

SAILES

An Interpretable AI Market Consultant

Schneider Electric | Hackathon Report

The Business Problem: Why?

The Context

Schneider Electric has millions of data points from sales opportunities, including Customer History, Product Mix, Competition, and Timing.

We can predict outcomes, but we need to know *why*:

The "Black Box" Challenge

Traditional AI models don't explain their reasoning, which creates problems for:

- **Trust:** Hard to trust predictions you don't understand.
- **Action:** Can't take corrective action if you don't know what matters.
- **Learning:** Can't improve processes without understanding success patterns.

Layer 1: Global Insights

What factors matter most across **all** opportunities?



Customer Hit Rate: Historical success rate with the customer is the top predictor.



Interactions & Contracts: The level of engagement and existing business relationships.



Historical Sales: Whether we have successfully sold a specific product to them before.



Opportunity Novelty: Long-standing, stalled opportunities are significantly less likely to be successful.

***Key Takeaway:** Strong existing relationships are the biggest predictor of success.*

Layer 2: Local Explanations

Why did the model make **this specific prediction?**

Technique: Decision Path Analysis

The model finds the "tie-breakers" among its internal sub-models to reveal which trends were most important for a single prediction.

Example Explanation:

"This opportunity has a high probability of success because the customer has a 95% historical success rate and we've had 12 previous positive interactions with them."



@AdnanMasood

Layer 3: What-If Analysis

What would need to **change** to flip the prediction?

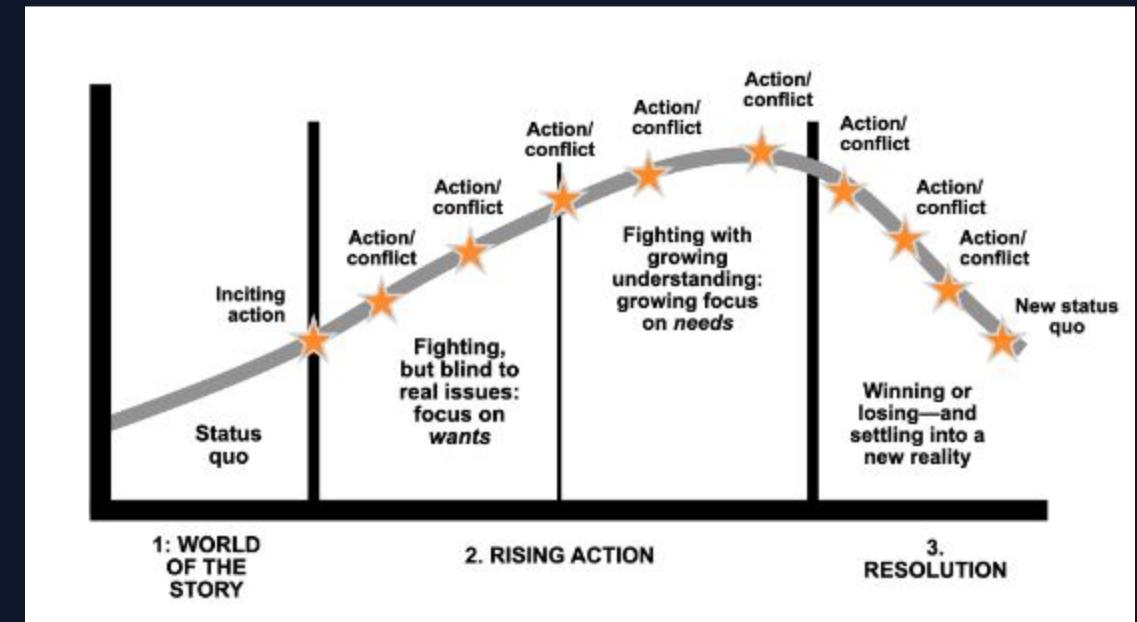
Technique: Counterfactual Generation

Given a "Loss" prediction, the VAE model finds the **most similar plausible opportunity** that would have resulted in a "Win."

It provides the **minimal amount of feature changes** possible to achieve this, making the advice actionable.

Business Impact:

This empowers sales teams by showing them the specific, high-leverage activities they can perform to help overturn a potential loss and prioritize their efforts.



MVP

SAILES (Supervised Artificial Intelligence Learning Explainable System)

The image shows a screenshot of the SAILES MVP interface. On the left, there is a sidebar titled "Enter Opportunity Data" with sections for "Customer Metrics" and "Opportunity Details". "Customer Metrics" includes "Customer Hit Rate" (0.13), "Customer Interactions" (0.31), "Customer Contracts" (-0.35), and "Customer in Iberia?" (Yes). "Opportunity Details" includes "Opportunity is Old?" (-0.28) and "Opportunity Month" (-1.41). On the right, the main dashboard features the SAILES logo and title "Supervised Artificial Intelligence Learning Explainable System". It includes a sub-section "Ask About Our Model's General Strategy" with questions like "Which competitors matter most?" and "How does customer history affect predictions?". The "Which competitors matter most?" question is highlighted with a response: "Based on our analysis, Competitor Z and Competitor Y matter most, as their presence results in a moderate negative prediction, meaning their involvement makes a deal more likely to be lost. Competitor X has minimal to no impact on the win/loss prediction. Overall, it's important to note that competitor presence matters less than core customer characteristics and deal timing." The "Deploy" button is located at the top right of the main dashboard area.

Deploy :

SAILES

Supervised Artificial Intelligence Learning Explainable System

Understand why our model predicts deals as Won or Lost, and [explore](#) live predictions.

Ask About the Model Live Prediction

Ask About Our Model's General Strategy

Ask questions like:

- *Which competitors matter most?*
- *What's the most important factor for winning?*
- *How does customer history affect predictions?*

Which competitors matter most?

Based on our analysis, Competitor Z and Competitor Y matter most, as their presence results in a moderate negative prediction, meaning their involvement makes a deal more likely to be lost. Competitor X has minimal to no impact on the win/loss prediction. Overall, it's important to note that competitor presence matters less than core customer characteristics and deal timing.

How does customer history affect predictions?

Enter Opportunity Data

Customer Metrics

Customer Hit Rate: 0.13

Customer Interactions: 0.31

Customer Contracts: -0.35

Customer in Iberia?: Yes

Opportunity Details

Opportunity is Old?: -0.28

Opportunity Month: -1.41

Product History

Product A (Current Deal): -0.09

18.79

Questions?

