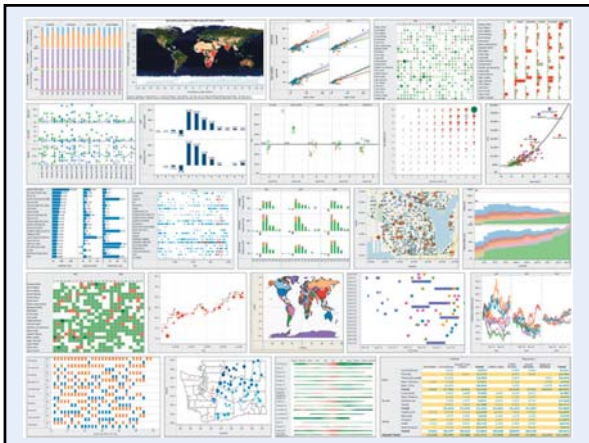


Intro to Tableau Software

Starting Survey Analysis

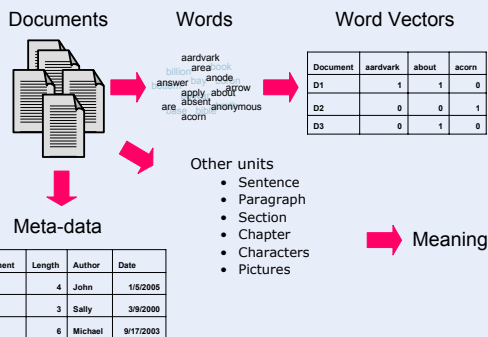
Friday 5 Oct 2007
 Polle Zellweger

Tableau Software Tool

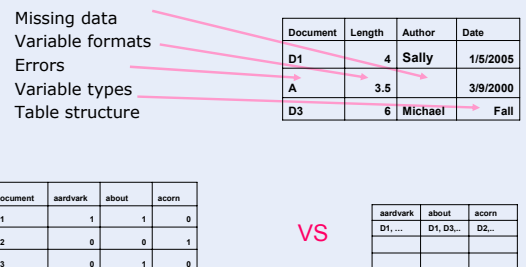


Data Transformations

Raw Data



Raw Data Issues



Data Transformations

Clean raw data
Calculations

Individual	Birth	Death	Age
I1	1908	1965	53
I2	1952		48
I3	1964		36
I4	2000		1

Structural

- Demote
- Promote
-

Data to Present

Consider user task

- Precise data vs. overview, summary
- Actual vs. derived values

Examples of derived values

- Count
- Rank
- Percent
- Average (mean vs. median)
- Deviation / difference
- Distribution (range vs. standard deviation)
- Time series
- Correlation

Individuals

Professions

Indiv	Age	Income	P1	P2	P3	P4	P5	P6	P7	P8
I1	53	1	0	1	0	0	0	0	0	0
I2	48	6	0	1	0	0	0	0	0	0
I3	36	8	0	0	0	1	0	0	0	0
I4	22	10	0	0	0	0	0	1	0	0
I5	36	4	1	0	0	0	0	0	0	1
I6	51	7	0	0	0	0	0	0	0	0
I7	27	3	0	0	0	1	0	0	0	0
I8	33	1	0	0	0	0	0	0	0	0

Calculation (before)

Indiv	Age	Income	P1	P2	P3	P4	P5	P6	P7	P8
I1	53	1	0	1	0	0	0	0	0	0
I2	48	6	0	1	0	0	0	0	0	0
I3	36	8	0	0	0	1	0	0	0	0
I4	22	10	0	0	0	0	0	1	0	0
I5	36	4	1	0	0	0	0	0	0	1
I6	51	7	0	0	0	0	0	0	0	0
I7	27	3	0	0	0	1	0	0	0	0
I8	33	1	0	0	0	0	0	0	0	0

Calculation (after)


Classing

Indiv	Age 6-20	Age 20-40	Age >40	Inc 0-2	Inc 3-5	Inc 6-8	Inc 9-10	P1	P2	P3	P4	P5	P6	P7	P8
I1	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0
I2	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0
I3	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0
I4	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0
I5	0	1	0	0	1	0	0	1	0	0	0	0	0	0	1
I6	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
I7	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0
I8	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0

Structural

Promote Professions

Indiv	Age	Income	P1	P2	P3	P4	P5	P6	P7	P8
I1	53	1	0	1	0	0	0	0	0	0
I2	48	6	0	1	0	0	0	0	0	0
I3	36	8	0	0	0	1	0	0	0	0
I4	22	10	0	0	0	0	0	1	0	0
I5	36	4	1	0	0	0	0	0	0	0
I6	51	7	0	0	0	0	0	0	0	1
I7	27	3	0	0	0	1	0	0	0	0
I8	33	1	0	0	0	0	0	0	0	0



Prof	Avg Age	Avg Inc
P1	36	4
P2	51	3.5
P3	36	8
P4	31	5.5
P5	0	0
P6	22	10
P7	0	0
P8	51	7

Target: scatterplot

Prof	Avg Age	Avg Inc
P1	36	4
P2	51	3.5
P3	36	8
P4	31	5.5
P5	0	0
P6	22	10
P7	0	0
P8	51	7

