

# Business Science Problem Framework



**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:**  
Collect Data

**Step 2:**  
Develop KPIs

**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

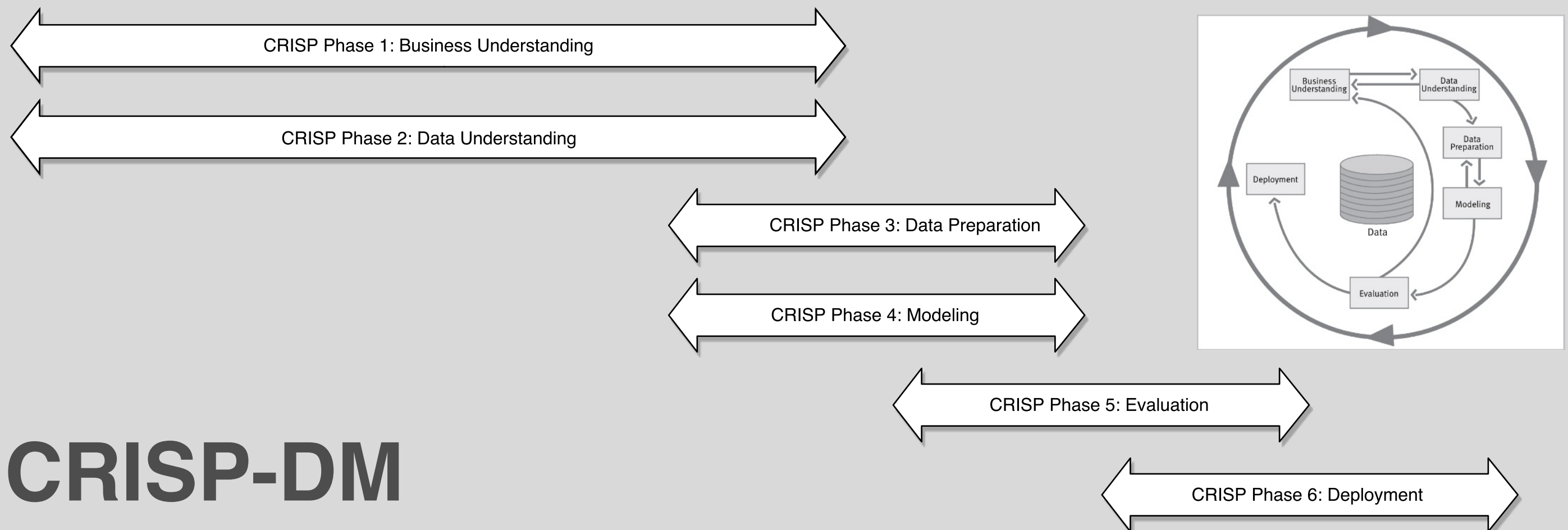
**Step 2:**  
Synthesize results in terms of good and bad outcomes identifying what was done and what happened

**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



## CRISP-DM