

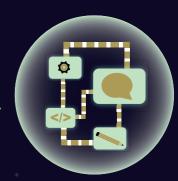
Create a mockup with various materials (eg cardboard, ...)



Model the product dynamically (eg self opening steps)



Define the business plan by relying on the lightness and compactness of the product (eg self-opening tent ...) Bend over backwards to imagine a self-opening product



Work on the feasibility and reliability of the product

CNES02

SELF OPENING STRUCTURE

FROM SPACE

Space uses many deployment systems to deploy a mast, an antenna arm or solar panels on satellites.

CNES has developed an innovative concept of a flexible structure, deployable, spontaneously, without lock actuator. An hinge enables zigzag folding. When the system is not deployed, the structure is flat, lightweight and portable.

TO THE CHALLENGE

Choose the final product, knowing that the cost of materials is balanced by reliability and lifetime.

CNES has used composite materials (carbon fibers). The structure is composed of tiles connected by a hinge. The whole structure is flattened like a deck of cards to be transportable in the folded state. When the stress is released, the structure extends automatically in length.

With recycled materials around you (water bottles, cartons, tape ...), create a model of your product.

Beforehand, you will need to properly target markets that are willing to buy a product that may be more expensive but which will shine by its qualities.

