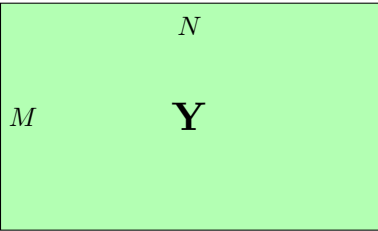
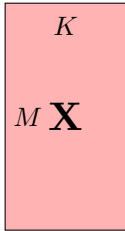


$$\mathbf{Y} \approx \hat{\mathbf{Y}} = \mathbf{X}\mathbf{W}$$



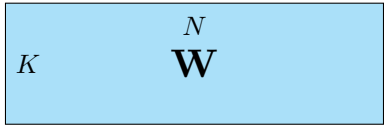
(Full) Utility matrix

$\approx$



Item features

$\times$



User features