ROI Lab – Travelling Exhibition Simulator

Turn your exhibition scenarios into decisions – in minutes, not months.

The **ROI Lab** is a free, browser-based mini-tool that lets museums and cultural organisations explore how different choices in visitors, ticket prices and ancillary revenue affect the overall performance of a travelling exhibition.

Use it to **compare cities, pricing strategies and merchandising intensity** before you commit budgets, partners or dates.

What you can do in the ROI Lab

- Test **three demo cities** (base, large, smaller city) – already loaded in the table.
- Adjust the **importance** of key drivers:
  - X1 – Expected visitors per city
  - X2 – Average ticket price (€)
  - X3 – Ancillary spend per visitor (€)
- Edit values directly in the table and watch the **Y Index** respond in real time.
- Upload your own **CSV from Excel** with city scenarios.
- Try **"What-if"** strategies (new city, different pricing, new shop strategy) and instantly see the impact.

How the simulator works

The ROI Lab uses a simple linear model:

Y = a + a1·X1 + a2·X2 + a3·X3
with *a = 0* in the demo.

- **Y Index** is a *relative score* – not direct profit.
- Use it to answer questions like:
  - "Under my assumptions, which city looks more attractive?"
  - "How much does a higher ticket price help if visitors drop slightly?"
  - "Does investing in merchandising (X3) make a visible difference?"

Higher **Y** → more attractive scenario under your chosen influence weights.
Lower **Y** → less attractive or more fragile scenario.

How to use the ROI Lab (step by step)

1. Open the simulator
Click the button:

Test ROI Simulator FREE

The tool opens in a new browser tab.

2. Play with the demo scenarios

- Three example scenarios are pre-loaded in the table.
- Change the numbers in the **Visitors, Ticket, Ancillary** columns.
- The **Y Index (result)** and the **summary KPIs** (number of scenarios, average/min/max Y) update automatically.

3. Set the importance of each factor
In **Step 1** of the simulator:

- Choose how important each variable is for your project (None, Low, Medium, High, Very High).
- These choices become internal weights *(a1, a2, a3)* and drive the Y calculation.

4. Optional – Upload your own scenarios
If you want to test real data:

1. Create an Excel file with columns: **Scenario, X1, X2, X3**
2. Save it as **CSV**.
3. In Step 2 of the simulator, click **"Choose CSV file"** and select your file from your computer.
4. Your scenarios appear in the table and can be edited live.

5. Use the What-If panel
At the bottom, enter a hypothetical city or strategy:

- X1 – visitors
- X2 – ticket price (€)
- X3 – ancillary revenue per visitor (€)

The **Predicted Y Index** shows how this new idea compares to your existing scenarios.