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Promo Data

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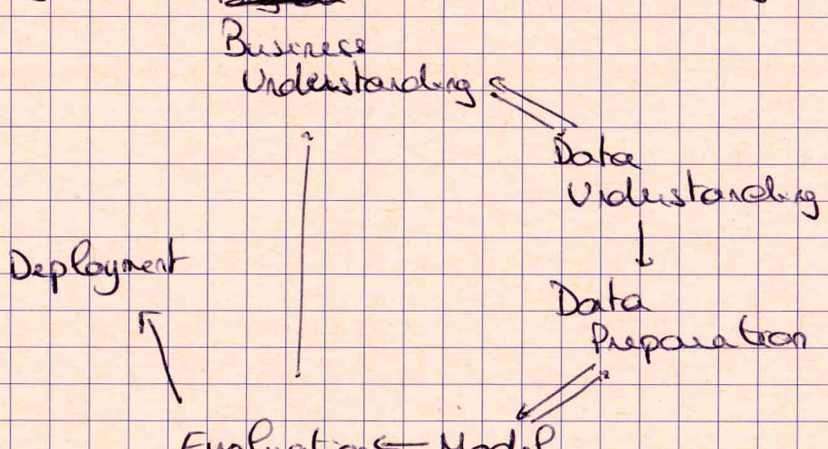
MATIÈRE Data Visualisation (1/2).

We followed CRISP DM method (Cross Industrial Standard Process for Data Mining (CRISP DM) method to do data mining. It follows this graph:



- Business Understanding is knowing what we need and why we need it.
- Data Understanding is knowing what data we acquired and what are the trends.
- Data Preparation is creating new features or arranging data according to the modelf we want to do.
- Modelf is creation of data mining model.
- Evaluation is testing our modelf to see if it fits business understanding
- And if it fits, we deploy it to make it usable by everyone

Other wise we have the SEMMA (Sample Explore Modify Modelf Asses) modelf which consists in:

- Sample: select useful data regarding our needs.
- Explore: looking for trends, visualize data, basics analytics.
- Modify: transform the data to make it usable for our model
- Modelf: create modelf regarding our needs
- Asses: Evaluate it.

Q3. Comparaison between Tableau, PowerBI, QlikView:

	Tableau	PowerBI	QlikView
Reputation	Mostly Used Tool.	2nd most popular	
Usage	Good Visualization tool	Good Data manipulation tool.	~~Good~~ to ok in both.
Price	Expensive over 35$/month/user	Less expensive (arround 10$/month)	Mid Range Price
Sources	Huge number of sources.	Most restricted number of sources.	
Limitations	Server's limit	10GB	Server's limit.
Speed	Efficient (RAM used)	Slower.	Efficient (RAM) used.
Others		• Produced By Microsoft • Lots of updates. • Good compatibility with Excel.	

Q5. It exists 4 main point of views bias that ~~could~~ we have to ~~check~~ avoid if we want to present the data rightly.

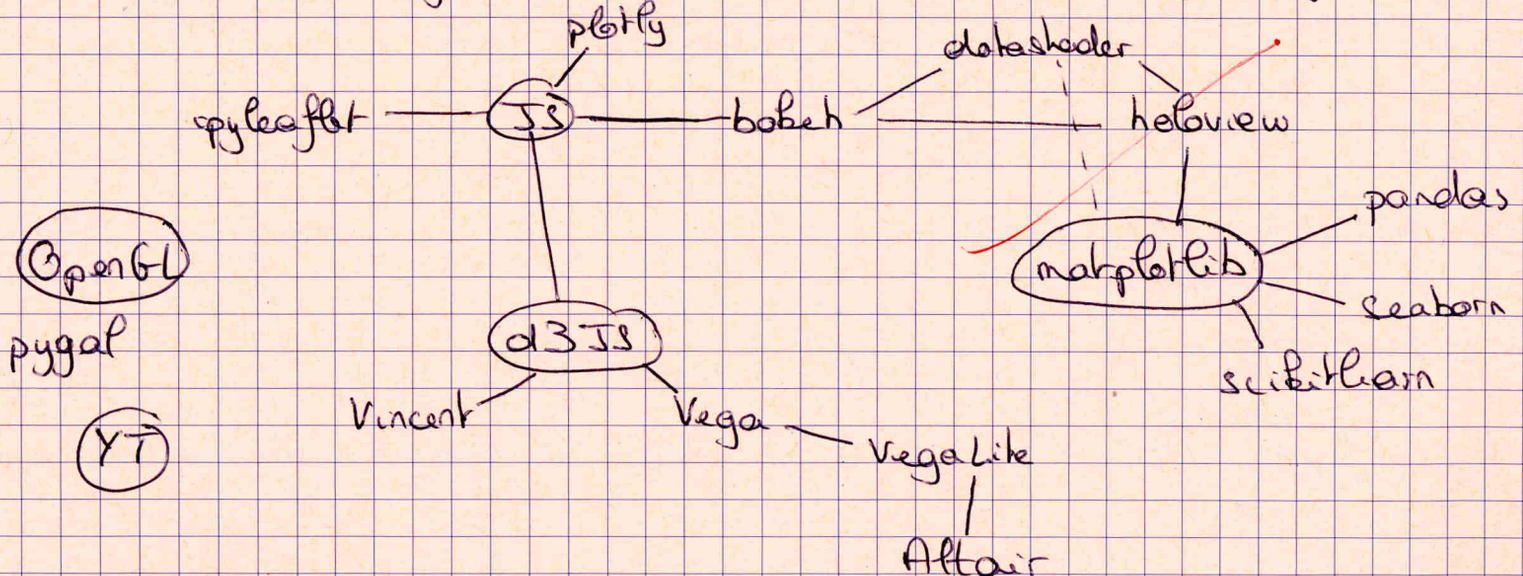
- Conceptual POV: if you find a correlation between two features, it doesn't mean they are correlated
- Perceptual POV: eventhough the dataset is complex, we have to make sure our representations are clear, not ~~overcharged~~ overloaded and straight to what we want to say.

- Graphical POV: we have to make sure our representations fits the reality. To do so, we can use the Lie Factor f to estimate proportions. Math sure of the size of objects or person such as the electors that get smaller and smaller (in % ages)

- ~~Political POV~~:

- Political POV: we have to be careful of any political orientation. For example, for one election, we could represent the winner ~~each~~ in every city over a map. But not every city has the same number of electors or senators. So it would be more accurate to represent ~~each~~ the winner per city when each city is sized regarding number of electors.

Q7. Some of most famous Python Landscape libraries ~~follows~~ for Data Visualization



Q2. ~~We used to follow~~ We follow this cycle:

Business Process Definition: where we state on our needs

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Research: where we observe what concurrents do and ~~what~~ decide what we want to do.

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Human Ressources Assessment: can we ~~support the~~ do this project? or do we need to outsource it?

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Data Acquisition: recuperating datas thanks to a crawler for example

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Data Munging: transforming unstructured data to structured ones.

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Data Storage: storing almost raw data

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Exploratory Data Analysis: exploring datas, looking for trends.

↓

Data preparation: preparation for modeling, selecting features, creating new ones.

↓

Model: creating the Model

↓

Implement: deploy the model.

Q4. Nowadays, Big Data can be described through 3V: Volume, Velocity and ~~Vaeu~~ Variety. Data Visualization faces those three V as challenges: We need to process more and more data ~~from~~ with different format but ~~need~~ also need to represent them as we used to do. Having more and more ~~axes~~ parameters, but the same number of axes. So we need ~~way~~ libraries that can support a lot of data and a lot of formats.

At the same time, we ~~need~~ want to have a view of how our product is ~~developping~~ used. So we need realtime view such as the Singapour realtime representation. Tools like however Spark notebook allows us to do so but still not very confortable to use for majority.

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MATIÈRE Data Visualization (2/2)

Q6 Big Data Visualization contains various styles such as Data reduction where you try to aggregate many datas in a simple manner and a simple view. For example, ~~nothing~~ you could make a network between main caracters of Bibli and mostly used words.

Moreover, there is one where you write try to not only ~~expl~~ show facts but also explain it. E. using them heatmaps and PCA. Be careful of Conceptual POV!