

WHAT WE NEED BUILT

20,000 meals. 3,500 bags. Five hours.

Youtopia collects chilled, sealed meals from local kitchens overnight, sorts and bags them by household at an aggregation center built from identical packing pods, and delivers the same afternoon. We need the pod designed once and built across 4,000+ centers.

20,000 meal packages per day	3,500 bags — and every one is open at once	1 → 10 pods per site, one added a quarter
~30 vans, the same fleet in and out	35–40 °F held inside every pod	10 min max consecutive time unrefrigerated

THE DAY

04:00 – 08:30	08:30 – 13:30	14:00 – 18:00
PICK-UP	YOUR SCOPE	DELIVERY
About 30 refrigerated vans collect from local kitchens; the last docks by 9:30.	Receive, allocate, sort, pack, seal, tag, cart, load. Every van gone by 13:30.	The same vans head to doorsteps; drivers recover bags and ice packs.
Sustained rate: 67 meal packages and about 12 bags must clear the line every minute — one finished bag about every 5 seconds. Accuracy: no defective bag leaves the building. We do not expect zero faults; we expect every fault caught and flagged before the van doors close.		

THE POD

One pod, then ten, then 4,000+ centers A site opens with one packing pod, a shared receiving and loading area, and room for a surge buffer. We add an identical pod each quarter, up to ten, without stopping production. Every pod is fed from one shared dock of four doors or fewer. Adding one must change nothing shared — so no central sorter with a divert per pod. Each site is standalone. Container preferred; a purpose-built module is still open. Width is capacity: about 300 cubbies per pod at 7 ft 6 in wide, 600 at 12 ft.	What moves through them Meals arrive on reusable trays, about 22 × 26.5 in, stacked 15 high on wheeled dollies, 5–9 mixed meals per tray, in no useful order. Compostable trays and bowls in varied shapes, up to 10 × 10 × 3 in and 2 lb each. No petroleum-based plastics. Each lid carries a three-part label with a perforated hanging RFID tag, removed before bagging. Bags hold 3–10 meals, up to 14 lb with ice packs. Contents are fixed 24 h ahead.
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OPEN — WE WILL FOLLOW YOUR RECOMMENDATION

Container or purpose-built module, and what width?	Where should hanging tags come off?
Should cubbies turn over mid-window?	Bag and seal inside each pod, or at a shared cell?

What we are sourcing

2 OF 2

Eight work packages. Bid any subset — tell us which ones, and who you would bring for the rest.

WP-01 · RECEIVING & DE-TRAY

20,000 packages off ~30 vans

Roll dollies of 15-high trays in, singulate mixed meals off the trays, stack and store the empties. Four dock doors or fewer, shared in and out.

WP-02 · SURGE BUFFER

Absorb the 8:30 wave

About 30 vans land within the hour; a chilled buffer meters them into the pods. Not needed at pod 1, but the dock must accept one later without rework.

WP-03 · IDENTIFY & ALLOCATE

Read the tag, pick the pod

Read each hanging tag, look it up, send it to its pod, then fine-sort to cubbie. **A new pod adds an output, not a rebuild.** Nothing is written to the tag.

WP-04 · CUBBIE WALL

3,500 chilled bags, all live

Every bag stays open until its last meal lands. A vertical put wall presents each bag on demand and hides it again; completion is sensed per bag.

WP-05 · PICK, STRIP, PLACE

The pick cell

Identify the package, remove its hanging tag if still on, place it in the assigned bag, add ice packs where asked. Robotic suction is the working concept.

WP-06 · SEAL & TAG

Close the bag, name the door

Seal the liner tamper-evident, close the bag, then print and apply a 2 × 6 in RFID bag tag with route, stop and bag count — 2 of 3.

WP-07 · CART & LOAD

3,500 bags onto ~30 vans

Each bag to its slot on a route cart, a household's bags side by side; carts roll onto the van in stop order and lock in place for the route.

WP-08 · CONTROLS

One layer, every pod

The WMS spans every pod and integrates with Youtopia — .NET on Azure, event-driven. A new pod joins by configuration. We resolve exceptions; you surface them.

THREE CONSTRAINTS THAT DECIDE THE DESIGN

1 · Every bag is open at once

Meals arrive unsorted, so no bag closes until its last package lands. All 3,500 are live at once, each in a chilled cubbie that presents on demand. This — not throughput — sets how many pods a site needs.

2 · A new pod changes nothing shared

We add a pod each quarter while running. A sorter with one divert per pod fails this test; so does conveyor welded through a doorway. Expect two-stage sortation and untethered transfer.

3 · RFID inside a metal box

Loose hanging tags, dense populations, reflective metal on six sides. Reads must be attributable to one package at 67 a minute, not a bulk count. Bring a measured read and mis-read rate from a comparable enclosure.

FIVE QUESTIONS WE WILL ASK YOU

- 01 What does pod 10 cost compared with pod 1 — and what changes on site when you add it?
- 02 Container at 7 ft 6 in or purpose-built at 12 ft? How many pods for 20,000 meals a day?
- 03 Our working concept is robotic suction from a vertical put wall. Defend it, or argue us out of it.
- 04 Show a measured RFID read rate for loose hanging tags inside a refrigerated metal enclosure.
- 05 Would you productize the pod for us — and would you sell the same pod to our competitors?



Scan for the full RFP and the 3D concept, and to tell Paul what you can do.

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