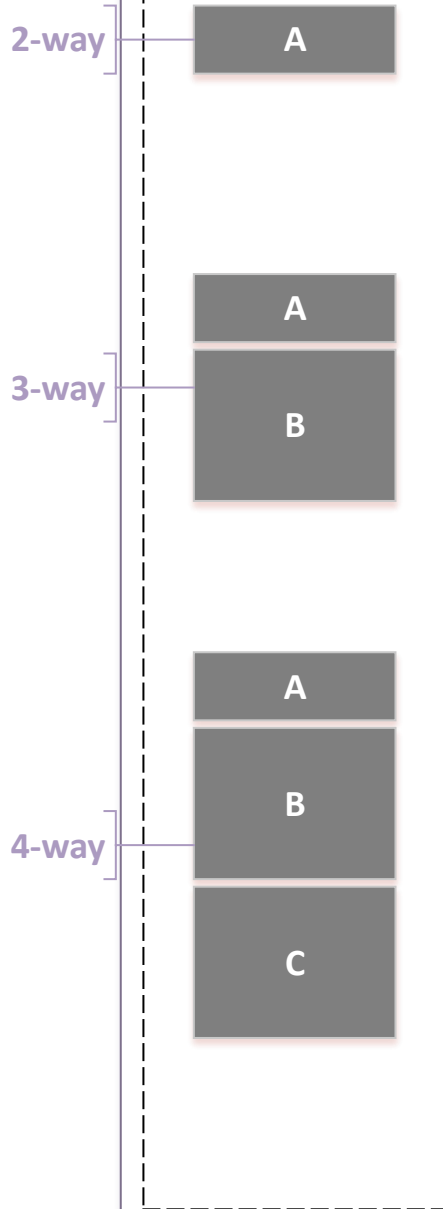


Single Bottom-up



Collaborative Bottom-up

