# Business Science Problem Framework

| View Business as a Machine | Understand the Drivers | Measure the Drivers | Uncover Problems & Opportunities | Encode Algorithms | Measure Results | Report Financial Impact |
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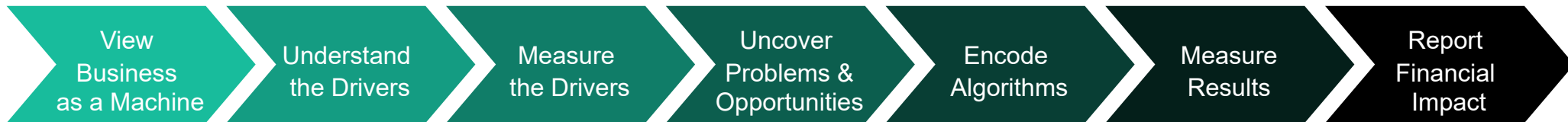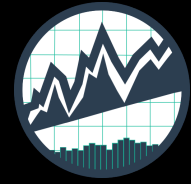
**Step 1:**
Isolate business unit

**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

**Important: Show Cost of the Problem**

# CRISP-DM

CRISP Phase 1: Business Understanding

CRISP Phase 2: Data Understanding

CRISP Phase 3: Data Preparation

CRISP Phase 4: Modeling

CRISP Phase 5: Evaluation

CRISP Phase 6: Deployment



**Learn to apply the BSPF:**
[Data Science For Business With R Course  (DS4B 201-R)](#)
[Machine Learning APIs with Python Course (DS4B 201-P)](#)

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