

Big data for business

Value creation with data

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Seven roads to data-driven value creation



Not a closed list, not a recipe!

Rather, these are essential building blocks for a strategy of value creation based on data.

1. PREDICT

Table 1. Predict

The ones doing it 1. Predictive churn / default / ... (banks / telco) 2. Predicting crime

The hard part 1. Collecting data ("cold start problem") 2. Risk missing the long tail, algorithmic discrimination, stereotyping 3. Neglect of novelty

2. SUGGEST

Table 2. Suggest

The ones doing it 1. Amazon's product recommendation system  2. Google's

The hard part 1. Managing serendipity and bubble effects 2. Finding the value proposition which goes beyond the simple "you purchased this, you'll like that"

3. CURATE

Table 3. Curate: the ones doing it

The ones doing it 1. Clarivate Analytics curating metadata from scientific publishing



2. Nielsen and IRI curating and selling retail data



Table 4. Curate: the hard part

The hard part 1. Slow progress 2. Must maintain continuity 3. Scaling up / right incentives for the workforce 4. Quality control

4. ENRICH

Table 5. Enrich: the ones doing it



1. Selling methods and tools to enrich datasets



2. Selling aggregated indicators

Table 6. Enrich: the hard part

1. Knowing which cocktail of data is valued by the market 2. Limit replicability 3. Establish legitimacy

5. RANK / MATCH / COMPARE

Table 7. Rank / Match / Compare: the ones doing it

1. Search engines ranking results



2. Yelp, Tripadvisor, etc... which rank places



3. Any system that needs to filter out best quality entities among a crowd of candidates

Table 8. Rank / Match / Compare: the hard part

1. Finding emergent, implicit attributes 2. Insuring consistency of the ranking 3. Avoid gaming of the system by the users

6. SEGMENT / CLASSIFY

Table 9. Segment / classify: the ones doing it

1. Tools for discovery / exploratory analysis by segmentation 2. Diagnostic tools (spam or not? buy, hold or sell? healthy or not?) 

Table 10. Segment / classify: the hard part

1. Evaluating the quality of the comparison 2. Dealing with boundary cases 3. Choosing between a supervised and unsupervised approach (how many categories?)

7. GENERATE (experimental!)

Table 11. Generate (experimental!): the ones doing it




1. Intelligent BI  2. wit.ai, the chatbot by FB  **wit.ai** 3.

Table 12. Generate (experimental!): the hard part

1. Should not create a failed product / false expectations 2. Both classic (think of ) and frontier science: not sure where it's going

Combos!



Figure 1. Combinations

The end

Find references for this lesson, and other lessons, [here](#).



This course is made by Clement Levallois.

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