

Experimentation

Experiment 1: Testing the efficiency of drone delivery Hypothesis: Delivering food supplements and meals through drones will significantly reduce delivery times compared to traditional delivery methods.

Method: We will compare delivery times for 100 orders using traditional delivery methods vs. 100 orders using drone delivery. We will measure the time it takes for the order to be prepared, packaged, and delivered to the customer. Expected Outcome: We expect to see a significant reduction in delivery times when using drone delivery.

Experiment 2: Testing customer satisfaction with NutriDrone's meal plans Hypothesis: Customers will be satisfied with NutriDrone's meal plans, which cater to a variety of dietary needs and are designed by professional chefs and nutritionists. Method: We will survey 100 customers who have purchased NutriDrone's meal plans to gauge their satisfaction levels. The survey will include questions about taste, quality, convenience, and dietary needs. Expected Outcome: We expect to see a high level of customer satisfaction with NutriDrone's meal plans, especially among health-conscious individuals and those with specific dietary needs.

Experiment 3: Testing the impact of NutriDrone's delivery service on the environment Hypothesis: NutriDrone's drone delivery service will have a lower carbon footprint than traditional delivery methods. Method: We will compare the carbon emissions generated by NutriDrone's drone delivery service with those generated by traditional delivery methods over the course of one year. Expected Outcome: We expect to see a significant reduction in carbon emissions when using NutriDrone's drone delivery service compared to traditional delivery methods, demonstrating our commitment to sustainability.

Prototype

Drones require lightweight materials to be able to fly, so using materials like foam, balsa wood, or plastic can be a good option to create a cheap prototype. These materials can be easily cut and shaped using basic hand tools and do not require advanced machining processes. Additionally, they are relatively inexpensive and readily available in most hardware stores.

In conclusion, creating a cheap drone prototype can be achieved by using off-the-shelf components, lightweight and inexpensive materials, 3D printing, or collaborating with a university. These methods can help save time and money in the prototyping process while still producing a functional drone prototype.