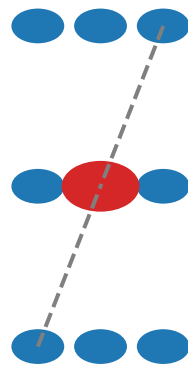


The Mathematics Hidden in Your Process

What You Minimize (K-means)

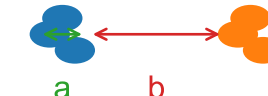
Goal = \sum (distance)²



*Minimize total squared distance
from points to centers*

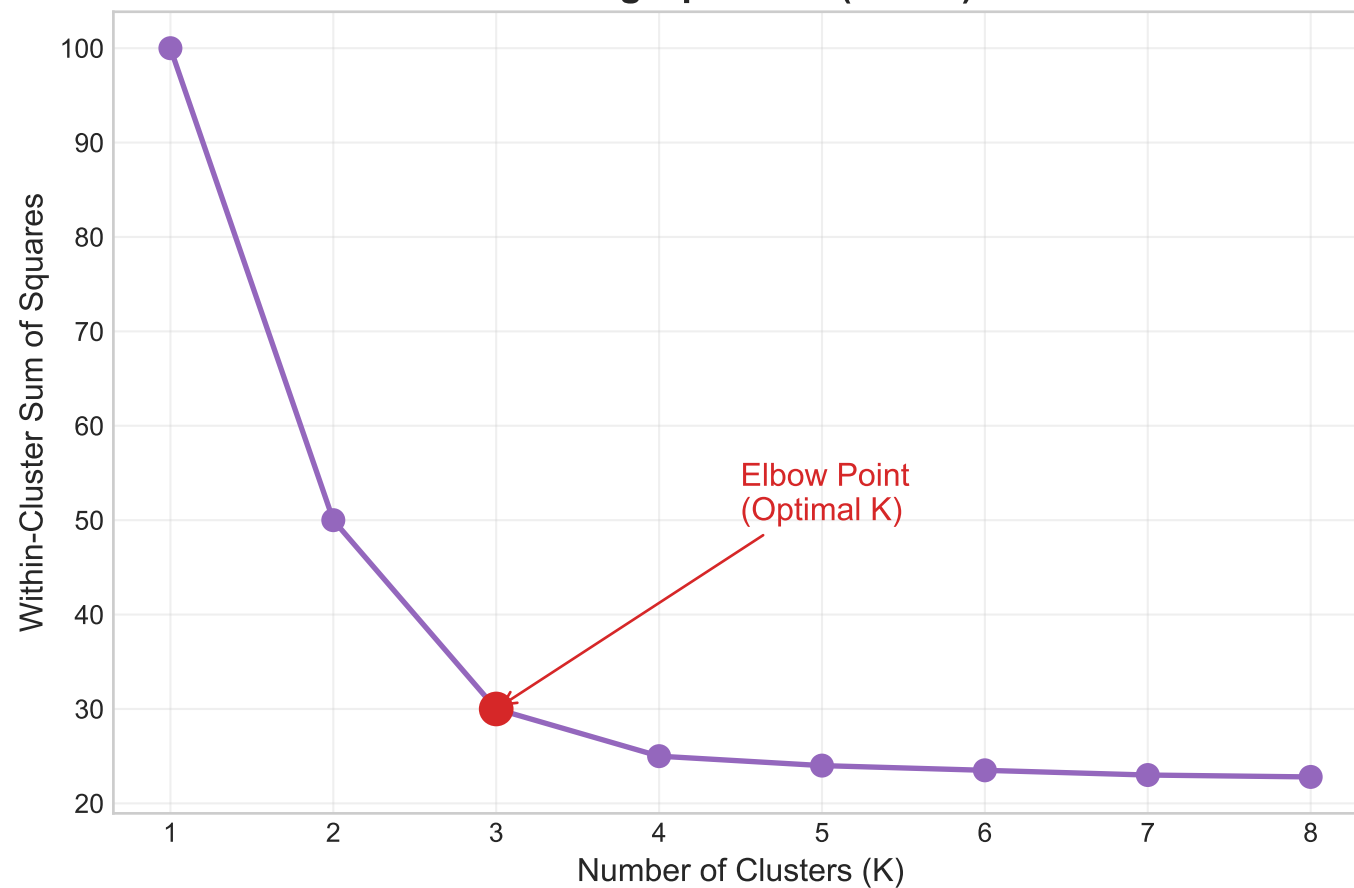
What You Maximize (Quality)

Quality = $\frac{b - a}{\max(a, b)}$

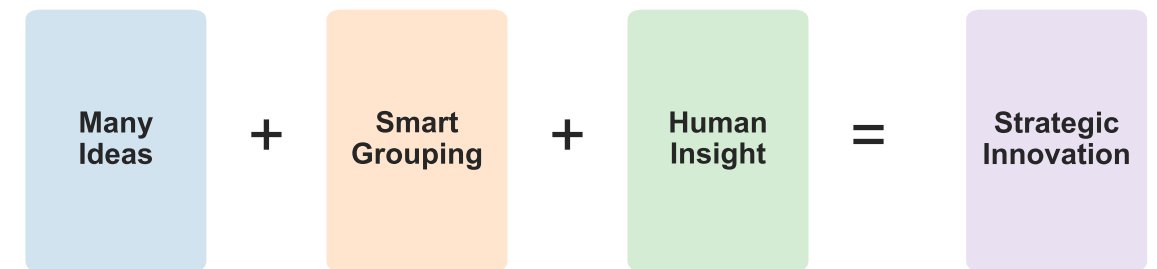


Maximize separation relative to cohesion

Finding Optimal K (Elbow)



Your Innovation Equation



1000 → Cluster → 20 themes → Prioritize → 5 actions