

ENTERPRISE AI · CASE STORY

Nobody could use our ML engine

Making machine learning usable for people with no ML background, without dumbing it down for the experts.

4 min

Click or press → to continue

Imagine a professional espresso machine with no labels.

It can make anything. Only the barista dares to touch it.

WebFOCUS had a powerful machine learning engine.
Adoption was low.

To train one model
12-15 clicks

All inside Reporting Server: the + menu, Data Flow, a new browser tab, drag a dataset onto the canvas, Train Models, drag a model type onto the canvas, then find a hidden play button.

Business users couldn't touch it.

Two people had to be served by the same screens:

BUSINESS ANALYST

Zero ML background. Needs to get through it and trust the result.

DATA SCIENTIST

Wants depth and control, and not to feel spoon-fed.

Rule 1

Ask why behind the small request.

It started as a request for one explainability popup. Asking why it was needed turned it into a revamp of the whole ML workflow.

Rule 2

Remove the dead end first.

No results generated. Click play to train the model.

A screen that tells you nothing happened, and hides how to make something happen, was the first thing to go.

Rule 3

One path, not two modes.

The principal data scientist asked: "**Are you trying to make this dumb?**"

No. Sophistication stayed. It became legible: one path for the novice and the expert, with explanations in context. Not a dumbed-down UI. An educated one.

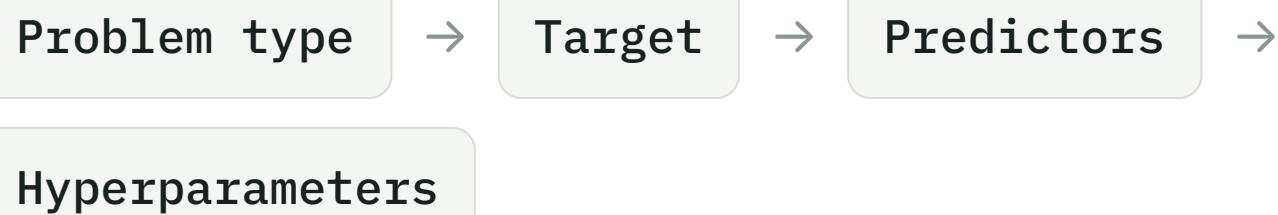
● PRINCIPLE

Reveal depth gradually

Show the essentials first and let people open the advanced options when they need them.²

Rule 4

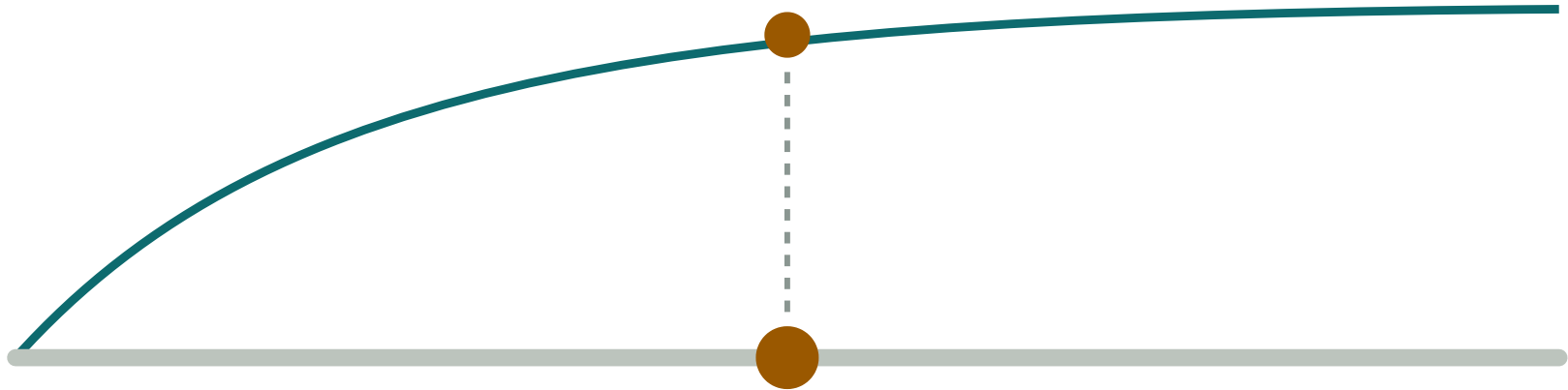
Four clear steps.



Full-screen views, side-step layouts and two columns were all tried. A popup wizard won, because it solved the problem without asking the legacy product to become something it isn't.

Rule 5

Put the control where the eye already is.



The threshold slider sits exactly under the point on the chart it moves.

● PRINCIPLE

Make clear why the model did what it did

People trust a result more when they can see how it was reached.¹ Moving the slider and watching the chart respond teaches it.

Rule 6

Meet the behavior people already have.

Right-click a dataset

Predict Data

Generate Insights

Ask a Question

In this product, right-clicking is religion. So Predict Data went there, and two more AI features later used the same entry.

Rule 7

Defend the design with evidence.

When two engineering directors and the principal data scientist pushed to bring back the old canvas, user research and session recordings showed why reverting would break the workflow.

WHAT CHANGED

Built and tested. Awaiting release.

- ✓ 12–15 clicks → a 4-step wizard
- ✓ 4 of 4 subject-matter experts finished with zero help, in usability testing
- ✓ 3 AI features adopted the right-click entry
- ✓ The explainability popup shipped in WebFOCUS 9.2

The testing validates the built redesign ahead of release. It isn't production adoption.

BEHIND THE STORY

"I taught him machine learning through the UI."

I owned the redesign end to end. Our design director, with no ML background, learned ML from the UI.

"The clarity of her designs, in spite of the underlying data science and machine learning complexity, is impressive and has greatly contributed to the success of our products."

Marcus Horbach, Principal Data Scientist

What a mind-bending project.

CHEAT SHEET

Making powerful tools usable

- 1 **Ask why** behind the small request.
- 2 **Remove the dead end** first.
- 3 **One path**, educated, not dumbed down.
- 4 **Few, clear steps.**
- 5 **Controls where the eye is.**
- 6 **Meet existing habits.**
- 7 **Defend with evidence.**

READ MORE

The full case study.

The wizard, the confusion matrix, and the fight to keep it.

Full case study: anujaharsha.com/work/ml-functions

Enterprise story 02: "Nobody could use our ML engine." Designed by Anuja Nimmagadda for WebFOCUS at Cloud Software Group.