Business Science Problem Framework



View
Business
as a Machine

Understand the Drivers

Measure the Drivers

Step 1:

Step 2:

Collect Data

Develop KPIs

Uncover
Problems &
Opportunities

Encode Algorithms Measure Results Report Financial Impact

Step 1:

Isolate business unit

Step 2:

Define objectives.
Define machine in terms of people and processes

Step 3:

Collect outcomes in terms of feedback. Feedback identifies problems. Step 1:

Investigate if objectives are being met

Step 2:

Synthesize outcomes

Step 3:

Hypothesize drivers

Step 1:

Evaluate performance vs KPIs

Step 2:

Highlight potential problem areas

Step 3:

Review process and consider what could be missed or needed to answer questions Step 1:

Develop algorithms to predict and explain problem

Step 2:

Tie financial value of individual decisions to optimize for profit

Step 3:

Use recommendation algorithms to improve decisions

Step 1:

Capture outcomes after decision making system is implemented

Step 2:

Synthesize results in terms of good and bad outcomes identifying what was done and what happened

Step 3:

Visualize outcomes over time to determine progress

Step 1:

Measure actual results.

Step 2:

Tie to financial benefits

Step 3:

Report financial benefit of algorithms to key stakeholders

