

(13) Product similarity - <sup>simulation</sup> ~~substitution~~ <sup>completeness</sup> ~~completeness~~  
 affects relations of resources

Identify substitutes 'Self-learning substitutes' → we data for modelling substitutes  
 - we this to look for substitutes in the recommended list.

(14) Product similarity  
 - look at whether previous recommended product been accepted; used liked on the response...

- 14th columns in design matrix.
- use L1 reg<sup>n</sup> to push coeff to zero

Use for all products to get a

Similarity matrix ~~for~~  
 e.g. nutella ⇒ banana  
 but not banana ⇒ nutella  
 get matrix

complementarity?

(15) Product similarity in products

- matrix engine receives lots of second similarity matrix.
- we can't have you forget 'by adding to the score.

Product similarity in the future (16)

- complementarity drives conversion
- challenge: reduce size of matrix;
- can't core on real-time engine

Shensu. Paid a damn money. com (17)

China Post, Shell DS is a team for

- Statistics & Econometrics
- Advanced Analytics
- Data Science Network

Nobody would use it unless they can understand it.

Parts for drilling platform