



Business Intelligence 101

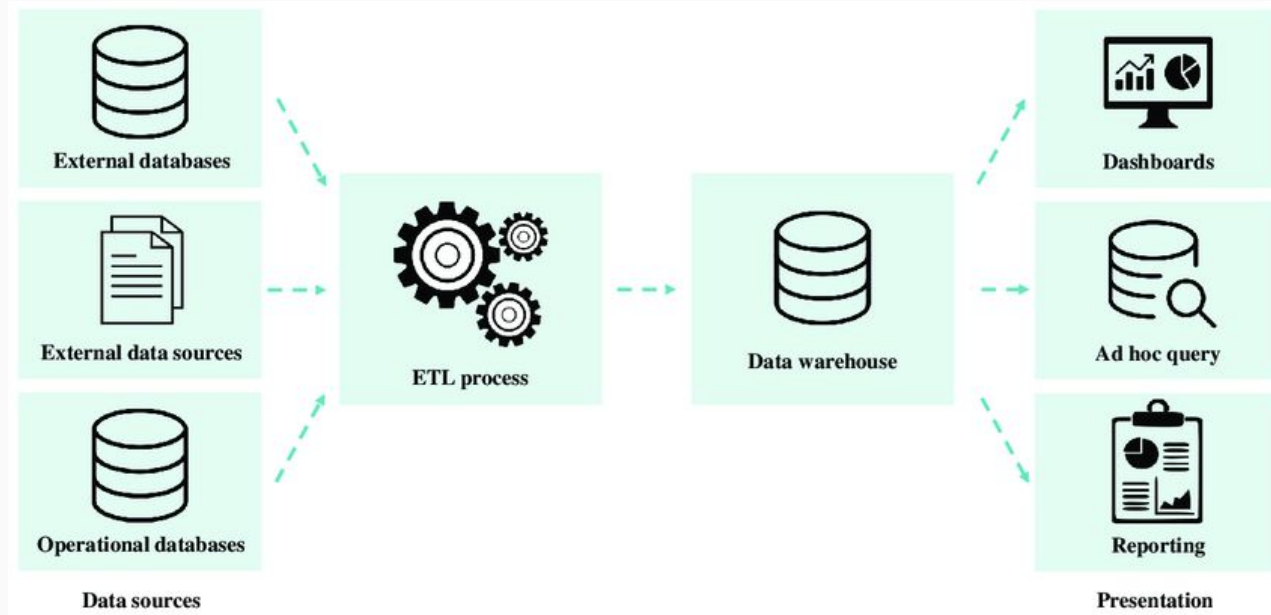
Changing the way you think about data!

itsmecevi.github.io
widyaanalytic.com

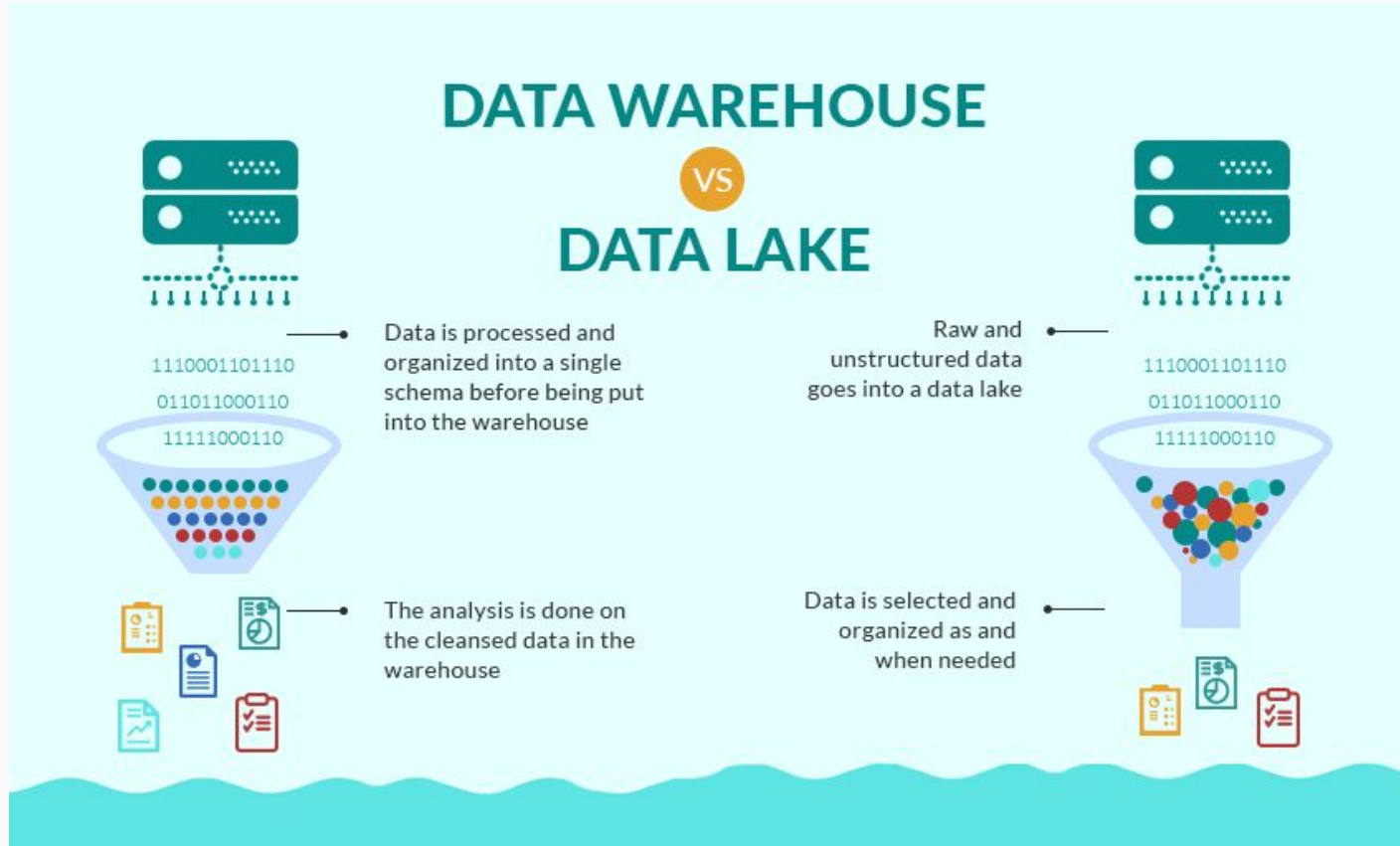
Agenda:

1. Business Intelligence Scope
2. Self-Service Business Intelligence (modern BI)
3. Clash of the titan! SSBI Industry-Update
4. Tableau Products

BI Data Workflow



Big Data Workflow



Business Intelligence processes include:

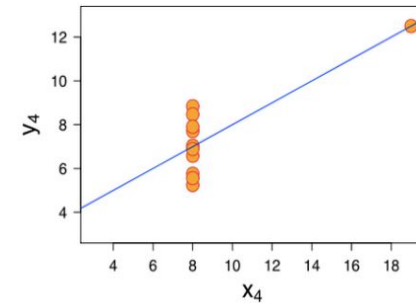
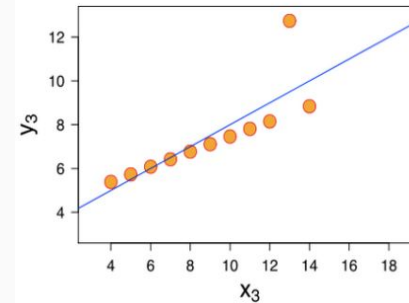
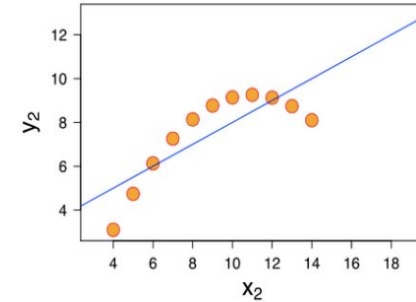
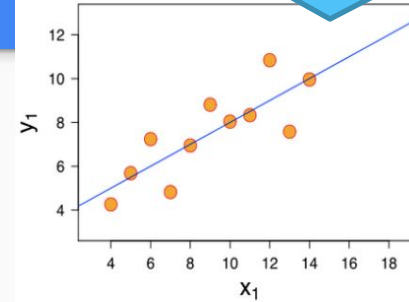
Data mining (Predictive Analytics)
Reporting (**Dashboard & Ad-Hoc**)
Descriptive analytics
Querying

Statistical analysis
Data visualization
Visual analysis
Data preparation

The Power of Data Visualization

Are you able to see any patterns, relations?

x_1	y_1	x_2	y_2	x_3	y_3	x_4	y_4
10.0	8.04	10.0	9.14	10.0	7.46	8.0	6.58
8.0	6.95	8.0	8.14	8.0	6.77	8.0	5.76
13.0	7.58	13.0	8.74	13.0	12.74	8.0	7.71
9.0	8.81	9.0	8.77	9.0	7.11	8.0	8.84
11.0	8.33	11.0	9.26	11.0	7.81	8.0	8.47
14.0	9.96	14.0	8.10	14.0	8.84	8.0	7.04
6.0	7.24	6.0	6.13	6.0	6.08	8.0	5.25
4.0	4.26	4.0	3.10	4.0	5.39	19.0	12.50
12.0	10.84	12.0	9.13	12.0	8.15	8.0	5.56
7.0	4.82	7.0	7.26	7.0	6.42	8.0	7.91
5.0	5.68	5.0	4.74	5.0	5.73	8.0	6.89



Notice how quickly your eye finds variations in these attributes.



SHAPE



SIZE



COLOR



ORIENTATION

Data visualization: what you need to know

People are **30 times** more likely to absorb high-quality infographics than plain text.

97% information will be deemed to be accurate and truthful with data visualization

90% of the information transmitted to the brain is visual

[itsmecevi.github.io](https://github.com/itsmecevi)

Data visualization strategy will provide an **ROI of \$13.01** back on every dollar spent.

Data Viz vs Visual Analytics



The New Art

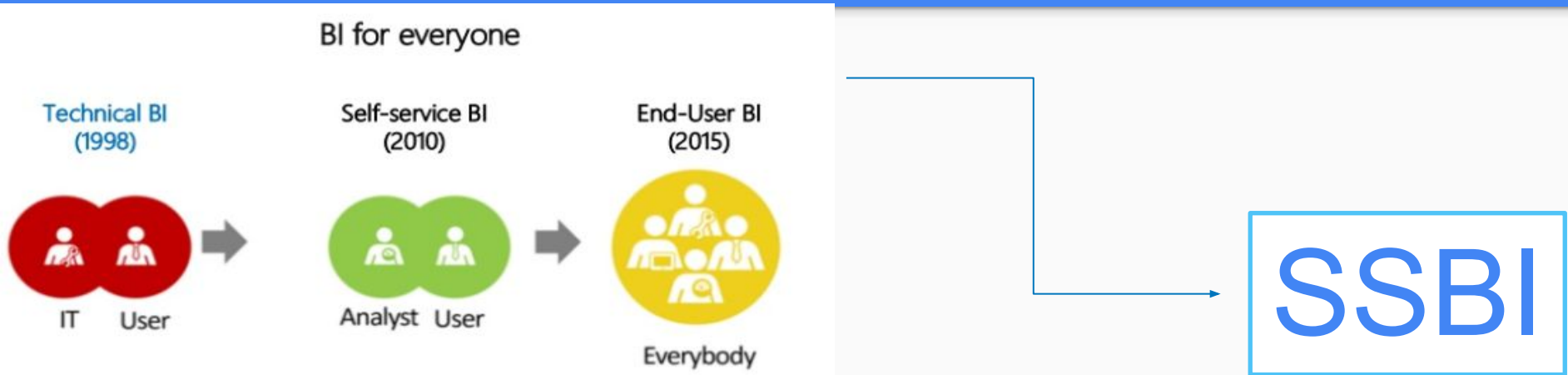
Self Service Reporting

Kantar: <https://www.informationisbeautifulawards.com/>

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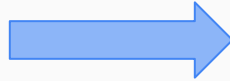
Nand Studio: <https://nand.io/projects/peak-spotting>

BI History:



Keys point...

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Self-serviceBI vs traditional BI tools

I need an answer
to my question

get data

prepare data

visualise

share



I need an answer
to my question

get data

get hold of IT
contact to use BI tool

wait for IT contact
to juggle his time

wait 2/3 weeks
for feedback

go back to IT contact
because he hasn't
answered the original
question

repeat process



Top Reasons SSBI

- Fast Reporting
- Save Time
- Save Money
- Faster Decisions
- Flexible Solution
- On premises/cloud
- Insert R/Python scripting

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BUSINESS INTELLIGENCE

SELF SERVICE BI **VS** TRADITIONAL BI



FAST REPORTING

The self-service BI tool will be much more adaptable and easy to use.

SAVE TIME

By removing the dependency on technical staff are able to increase the efficiency of their analytical process.

SAVE MONEY

Data reporting staff or technical team is not needed, as end users can report themselves.

FASTER DECISIONS

Self-service BI helps in better decision-making process by delivering quick and accurate reports.

FLEXIBLE SOLUTION

End users can analyze their business data from any device, anywhere, at any time.



PREDEFINED REPORTS

With traditional BI tools, interaction with business data is only possible through reports, which were previously created by the IT team.

DATA WAREHOUSES

Data warehouses store all the data required for analysis and most of the time demand pre-computation of KPIs.

HIGH COST

These BI tools are comparatively expensive to purchase and difficult to implement when compared to self-service BI tools.

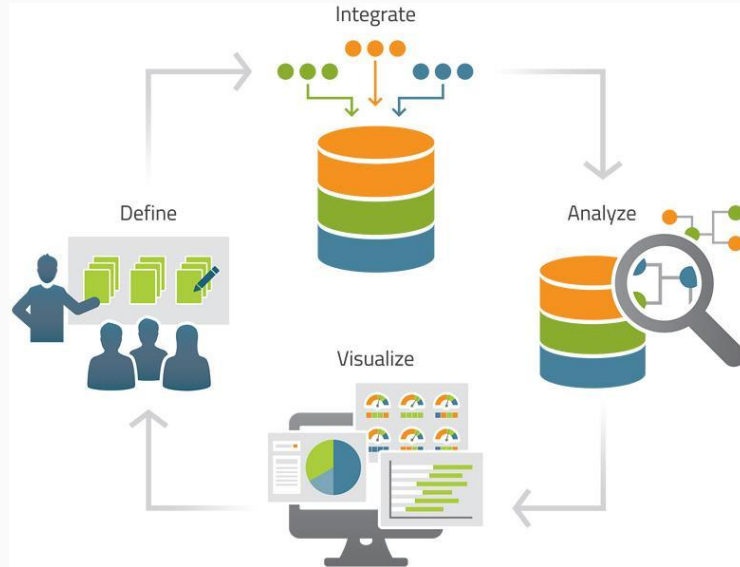
PRESET METRICS

Traditional BI tools are highly dependant on IT teams, the metrics have to be preset and changes to visualization can only be made by request.

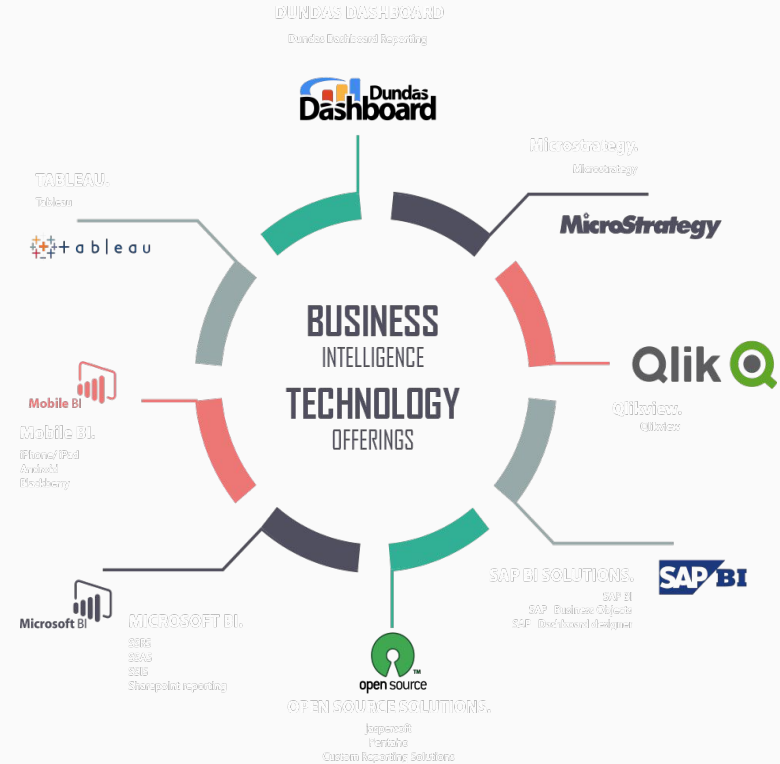
DESKTOP DEPENDANT

Users can only access the business data that were previously included in dashboard created on the desktop.

BI Processes & Industry:



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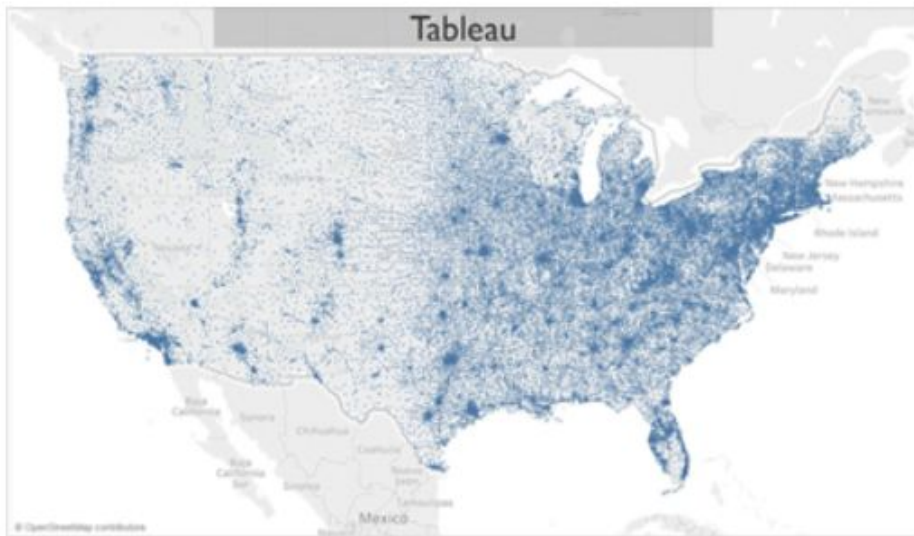
Clash of the Titans!

Power BI vs Tableau

Parameter:

- Visualization
- Cost
- Integration! Embedded system
- Data management
- Functionality
- Revenue
- Implementation Team
- The End Users (Who and How Many)
- Number of Systems You'll Connect
- How Will You Be Using the Tool?
- Gold-Standard Desired
- Do you have Office 365?
- Datasets over 10 GB
- Comfortable Spending Extra Time or Money?

Key Identifiers / Strengths



Real comparison screenshot, Tableau with **38,000+** zip codes data points and Power BI with the limited **3500** data points.

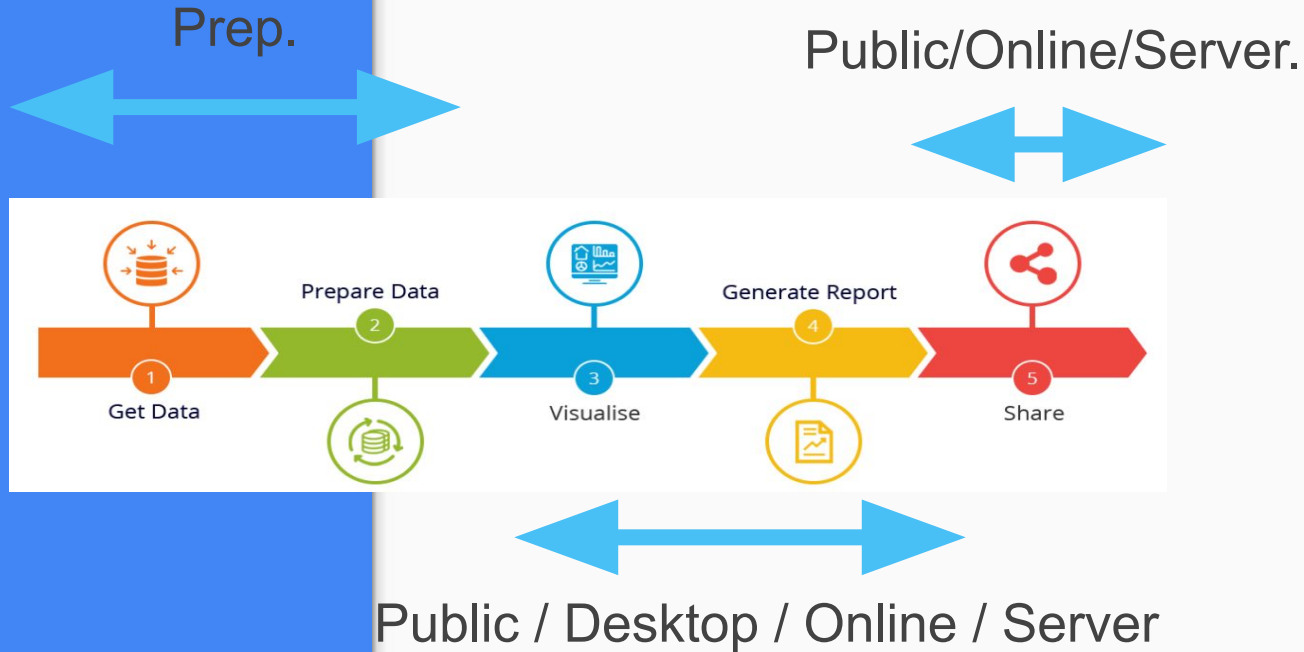
Tableau Products

<https://www.tableau.com/products>

Tableau Prep.



Tableau Workflow



References

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- <https://www.grazitti.com>
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- <https://www.slideshare.net>
- [izenda.com](https://www.izenda.com)
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