

What is Visual Analytics And Why ?

"Visual analytics is the representation and presentation of data that exploits our visual perception abilities in order to amplify cognition."

- Andy Kirk, author of "Data Visualization: a successful design process"



Please Count The Total 9 in the below data set !

3	3	0	3	0	1	8	7	6	8	2	1	4	0	3	8	3	7	7	2	0	5	2	3	2	7	0	2	0
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1	0	2	2	7	6	3	3	0	8	8	0	3	1	8	8	1	2	1	7	5	2	9	3	5	8	3	2	5

Please Count Now !

3	3	0	3	0	1	8	7	6	8	2	1	4	0	3	8	3	7	7	2	0	5	2	3	2	7	0	2	0
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1	0	2	2	7	6	3	3	0	8	8	0	3	1	8	8	1	2	1	7	5	2	9	3	5	8	3	2	5

Human Perception & Cognition

Humans Are Slow at Mental Math

24

X 86



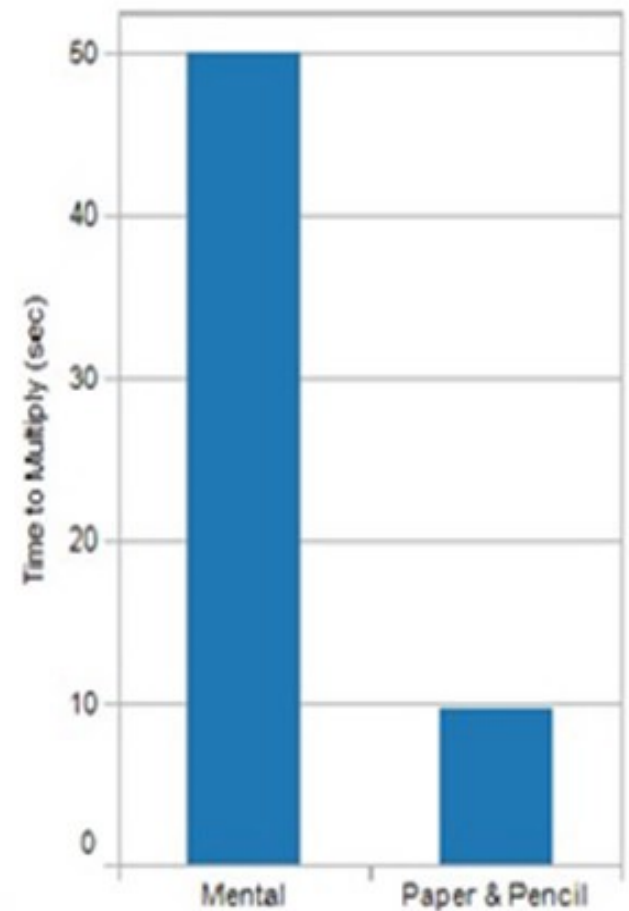
Using Pen & Paper

We're Faster When We Use the Pen

24
X 86

144
1920

2064



We're Much Faster When We Can "See" Data

Sales per Category/ Sub Category

Category	Sub-Category	Sales
Technology	Phones	330007.1
Furniture	Chairs	328449.1
Office Supplies	Storage	223843.6
Furniture	Tables	206965.5
Office Supplies	Binders	203412.7
Technology	Machines	189238.6
Technology	Accessories	167380.3
Technology	Copiers	149528.0
Furniture	Bookcases	114880.0
Office Supplies	Appliances	107532.2
Furniture	Furnishings	91705.2
Office Supplies	Paper	78479.2
Office Supplies	Supplies	46673.5
Office Supplies	Art	27118.8
Office Supplies	Envelopes	16476.4
Office Supplies	Labels	12486.3
Office Supplies	Fasteners	3024.3



We can make faster Business Decisions when we SEE the Analysis from different perspective



Sales Report for Superstore

Dates

1/3/2015 12/30/2018

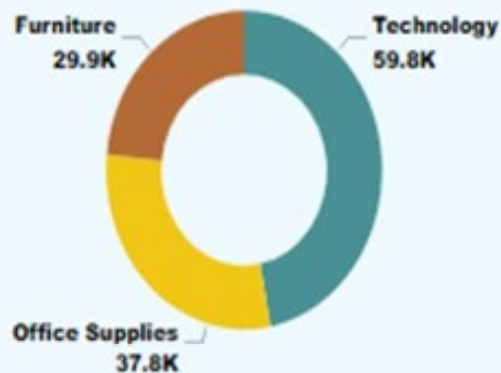
Region

East

Segment

Home Office

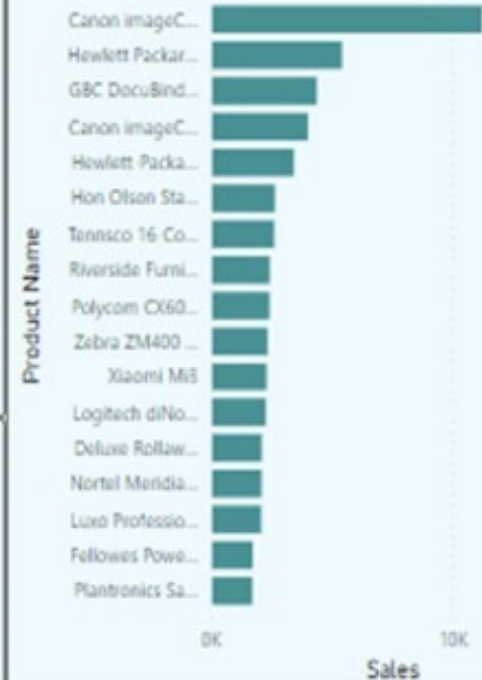
Sales by Category



Sales per Month



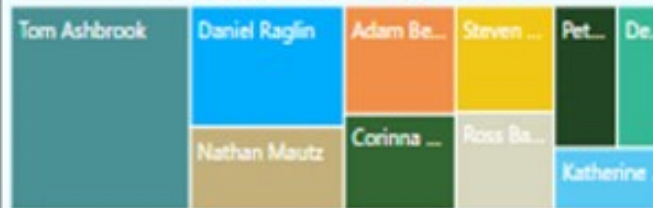
Sales by Product Name



127.5K
Sales

26.71K
Profit

Sales by Customer Name



Copiers 17

Supplies 15

Paper 336

Binders 303

Furnishings 193

Phones 164

The Cycle of Visual Analysis



Visualization Best Practices

- Representing data for humans
- Color
- Maps
- Creating Reports / Dashboards

