

# Introduction to Tableau Public

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# Objectives

- Understand some key terms such as Business Intelligence (BI) and BI structure.
- Know what Tableau Public is and its **limitations**.
- **Learn how Tableau Public works and its basic workflow.**

# What is Tableau?

- Tableau is **business intelligence software** that helps people see and understand their data.

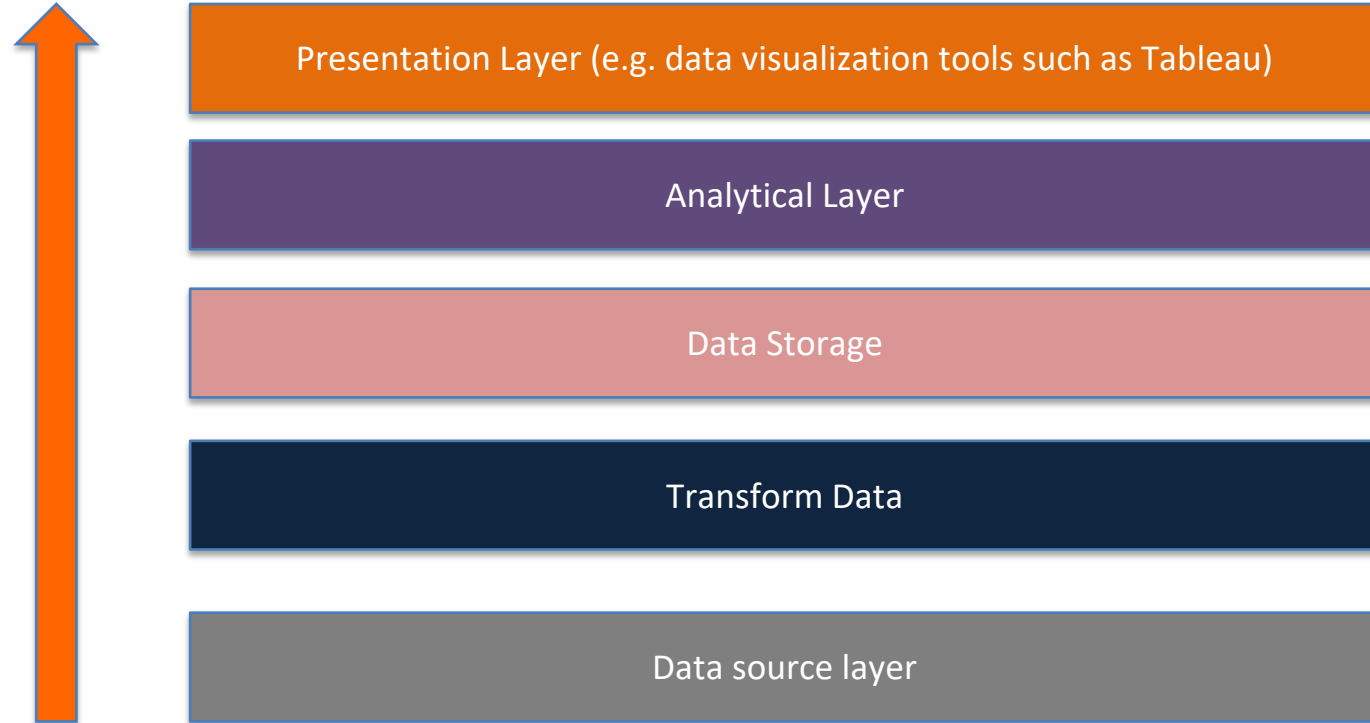
[https://www.tableau.com/trial/tableau-software?utm\\_campaign\\_id=2017049&utm\\_campaign=Prospecting-CORE-ALL-ALL-ALL-ALL&utm\\_medium=Paid+Search&utm\\_source=Google+Search&utm\\_language=EN&utm\\_country=USCA&kw=what is tableau&adgroup=CTX-Brand-General-E&adused=21.](https://www.tableau.com/trial/tableau-software?utm_campaign_id=2017049&utm_campaign=Prospecting-CORE-ALL-ALL-ALL-ALL&utm_medium=Paid+Search&utm_source=Google+Search&utm_language=EN&utm_country=USCA&kw=what+is+tableau&adgroup=CTX-Brand-General-E&adused=21)

# What is Business Intelligence (BI)?

- The Business Intelligence (BI) refers to technologies, applications and practices for the collection, integration, analysis, and presentation of **business information** to support **better business decision making**.

*What is Business Intelligence (BI)? from OLAP.com <http://olap.com/learn-bi-olap/olap-bi-definitions/business-intelligence/>*

# BI System can have five layers.



## Raw Data: DMC Equipment Circulation from System Log Text Files.

```
E201401021409270074R ^S48CVFFDMCSTUDNT^FEFONDREN^FcNONE^FWDMCSTUDNT^NQ31272101614855^U0001092700^IQA
UDREC ROL 2011^IS6^RJDMC^dC3^rsY^jz1^Fv2000000^^^0
E201401021409330074R ^S53CVFFDMCSTUDNT^FEFONDREN^FcNONE^FWDMCSTUDNT^NQ31272101615472^U0001092700^IQT
RI SUN 2011^IS2^RJDMC^dC3^rsY^jz1^Fv2000000^^^0
E201401021409420074R ^S58CVFFDMCSTUDNT^FEFONDREN^FcNONE^FWDMCSTUDNT^NQ31272101615282^U0001092700^IQV
CAM-SD CAN 2012^IS3^RJDMC^dC3^rsY^jz1^Fv2000000^^^0
E201401021545510074R ^S66CVFFDMCSTUDNT^FEFONDREN^FcNONE^FWDMCSTUDNT^NQ31272102492400^U0500310000^IQC
ONSGMIC AZD 2012^IS1^CF01/06/2014,15:00^RJDMC^dC3^rsY^jz1^OIDMCPTMS^Fv2000000^^^0
E201401031406130072R ^S10CVFFDMCSTUDNT^FEFONDREN^FcNONE^FWDMCSTUDNT^NQ31272101615423^U0001100000^IQT
RI PS 2012^IS5^RJDMC^dC3^rsY^jz1^Fv2000000^^^0
E201401031425220072R ^S17CVFFDMCSTUDNT^FEFONDREN^FcNONE^FWDMCSTUDNT^NQ31272101615399^U0001140000^IQT
RI PS 2012^IS2^RJDMC^dC3^rsY^jz1^Fv2000000^^^0
E201401061623420129R ^S11CVFFDMCSTUDNT^FEFONDREN^FcNONE^FWDMCSTUDNT^NQ31272101615290^U0001197000^IQV
CAM-SD CAN 2012^IS4^RJDMC^dC3^rsY^jz1^Fv2000000^^^0
E201401061623460129R ^S16CVFFDMCSTUDNT^FEFONDREN^FcNONE^FWDMCSTUDNT^NQ31272101615738^U0001197000^IQT
RI PS 2012^IS10^RJDMC^dC3^rsY^jz1^Fv2000000^^^0
E201401071341230086R ^S18CVFFDMCSTUDNT^FEFONDREN^FcNONE^FWDMCSTUDNT^NQ31272101615001^U0500240000^IQP
ER MINT-VGA 2011^IS1^RJDMC^dC3^rsY^jz1^Fv2000000^^^0
```

## Transformed Data: an Excel File

1	DMC charges recorded in 2014 and 2016							
2								
3	User Profile	User Cat1	User Cat2	Time Charge	Op Type	Station Operator	Barcode	Title/Call No.
4	GRAD	GRAD	STUDENT	01/02/2014 14:09:27	CHARGE	DMCSTUDNT	31272101614855	AUDREC ROL 2011
5	GRAD	GRAD	STUDENT	01/02/2014 14:09:33	CHARGE	DMCSTUDNT	31272101615472	TRI SUN 2011
6	GRAD	GRAD	STUDENT	01/02/2014 14:09:42	CHARGE	DMCSTUDNT	31272101615282	VCAM-SD CAN 2012
7	STAFF	STAFF	STAFF	01/02/2014 15:45:51	CHARGE	DMCSTUDNT	31272102492400	CONSGMIC AZD 2012
8	GRADUATE15	GRAD15	STUDENT	01/03/2014 14:06:13	CHARGE	DMCSTUDNT	31272101615423	TRI PS 2012
9	GRADUATE15	GRAD15	STUDENT	01/03/2014 14:25:22	CHARGE	DMCSTUDNT	31272101615399	TRI PS 2012
10	GRADUATE15	GRAD15	STUDENT	01/06/2014 16:23:42	CHARGE	DMCSTUDNT	31272101615290	VCAM-SD CAN 2012
11	GRADUATE15	GRAD15	STUDENT	01/06/2014 16:23:46	CHARGE	DMCSTUDNT	31272101615738	TRI PS 2012
12	STAFF	STAFF	STAFF	01/07/2014 13:41:23	CHARGE	DMCSTUDNT	31272101615001	PER MINI-VGA 2011
13	GRAD	GRAD	STUDENT	01/07/2014 15:49:55	CHARGE	DMCSTUDNT	31272101615282	VCAM-SD CAN 2012
14	GRAD	GRAD	STUDENT	01/07/2014 15:49:58	CHARGE	DMCSTUDNT	31272102492418	CONSGMIC AZD 2012
15	GRAD	GRAD	STUDENT	01/07/2014 15:49:59	CHARGE	DMCSTUDNT	31272101615399	TRI PS 2012
16	GRADUATE15	GRAD15	STUDENT	01/08/2014 17:04:11	CHARGE	JUNEAUK	31272101354213	DMC KEY
17	TERMINATED	STAFF	STAFF	01/09/2014 13:09:18	CHARGE	DMCSTUDNT	31272101615076	DSL R CAN 2012
18	TERMINATED	STAFF	STAFF	01/09/2014 13:09:26	CHARGE	DMCSTUDNT	31272101615977	DSL R Z250-LEN CAN 2013)
19	TERMINATED	STAFF	STAFF	01/09/2014 13:10:22	CHARGE	DMCSTUDNT	31272101615076	DSL R CAN 2012
20	TERMINATED	STAFF	STAFF	01/09/2014 13:10:25	CHARGE	DMCSTUDNT	31272101615977	DSL R Z250-LEN CAN 2013)
21	STAFF	STAFF	STAFF	01/10/2014 15:36:22	CHARGE	DMCSTUDNT	31272101615530	PROJ EPS 2011
22	LIBRARYUSE	STAFF	STAFF	01/10/2014 15:56:49	CHARGE	DMCSTUDNT	31272101615613	PENTAB WAC 2011
23	LIBRARYUSE	STAFF	STAFF	01/10/2014 15:57:12	CHARGE	DMCSTUDNT	31272101615613	PENTAB WAC 2011
24	LIBRARYUSE	STAFF	STAFF	01/10/2014 15:57:47	CHARGE	DMCSTUDNT	31272101615613	PENTAB WAC 2011
25	GRADUATE14	GRAD14	STUDENT	01/10/2014 16:17:20	CHARGE	DMCSTUDNT	31272101615548	PROJ EPS 2011

# Why Tableau?



Gartner's 2018 Magic Quadrant for Analytics and Business Intelligence Platforms  
<https://www.gartner.com/doc/reprints?id=1-4RXB56A&ct=180227&st=sb>



# Tableau Viz Examples

- Tableau Viz Examples

[https://www.tableau.com/trial/tableau-examples?utm\\_campaign\\_id=2017049&utm\\_campaign=Prospecting-CORE-ALL-ALL-ALL-ALL&utm\\_medium=Paid+Search&utm\\_source=Google+Search&utm\\_language=EN&utm\\_country=USCA&kw=%2Btableau%20%2Bexamples&adgroup=CTX-Brand-Examples-B&adused=329493725742&matchtype=b&placement=&gclid=EA1aIQobChMI5-yk48gC4wIVGp7ACh3VTAGTEAAYASAAEgJDcFD\\_BwE&gclsrc=aw.ds](https://www.tableau.com/trial/tableau-examples?utm_campaign_id=2017049&utm_campaign=Prospecting-CORE-ALL-ALL-ALL-ALL&utm_medium=Paid+Search&utm_source=Google+Search&utm_language=EN&utm_country=USCA&kw=%2Btableau%20%2Bexamples&adgroup=CTX-Brand-Examples-B&adused=329493725742&matchtype=b&placement=&gclid=EA1aIQobChMI5-yk48gC4wIVGp7ACh3VTAGTEAAYASAAEgJDcFD_BwE&gclsrc=aw.ds)

- Web Analytics Dashboard

- DMC equipment circulation data

[https://public.tableau.com/views/DMCEquipmentCirculationDataViz/DMC-Equipment-Circulation-Story?:embed=y&:display\\_count=yes&:origin=viz\\_share\\_link](https://public.tableau.com/views/DMCEquipmentCirculationDataViz/DMC-Equipment-Circulation-Story?:embed=y&:display_count=yes&:origin=viz_share_link)

# Why Tableau?

- Self Service BI

Users can create their own reports and dashboards without putting additional strain on the BI development team.

- Quick Development

Tableau's drag/drop features allow non-technical users to quickly build effective dashboards.

- Data Visualization

Tableau allows for a highly interactive and effective analytical experience for users and provides professional layout templates and features for meaningful reporting and dashboarding.

# Tableau Products

- Tableau Desktop, Tableau Prep (released in April 2018)
- Tableau Server
- Tableau Online
- **Tableau Public – a free service/solution** from Tableau company. To use Tableau Public,
  - Download Tableau Public (Desktop) at <https://public.tableau.com/s/download>
  - Create an account on Tableau Public at <https://public.tableau.com/s/>

# Tableau Public limitations

## Tableau desktop public edition

- Limited live data connection and limited data sources
- **Can't save work locally, which poses a data privacy issue.**
- Up to 15,000,000 rows per workbook

## Tableau public server

- **Up to 10GB online storage per free Tableau Public account**

# Tableau Academic Programs

- Tableau Desktop and Tableau Prep is free for students and instructors around the world.

Read more at

<https://www.tableau.com/academic#8PcZYr0tkUI2ZvFG.99>

- **Tableau for Students**

Students (K12 and postsecondary) at accredited academic institutions worldwide are eligible for a free one-year license to activate Tableau Desktop and Tableau Prep.

<https://www.tableau.com/academic/students#form>

# Data Visualization Workflow with Tableau

- Connect to your data
- Analyze your data
  - Create a basic view with **worksheet**
    - Drill into the data
    - Increase the level of detail with small multiples
    - Filter the view to focus your exploration
    - Use the Marks card to add depth to your analysis
  - Build an interactive **dashboard**
  - Present your analysis with **story**
- Save/share your work