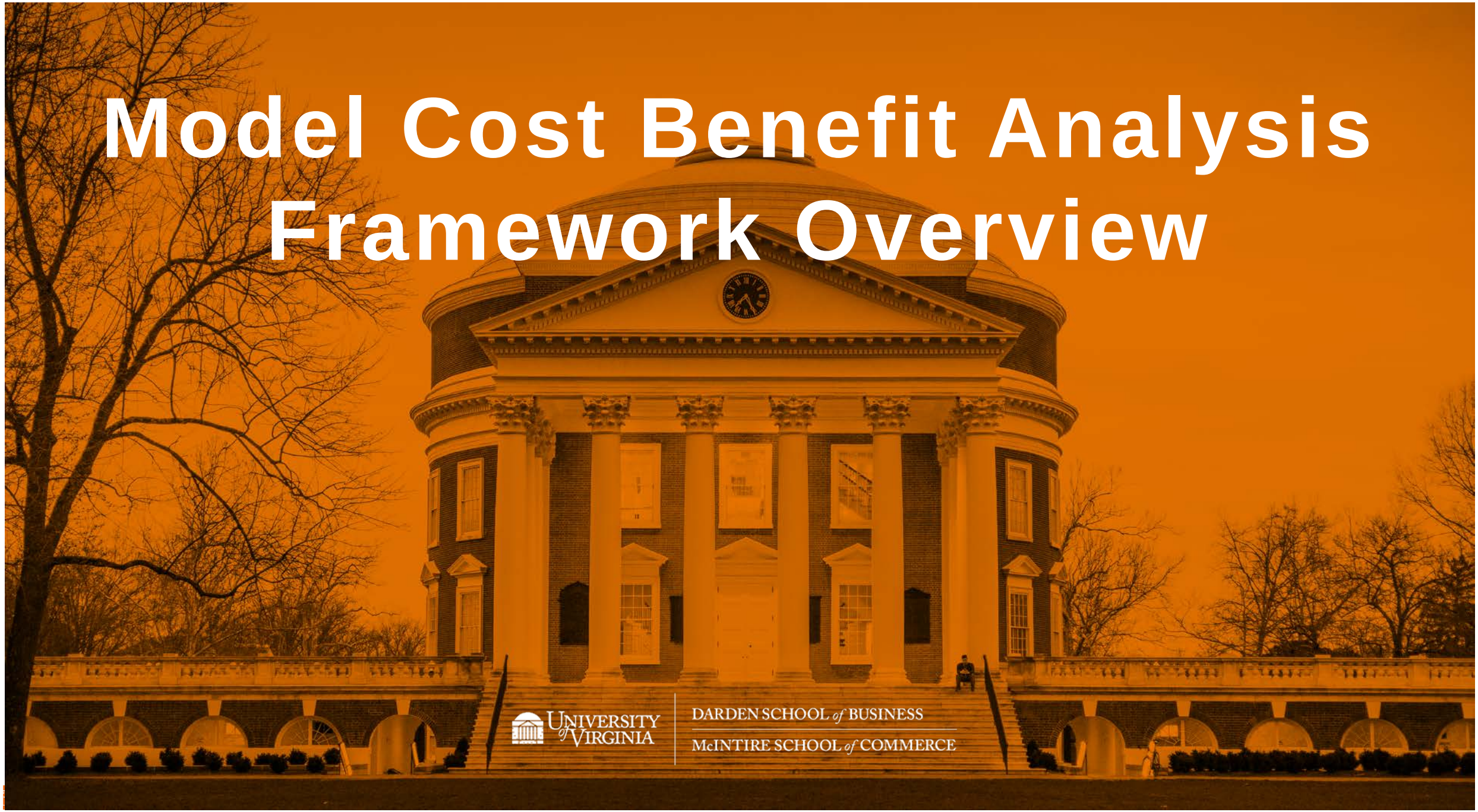
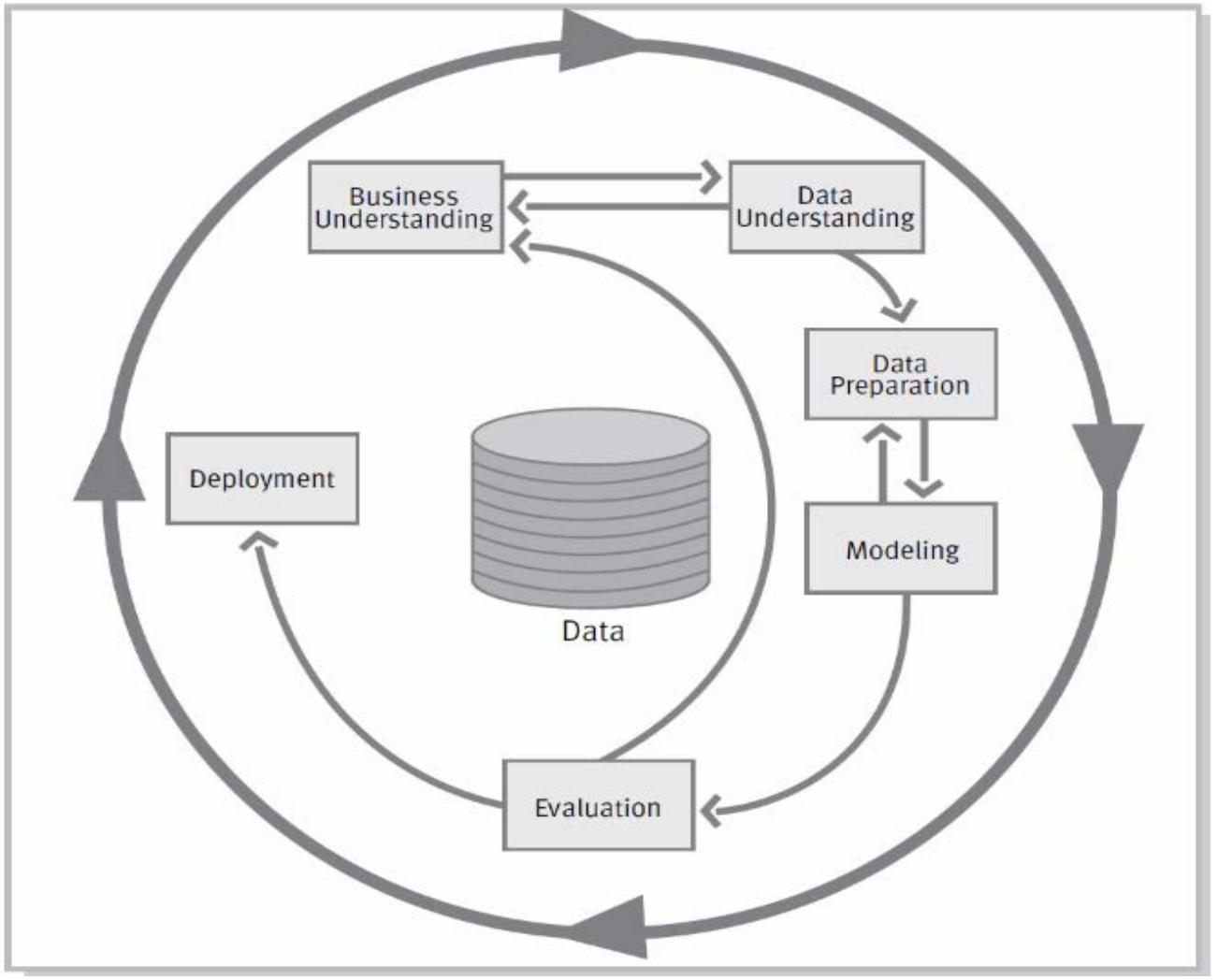
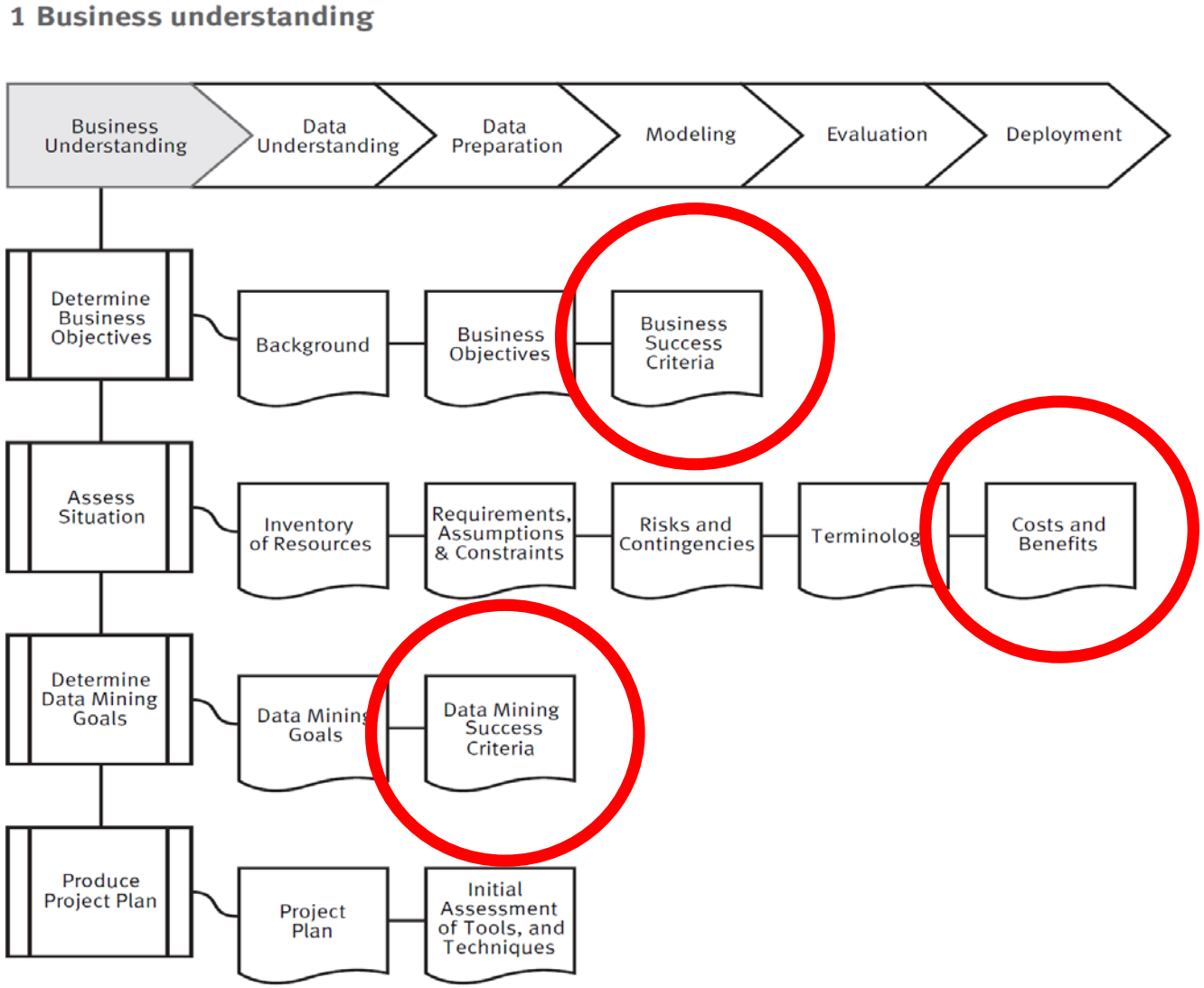
Model Cost Benefit Analysis Framework Overview



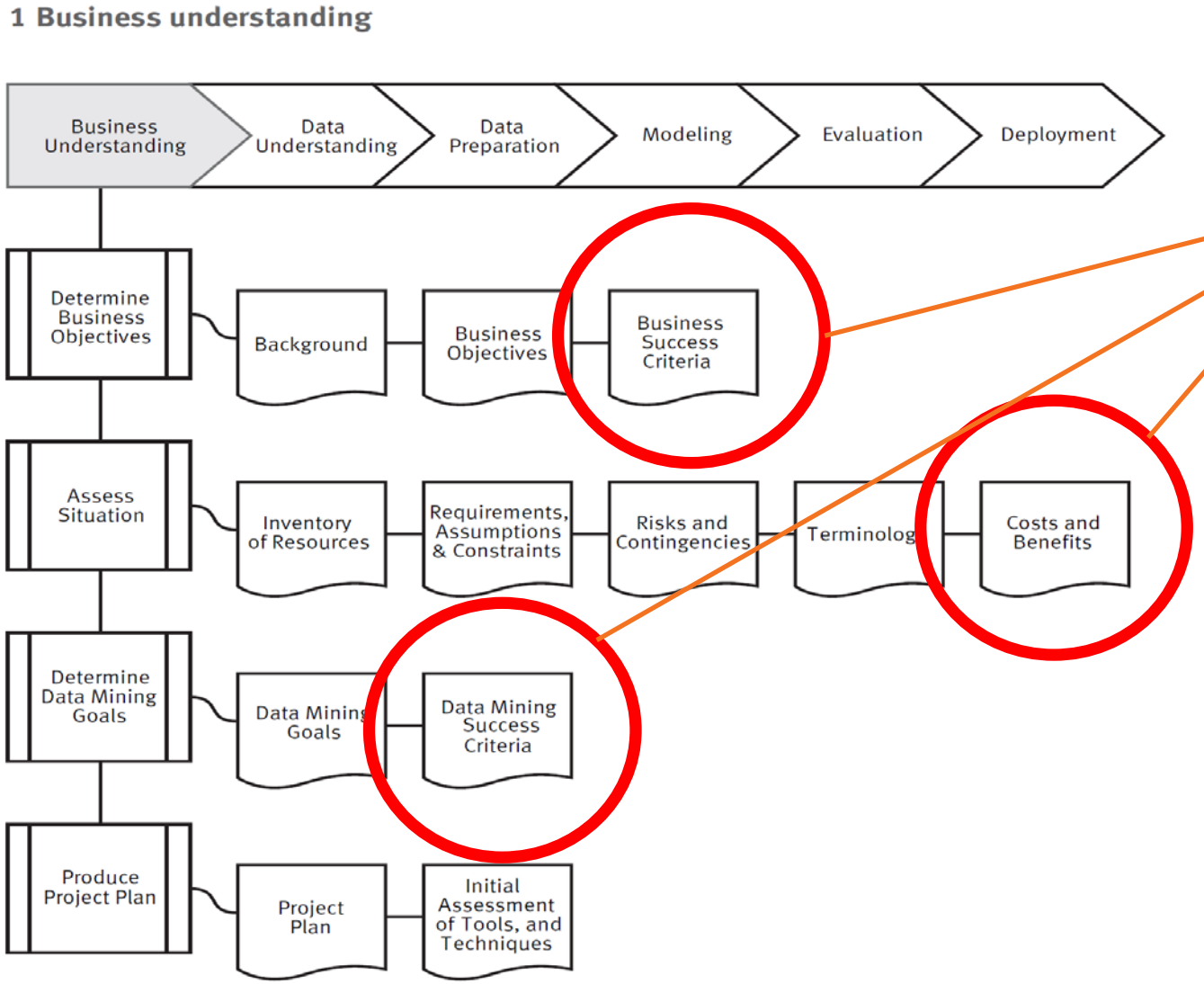
Revisiting CRISP-DM



Revisiting CRISP-DM



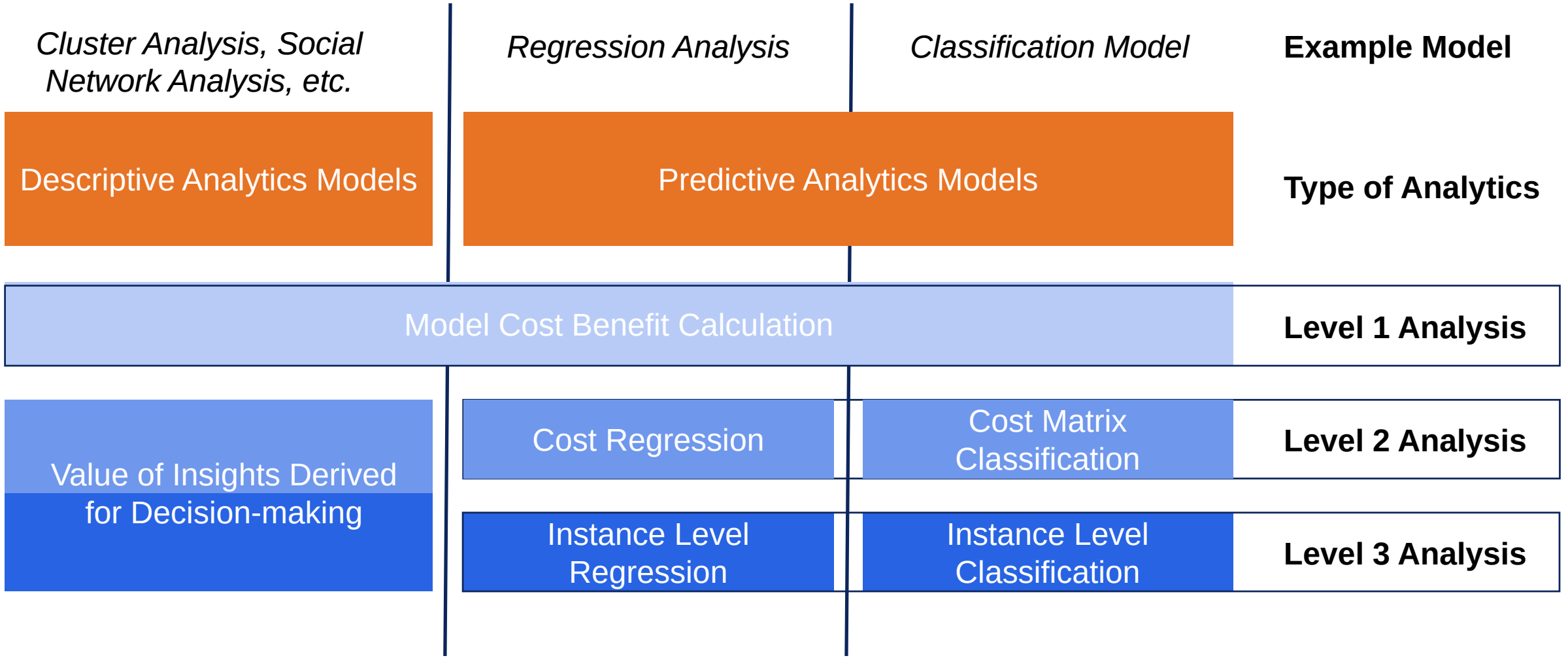
Revisiting CRISP-DM



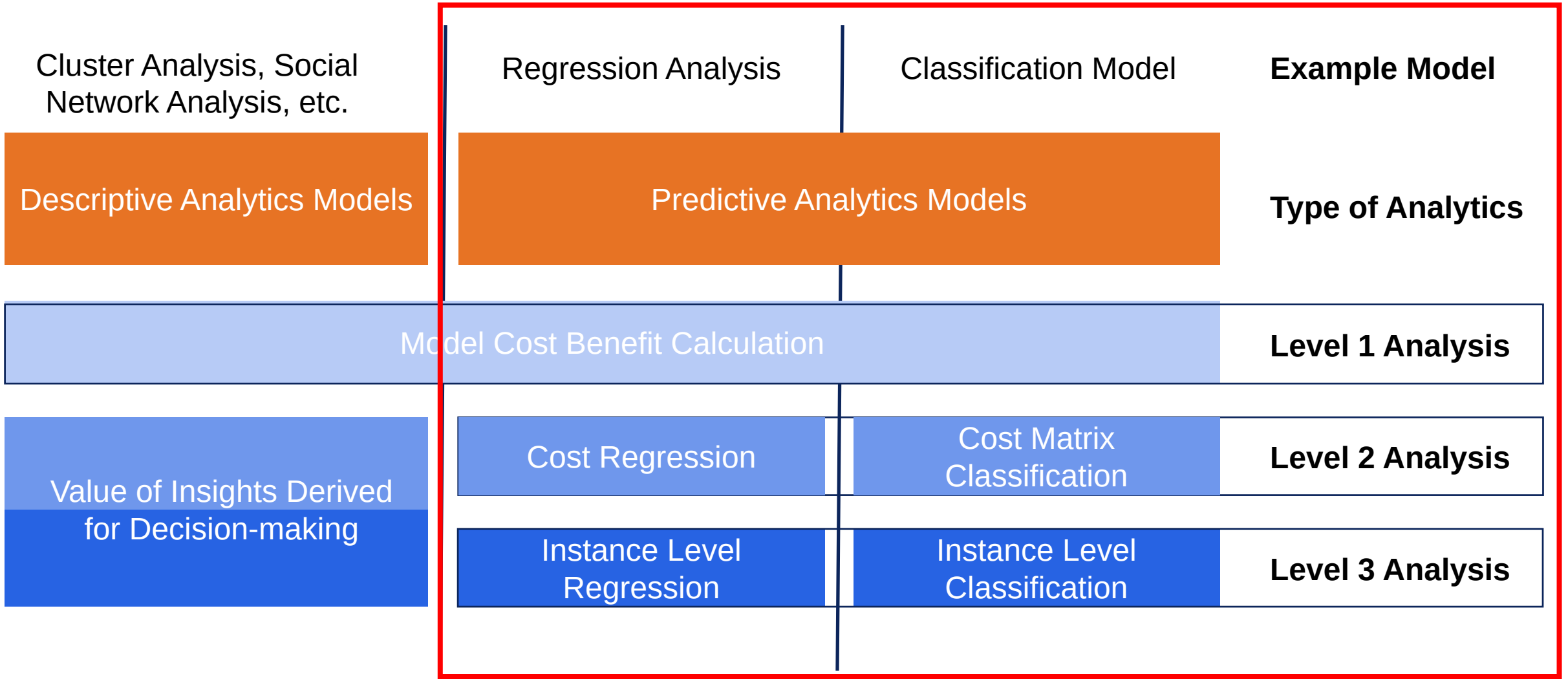
Cost-benefit analysis is essential for aligning initiatives with business objectives, gaining situational awareness, and driving data mining success criteria.

But how to do it?

Model Cost-benefit Analysis Framework



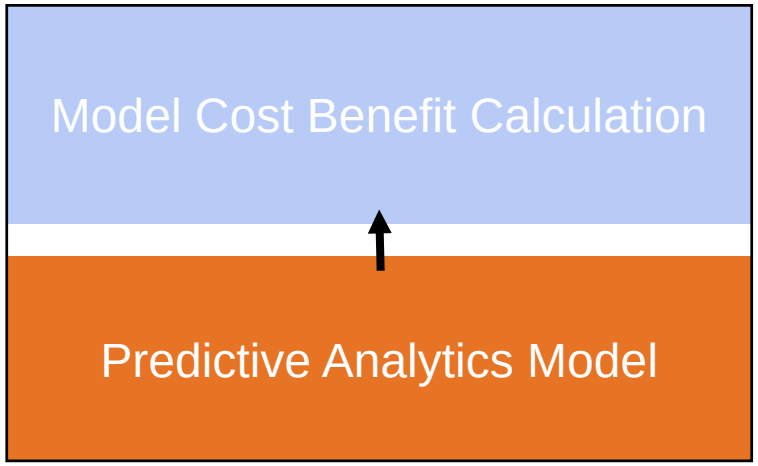
Model Cost-benefit Analysis Framework



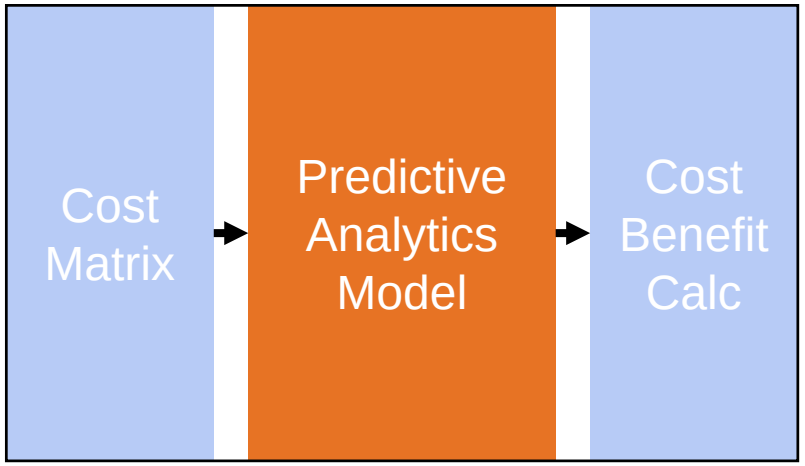
Model Cost Benefit Analysis Framework – Predictive Analytics

Three potential levels of analysis, depending on the problem context

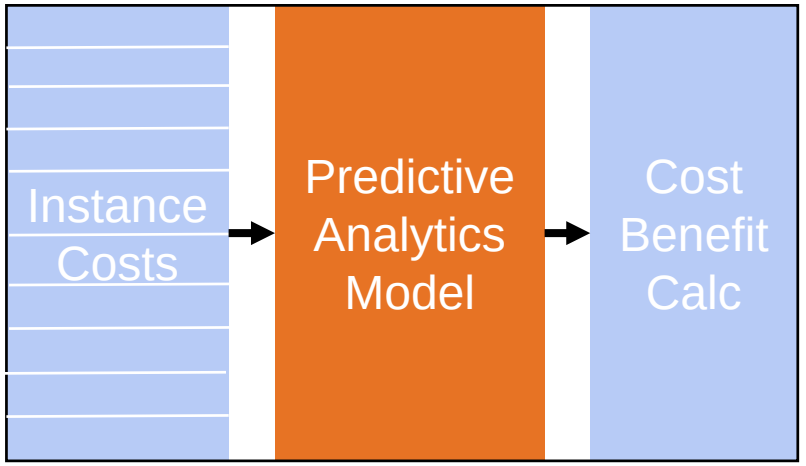
Lv 1 – Model Level



Lv 2 – Matrix Level



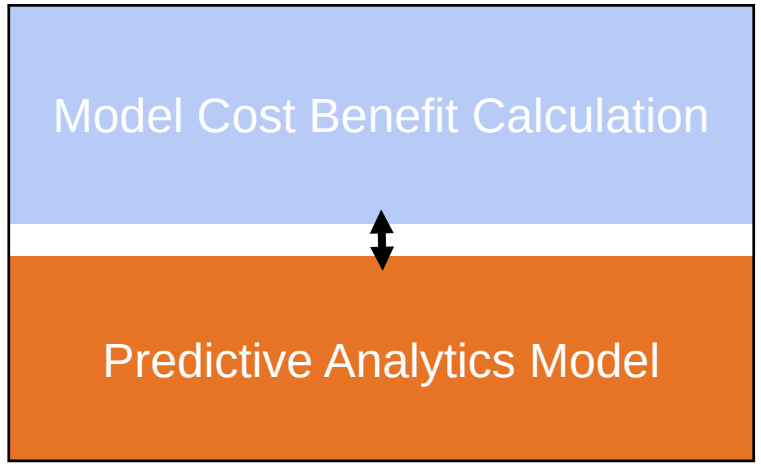
Lv 3 – Instance Level



Model Cost Benefit Analysis Framework – Predictive Analytics

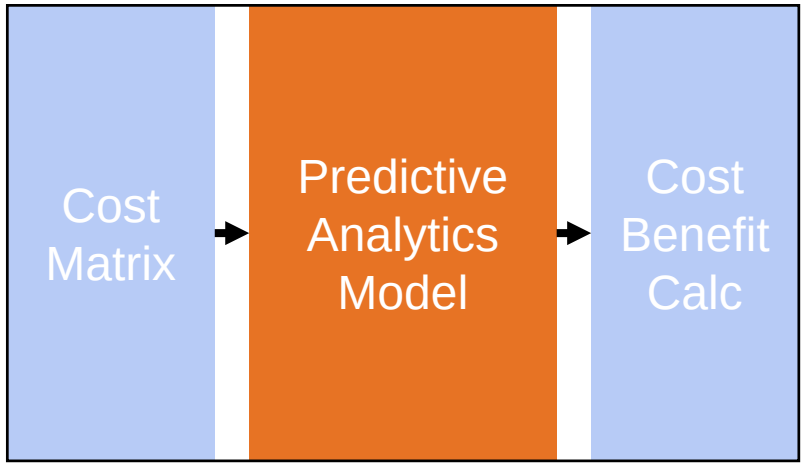
Three potential levels of analysis, depending on the problem context

Lv 1 – Model Level



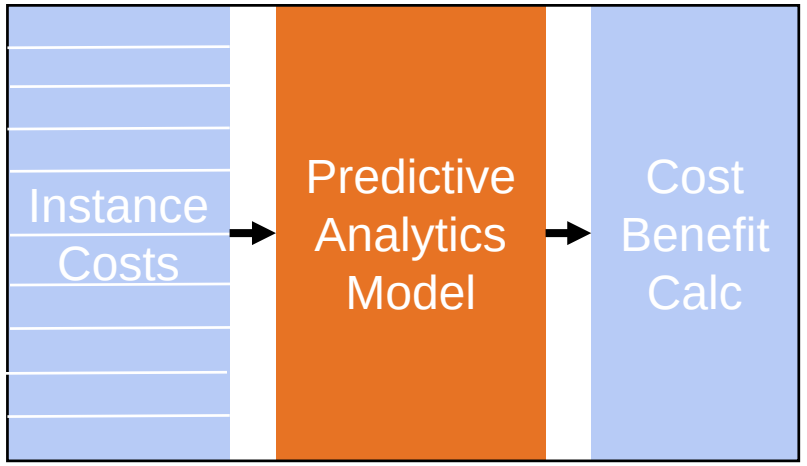
Treat model like a black box
Couple TP/TN/FP/FN with cost-benefit calculations

Lv 2 – Matrix Level



Input cost matrix ratios into model
Couple TP/TN/FP/FN with cost-benefit calculations

Lv 3 – Instance Level

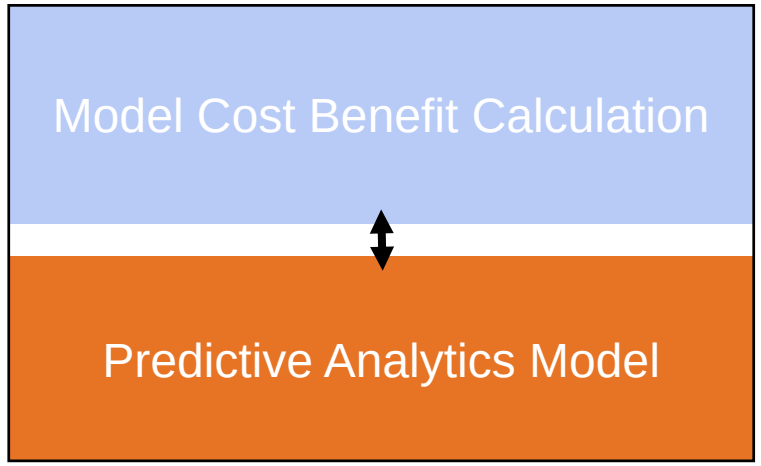


Input instance-level costs into model
Couple TP/TN/FP/FN with cost-benefit calculations

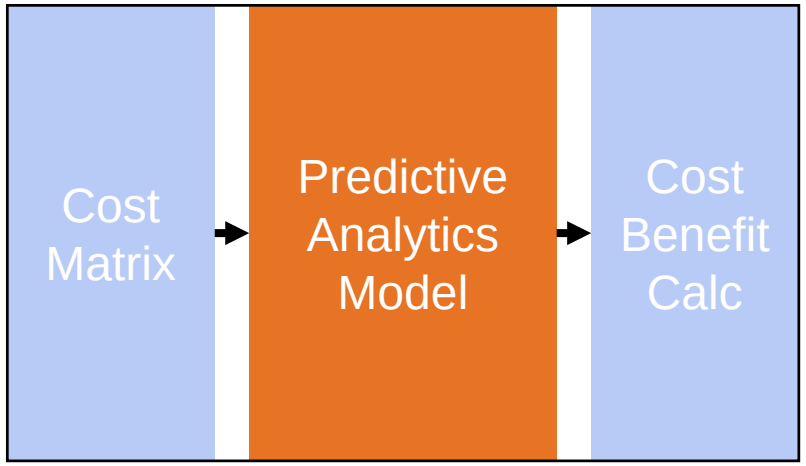
Model Cost Benefit Analysis Framework – Predictive Analytics

Three potential levels of analysis, depending on the problem context

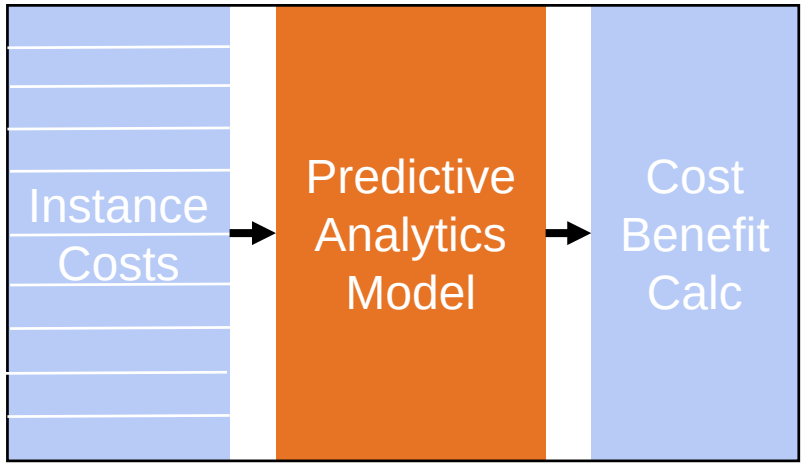
Lv 1 – Model Level

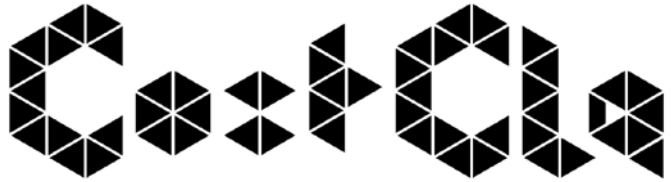


Lv 2 – Matrix Level



Lv 3 – Instance Level





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VIRGINIA