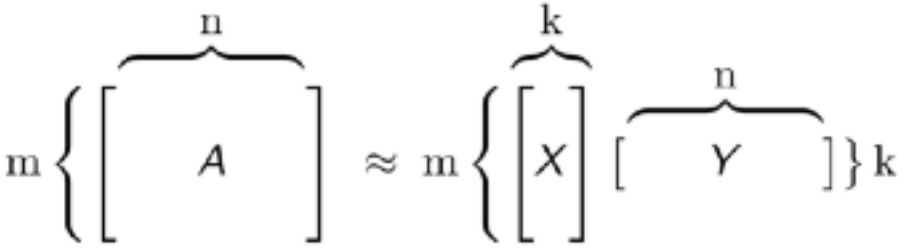
GENERALIZED LOW-RANK MODEL (GLRM)

Unsupervised Learning:

GLRM Overview

- GLRM is an extension of well-known matrix factorization methods such as Principal Component Analysis (PCA).
- Unlike PCA which is limited to numerical data, GLRM can also handle categorical, ordinal and Boolean data.
- **Given**: Data table *A* with *m* rows and *n* columns
- **Find**: Compressed representation as numeric tables *X* and *Y* where *k* is a small user-specified number



- *Y* = archetypal features created from columns of *A*
- *X* = row of A in reduced feature space
- GLRM can approximately reconstruct *A* from product *XY*

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