PROTOTYPE PREMIERE

Study Guide: Build the 3D Model of Your Product | IVYES Entrepreneurial Summit, Business Rounds

1. The Challenge

In this round, you will turn your business idea into something people can see and hold. Your task is to build a **3D model (physical prototype)** of the product or project you have chosen. The model should show what your product looks like, how it works and why customers would want it. It does not need to be a fully working version. It needs to be a clear, convincing and well-thought-out representation of the real thing.

2. Learning Objectives

- Turn an abstract business idea into a tangible design.
- Make practical design choices about materials, size, features and cost.
- Communicate a product's value through its form and branding.
- Explain and defend your design decisions with confidence.

3. What Your 3D Model Must Include

Element	What it should show
Core form	A recognizable 3D representation of the product with sensible shape, size and proportions, built to a stated scale (for example 1:5 or life-size).
Key features	3 to 5 main features clearly shown and labeled with tags or callouts.
Materials & components	The materials used, plus a note on what the real product would be made from and why.
User interaction	How the customer holds, wears, opens or operates the product, with moving parts, buttons or openings modeled where possible.
Branding	Product name, logo, colour palette and, where relevant, packaging suited to the target customer.
Problem it solves	A design that visibly answers a real customer need.
Cost & production note	A short card stating the estimated cost to make, how it would be produced, and any sustainability considerations.
Name card	A small display card with your team name, product name and a one-line description.

4. Materials & Tools

Use whatever helps you show your idea best, within the limits set by the organizers. Common options include cardboard and foam board, clay or modelling dough, wood or craft sticks, fabric, recycled or reusable materials, building blocks, 3D printing, or a digital 3D model (for example Tinkercad or Blender) shown on a screen.

5. The Requirements in Detail

Use the points below to decide what your model needs to show for each element.

Core form

- Does the shape make the product easy to recognize?
- Are the proportions realistic for the size a customer would expect?
- Is the scale written clearly on the model or name card?

Key features

- Which 3 to 5 features make your product different from existing ones?
- Is each feature visible on the model and labeled?
- Does every feature connect to a customer need?

Materials & components

- What would the real product be made of, and why (durability, weight, cost, safety)?
- Which parts of the product are separate components?
- Where materials differ from the real product, is this noted?

User interaction

- How does the customer use the product step by step?
- Which parts move, open or attach, and are they shown on the model?
- Does the design suit the target customer's age, habits and needs?

Branding

- Do the name, logo and colours suit the target market?
- Is the branding consistent across the model, packaging and name card?
- Does the look communicate the product's value, such as premium, affordable or eco-friendly?

Problem it solves

- What customer problem does the design address?
- Can someone understand the purpose just by looking at the model?

Cost & production note

- What is the estimated cost to produce one unit?
- How would it be manufactured and by whom?
- Are there sustainability considerations, such as recyclable or reusable materials?

6. General Guidelines

Confirm the exact rules, such as time, size limits and materials, with the organizers.

- The model must represent the product or project you selected for this round.
- The model should be your team's own original work.
- Keep the model a size that can be carried and displayed on a standard table.
- Make sure it is sturdy enough to be handled and displayed.