all levels of analysis, irrespective of data volumes
Start right with the data connection

Connection
- Live
- Extract

Live
- Fast analytical database
- Full data volume requirement
- Real-time data requirement

Extract
- Slow database query performance
- Poor database stability
- Offline analysis requirement
Start right with the data connection

```sql
SELECT `Reference_ID` AS `Reference_ID`,
`Date` AS `Date`,
`State` AS `State`,
`Region` AS `Region`,
`Post_Code` AS `Post_Code`,
`District` AS `District`,
`City` AS `City`,
`Village_Town` AS `Village_Town`,
`Street` AS `Street`,
`House_Name_Number` AS `House_Name_Number`,
`Flat` AS `Flat`,
`Property_Type` AS `Property_Type`,
`Build` AS `Build`,
`Estate_Type` AS `Estate_Type`,
`Price_Paid` AS `Price_Paid`,
`County` AS `County`,
`FileName` AS `FileName`,
`Population` AS `Population`,
`LSOA_Code` AS `LSOA_Code`,
`Local_authority` AS `Local_authority`,
`MSOA_Code` AS `MSOA_Code`
FROM `pre-sales-demo.TC`.`HM_Land_Registry`.
```
Start right with the data connection
Start right with the data connection

Native

```sql
SELECT 'County' AS 'County',
AVG('Price_Paid') AS 'avg_Price_Paid_ok'
FROM 'pre-sales-demo.TC'.`HM_Land_Registry`
```

Custom SQL

```sql
SELECT County AS 'County',
AVG('Price_Paid') AS 'avg_Price_Paid_ok'
FROM (SELECT `Reference_ID` AS 'Reference_ID',
`Date` AS 'Date',
`State` AS 'State',
`Region` AS 'Region',
`Post_Code` AS 'Post_Code',
`District` AS 'District',
`City` AS 'City',
`Village_Town` AS 'Village_Town',
`Street` AS 'Street',
`House_Name_Number` AS 'House_Name_Number',
`Flat` AS 'Flat',
`Property_Type` AS 'Property_Type',
`Build` AS 'Build',
`Estate_Type` AS 'Estate_Type',
`Price_Paid` AS 'Price_Paid',
`County` AS 'County',
`FileName` AS 'FileName',
`Population` AS 'Population',
`LSOA_Code` AS 'LSOA_Code',
`Local_authority` AS 'Local_authority',
`MSOA_Code` AS 'MSOA_Code'
FROM 'pre-sales-demo.TC'.`HM_Land_Registry'
) `Custom SQL Query`
Adopt a tiered approach

- **Cold**: Unstructured data
- **Warm**: Prepared data
- **Hot**: Aggregated data
Aggregate the data
Aggregate the data
Aggregate the data

Aggregate Price Paid and # of Records to year and county level
Aggregate the data

View Data: HM Land Registry

21,977,800 rows → checkbox Show aliases

Extract Data

Specify how much data to extract:
Filters (optional)

Filter
Details

Aggregation
- checkbox Aggregate data for visible dimensions
- option Roll up dates to [Year]

Number of Rows
- option All rows

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View Data: HM Land Registry

23 rows → checkbox Show aliases
Aggregate the data
Adopt a tiered approach

- Hot
- Warm
- Cold
Link tiers with x-data source actions

Hot

Warm

Cold
Practical
The human scale of data
Recap

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Information overload? (Not with interactive dashboard navigation and story points)

Tuesday  |  14:15 – 16:45  |  MCCNO – L2 – 244

Don’t gamble on your dashboard | Effective visual design

Wednesday  |  10:45 – 13:45  |  MCCNO – L2 – 206
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Please complete the session survey from the My Evaluations menu in your TC18 app.
Thank you!
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A Practical Guide to Guided Analytics

Thurs | 14:15 – 15:15 | MCCNO – L2 – Theater B