PRODUCT INNOVATION CASE STUDY

Beyond The Sachet.

Rethinking how flavor reaches instant noodles.

123B

servings / year

~2–3 plastic sachets each.

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A simple moment that started this.

> *“When I make instant noodles, I have to juggle a plastic sachet, tear it open, watch seasoning spill everywhere, then throw away plastic I used for 3 seconds.”*

The sachet exists for the manufacturer. Not the consumer.

What I was really asking:

1. Does the sachet actually serve the consumer?
2. Or does it only serve the manufacturer?
3. What if the seasoning was part of the noodle itself?
4. Has anyone tried to solve this before?

02 · PROBLEM DEFINITION

The sachet solves a manufacturing problem. It creates a consumer one.

WHY SACHETS EXIST

- Isolates seasoning from noodle moisture
- Protects volatile aromatics over 18 months
- Enables multiple flavor SKUs on one line

Spill & mess

Powder scatters every pour

Residual waste

Masala stuck inside, discarded

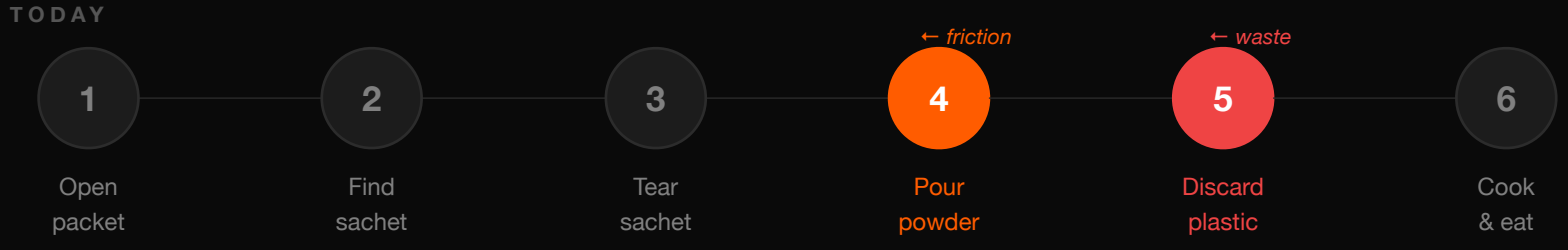
Plastic guilt

3 seconds of use. Decades of waste.

Extra friction

4 extra steps every single time

What if the sachet simply didn't exist?



The question is not “can we?”

It’s “which format wins across taste, cost, and scale?”

6 ways to kill the sachet.

Compressed Tablet

Drop in. Dissolves.

Bouillon-style pressed seasoning. Consumer drops it into water like a stock cube.

Seasoning Ring

Around the cake.

Pressed ring that encircles the noodle block. Melts on contact with boiling water.

Edible Film

Dissolves in seconds.

Water-soluble starch pouch. Same ritual as a sachet — but it becomes part of the soup.

Noodle Coating

Already on the block.

Seasoning spray-coated post-frying. Nothing extra to open. Zero separate parts.

Flavor Beads

Micro-capsules.

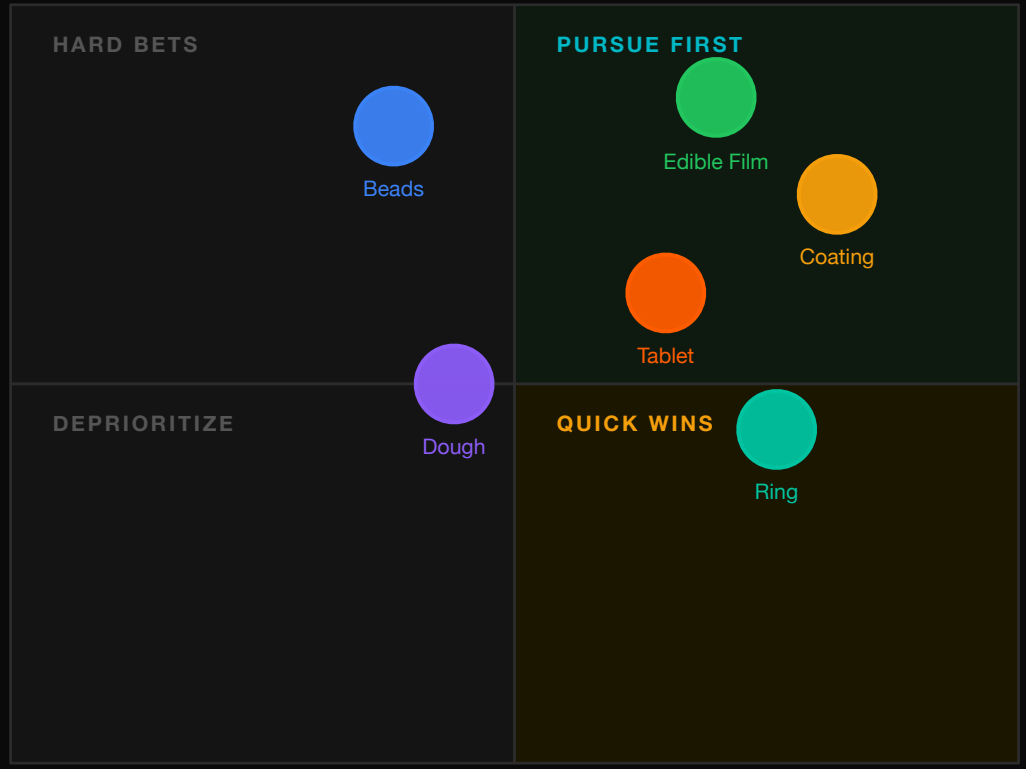
Microencapsulated flavor beads embedded in the noodle structure. Burst during cooking.

Dough Integration

Baked into the noodle.

Seasonings mixed into the dough before extrusion. The noodle is the seasoning.

Not all ideas are equal.



SCORECARD

FORMAT	Taste	Cost	Scale	Sus	Adopt
Coating	●	●	●	●	●
Film	●	●	●	●	●
Tablet	●	●	●	●	●
Beads	●	●	●	●	●

● Strong ● OK ● Weak

06 · WHAT SURPRISED ME

Research changed my priors.

01

Tablets are harder than they look.

Oil-based sachets can't be compressed — every pack has 2–3 sachets, and the oil one is the hardest to replace.

02

Surface coating is hiding in plain sight.

Drum-coating is already in snack manufacturing. Lowest capex of any format. Wildly underrated.

03

Sustainability isn't automatic.

Edible films use more energy to make than powder fill. Chitosan isn't even vegan. Every claim needs a lifecycle audit.

04

The real moat is manufacturing inertia.

Sachet lines run at 300–600 kg/hr. Any new format must match this throughput. Technology isn't the bottleneck — operations are.

Start with the coating.

Noodle Block Surface Coating

Spray seasoning onto the noodle block post-frying using drum-coating technology already used in snack manufacturing worldwide.

Lowest capex	$150K–400K vs $500K–3M for alternatives
Zero behavior change	Open, cook, eat — consumer does nothing new
No patent conflict	Clear of Unilever bouillon tablet IP
Existing technology	Drum coaters already in snack lines globally

WHY NOT THE OTHERS?

Edible film

Brittle in tropical humidity. Needs climate-controlled supply chain.

Tablet

Unilever IP conflict. Oil fraction still needs a separate solution.

Flavor beads

3–5× the cost of current sachets. Pharma-grade capex required.

Dough integration

Maillard reaction degrades seasonings during frying. Inconsistent results.

Best first mover: ITC Yippee (India) — single masala sachet, sustainability mandate, fastest domestic pilot path.

A 3-phase pilot to de-risk fast.

Phase 1 0–6 months

Formulate & Validate

- Partner with Givaudan or IFF on formulation
- Test 5 coating variants on Yippee Masala noodle
- Blind taste-test vs. sachet baseline

Pass/fail: taste parity with sachet

Phase 2 6–18 months

Line Trial & Shelf Life

- Pilot drum-coater at one Yippee factory
- Accelerated shelf-life test: 40°C, 90% RH
- FSSAI regulatory pre-engagement

Target: Aw < 0.65 throughout shelf life

Phase 3 18–36 months

Launch & Scale

- 2-city launch with 'Zero Sachet' claim
- Track NPS, repurchase rate, sentiment
- Positive signal → retrofit second line

Success: NPS ≥ baseline + repurchase ≥ 70%

Instant noodles, 2035.

No sachet. No plastic. No friction.

H1: 2025–2027

Surface-coated noodles replace the dry powder sachet. One less piece of plastic in every pack.

H2: 2027–2031

Edible film pouch replaces all sachets. Preparation becomes: open, add water, eat.

H3: 2031–2035

Smart flavor integration. Seasonings adapt to consumer data. Zero packaging. Zero waste.

The sachet was never a product feature. It was a workaround.

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APPENDIX

Technical Reference

COST PER SERVING vs. CAPEX

Format	Line Capex	Cost/serve Δ	Shelf-life risk
Sachet (baseline)	—	—	Low
Surface coating	$150–400K	+$0.002–0.005	Medium
Edible film	$300K–1.2M	+$0.017–0.040	High (humidity)
Compressed tablet	$500K–2M	+$0.010–0.045	Medium
Dissolvable capsule	$1–3M	+$0.037–0.075	Low

KEY PATENT LANDSCAPE

WO2019002088A1 HIGH

Unilever

Broad tablet composition claims. Design-around required.

WO2020109173A1 HIGH

Unilever

Controls dissolution via compaction. Hardness 80–300N.

Starch Film (2021) NONE

Public domain

Cornstarch + xylose film. Free to use commercially.