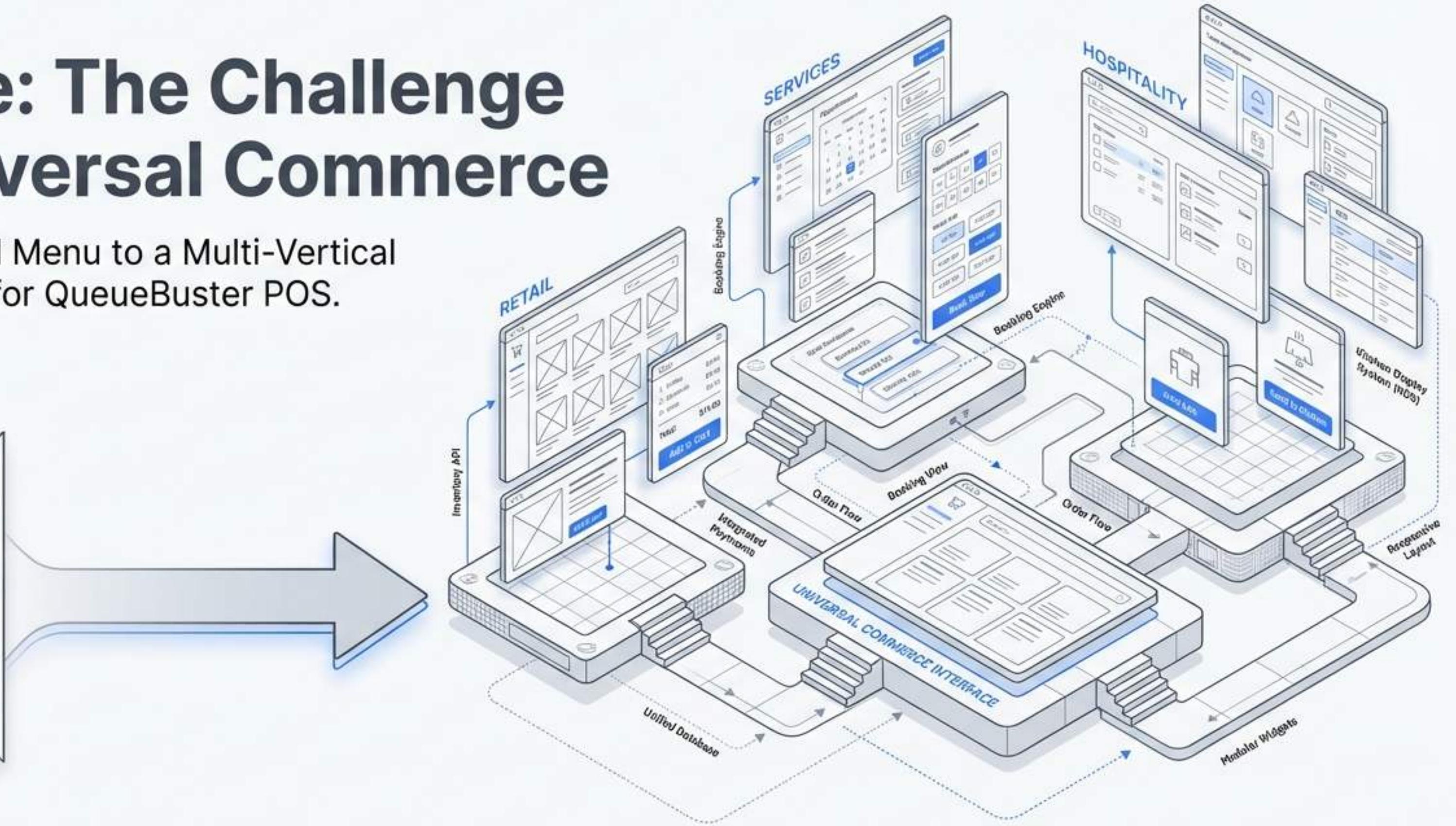


eStore: The Challenge of Universal Commerce

From a Digital Menu to a Multi-Vertical Marketplace for QueueBuster POS.



Designing a single interface that accommodates the distinct logic of Retail, Services, and Hospitality.

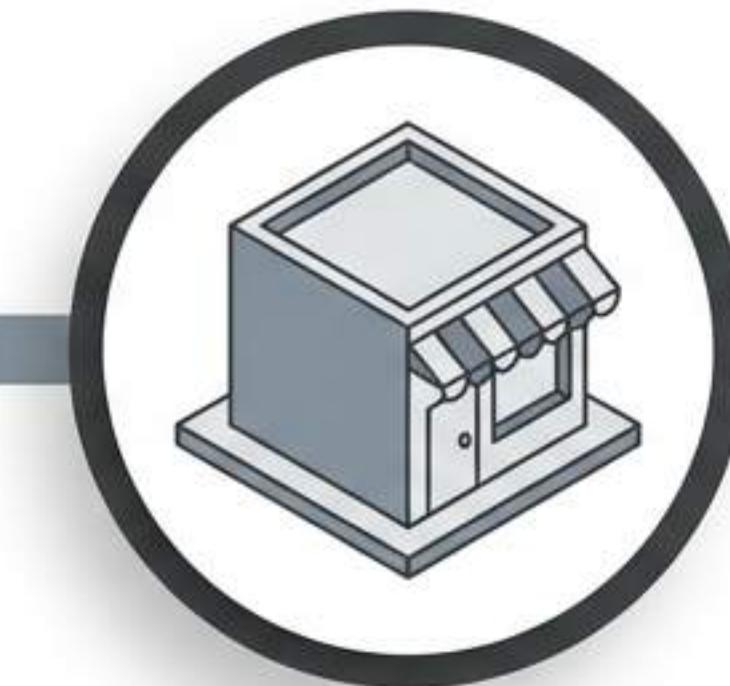
Author: Madhavan
NotebookLM

The Pivot: Survival Driven Evolution



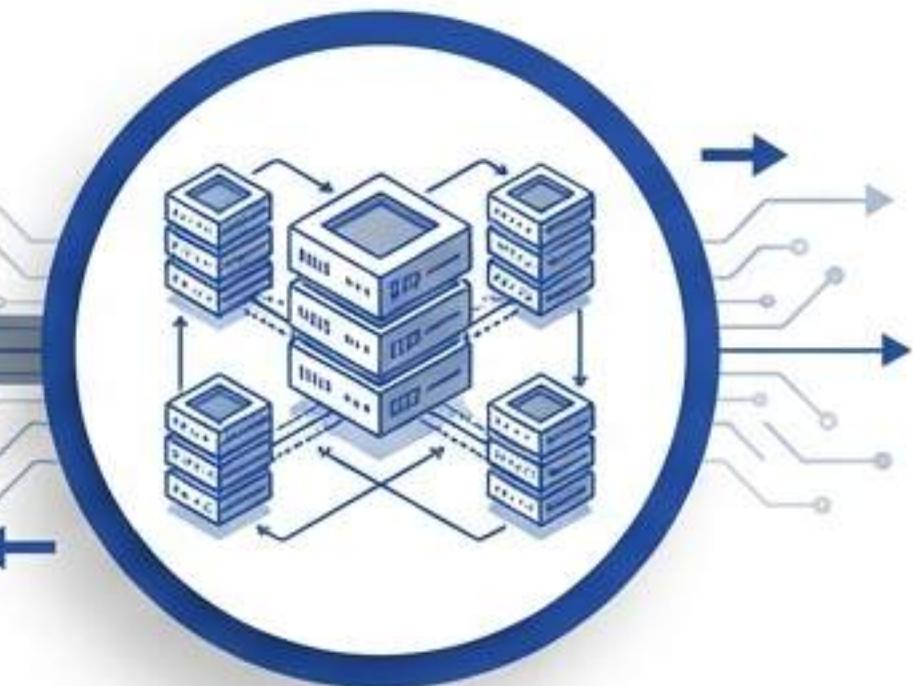
2020 Context

Response to Covid-19.
Digital Menu & Contactless
Ordering.



The Pivot Goal

Enable QueueBuster POS
customers to sell online.

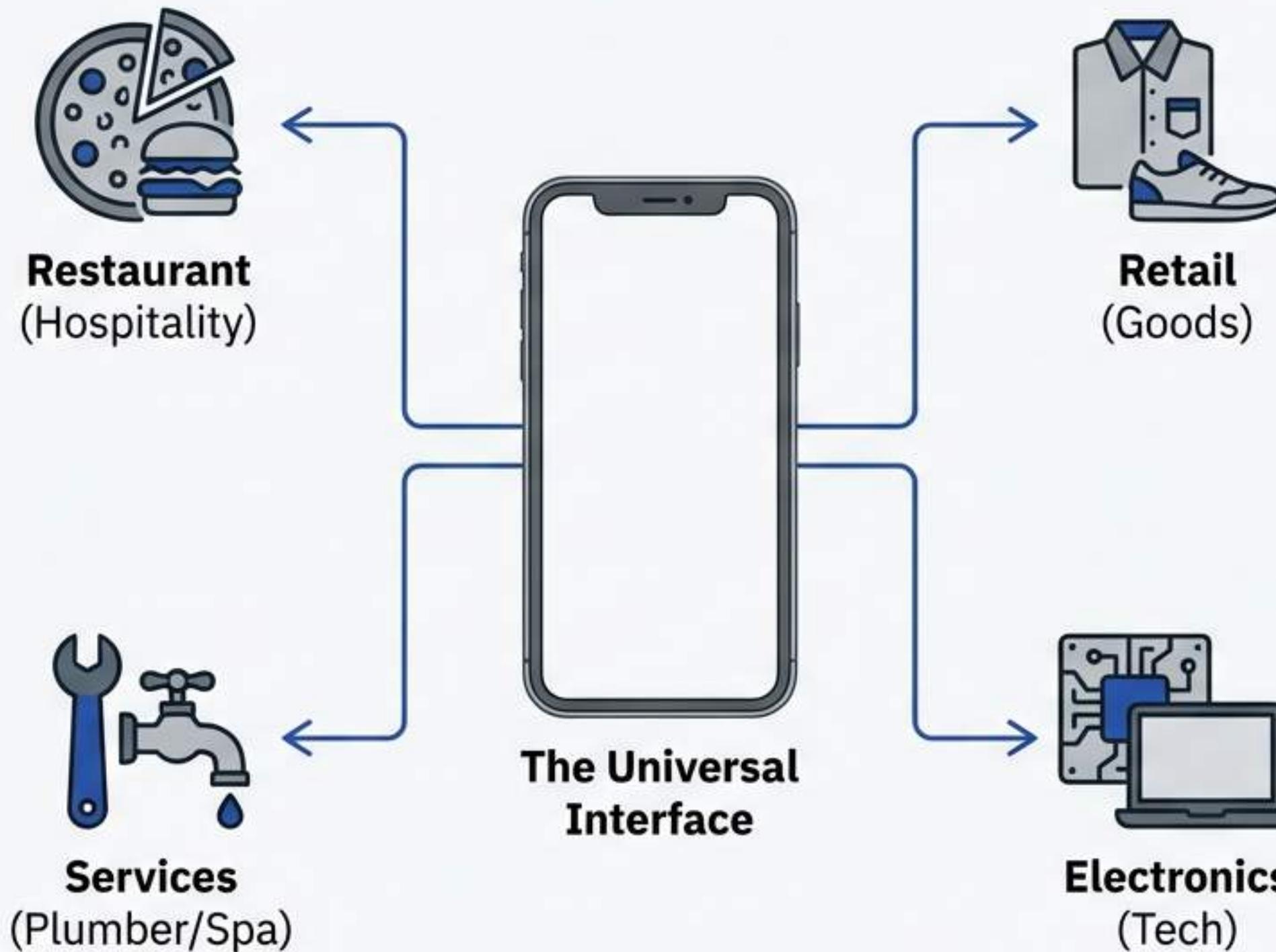


The Reality

**Full E-commerce Portal.
Payments, Inventory,
Universal Logic.**

The project began with a singular focus on safety—contactless ordering—but evolved into a foundational business requirement. The challenge was no longer just about ordering food; it was about building a survival engine for merchants across incompatible verticals.

The Paradox of the Universal Interface



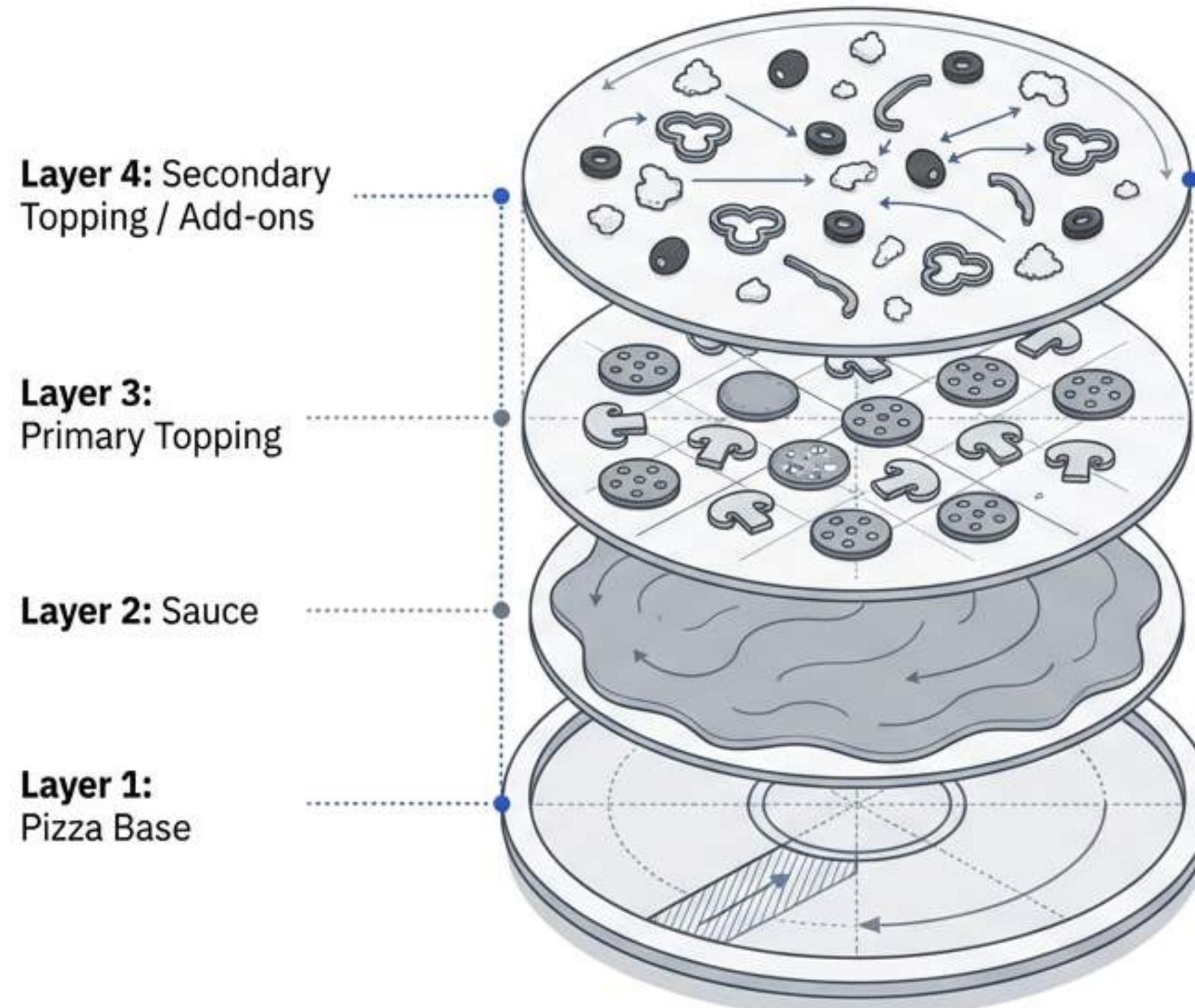
The project became complex when the interface had to be designed for different industries simultaneously.

How do you build a single UI that accommodates products and services that share no structural logic? A spa appointment is not sold the same way as a smartphone.

Deep Dive: The Logic of a Pizza

THE LOGIC TREE

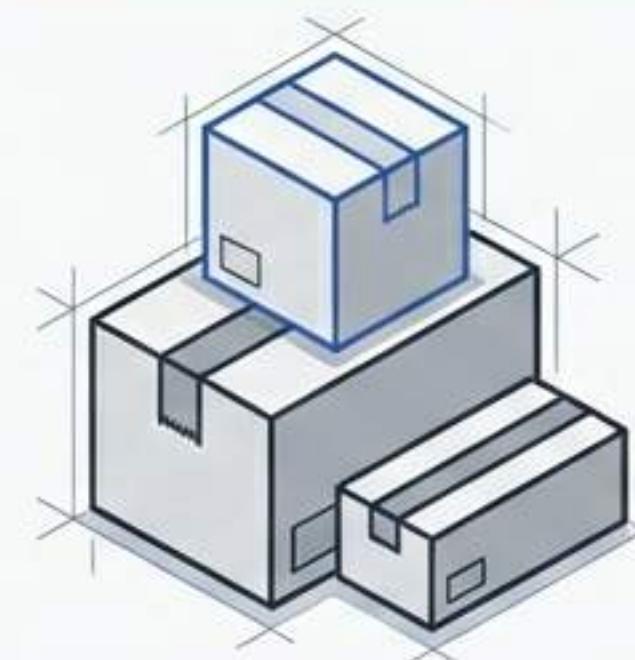
- **Nested Add-ons:** Options exist inside layers.
- **Dependencies:** Some choices are mandatory; others are optional.
- **Conflicts:** There can be a product where one add-on cannot be added with another.



To the user, it is just dinner. To the system, it is a complex dependency tree.

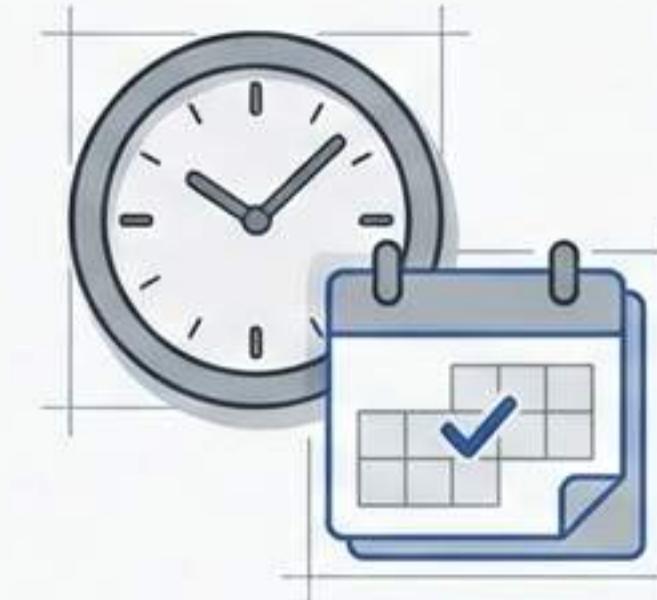
Tangible Goods vs. Intangible Services

Retail & Electronics



- Fixed Stock Inventory
- Defined Variants (Colour, Brand, Size)
- Specific Hierarchy
- Physical Delivery

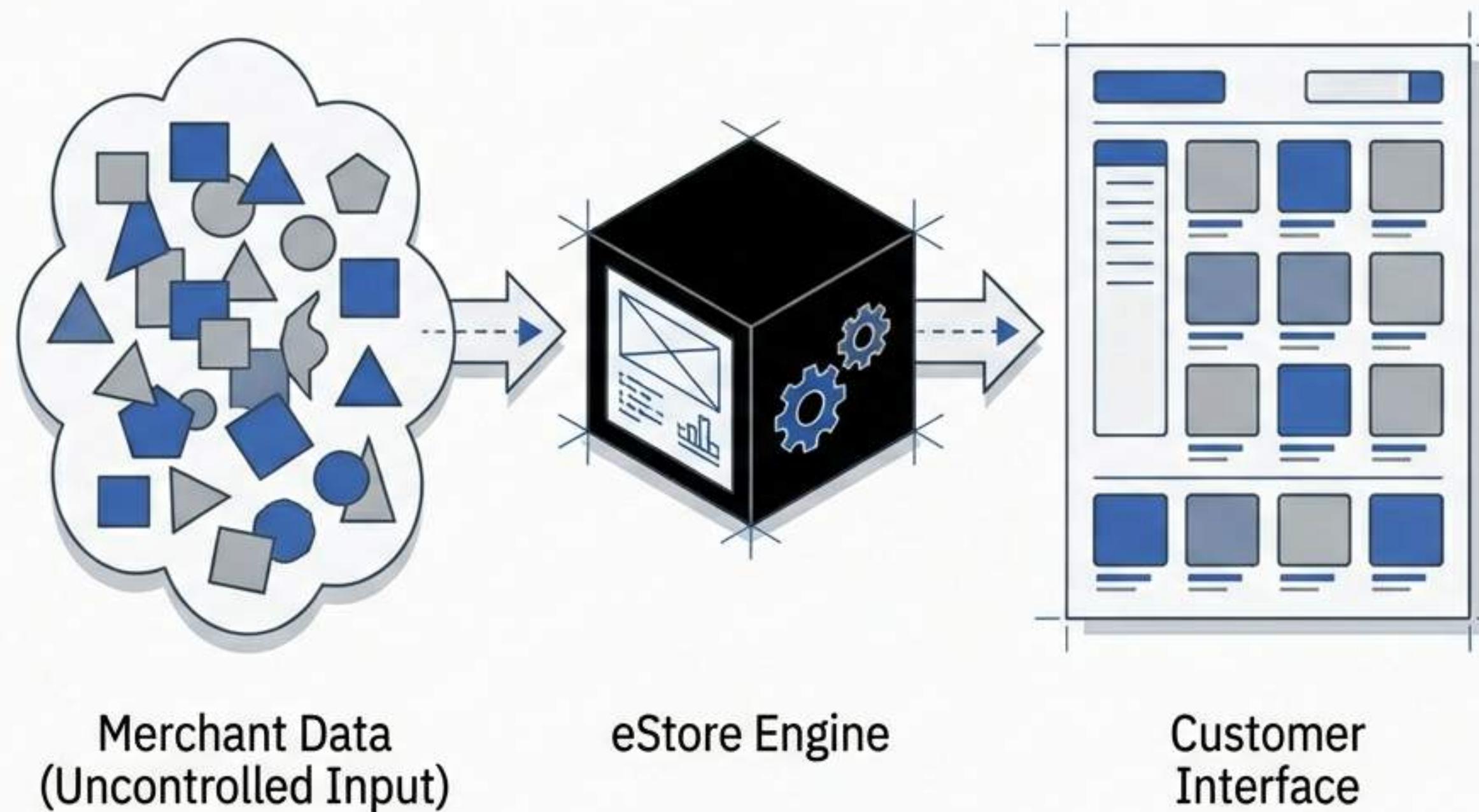
Services (Spa, Plumber, Electrician)



- Time-based Availability
- Abstract Descriptions
- No Physical Inventory
- Service Radii / Location based

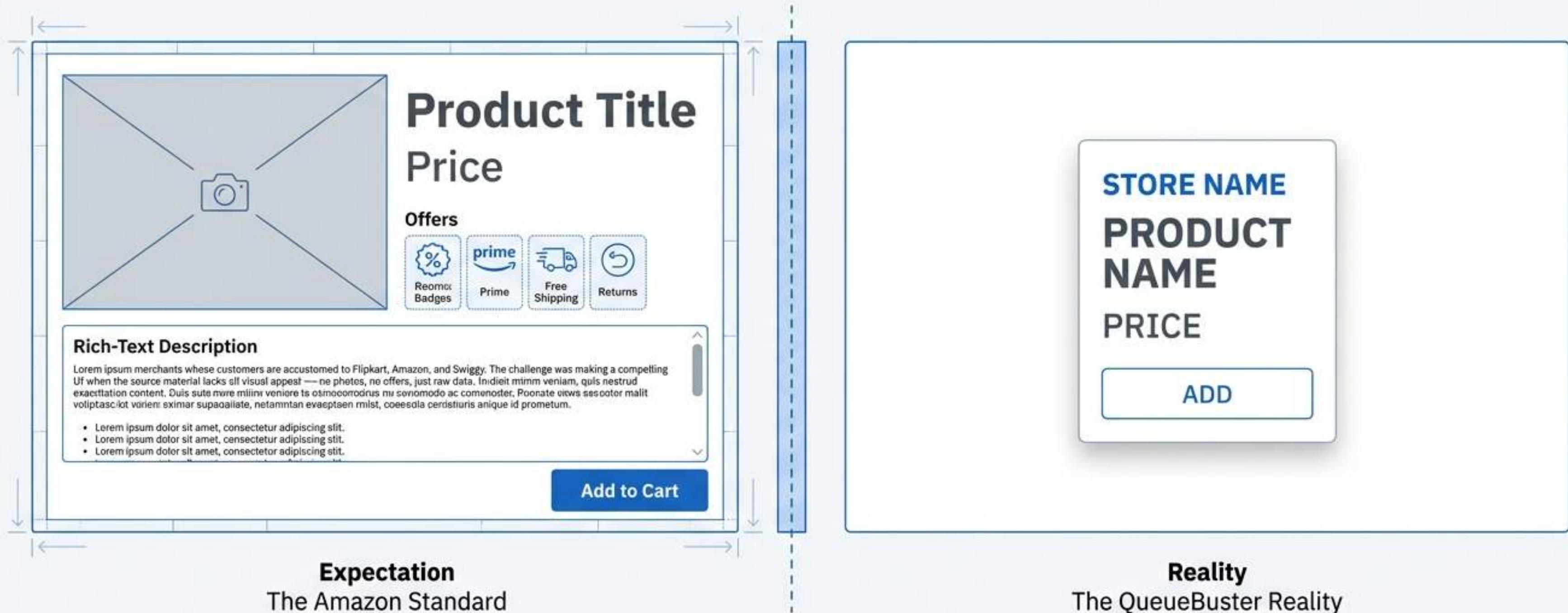
Key Design Question: How does the same 'Add to Cart' button function for a physical television and an hour of a plumber's time?

Constraint I: The Loss of Inventory Control



- Unlike a curated store (e.g., Apple), eStore does not control the merchandise.
- **Constraint:** We cannot control the number of categories, sub-categories, brands, or variants.
- **Risk:** The UI breaks if the merchant adds too much data (500 categories) or too little (1 category).

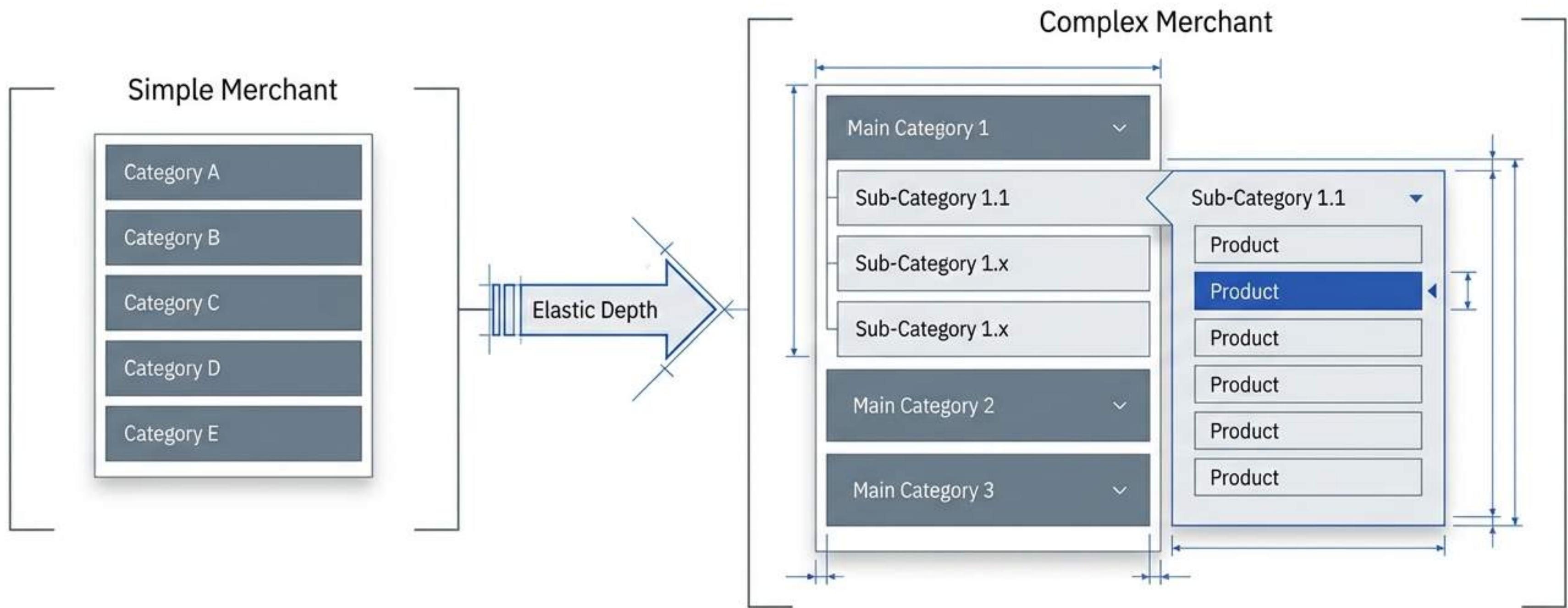
Constraint II: Designing for Minimum Viable Data



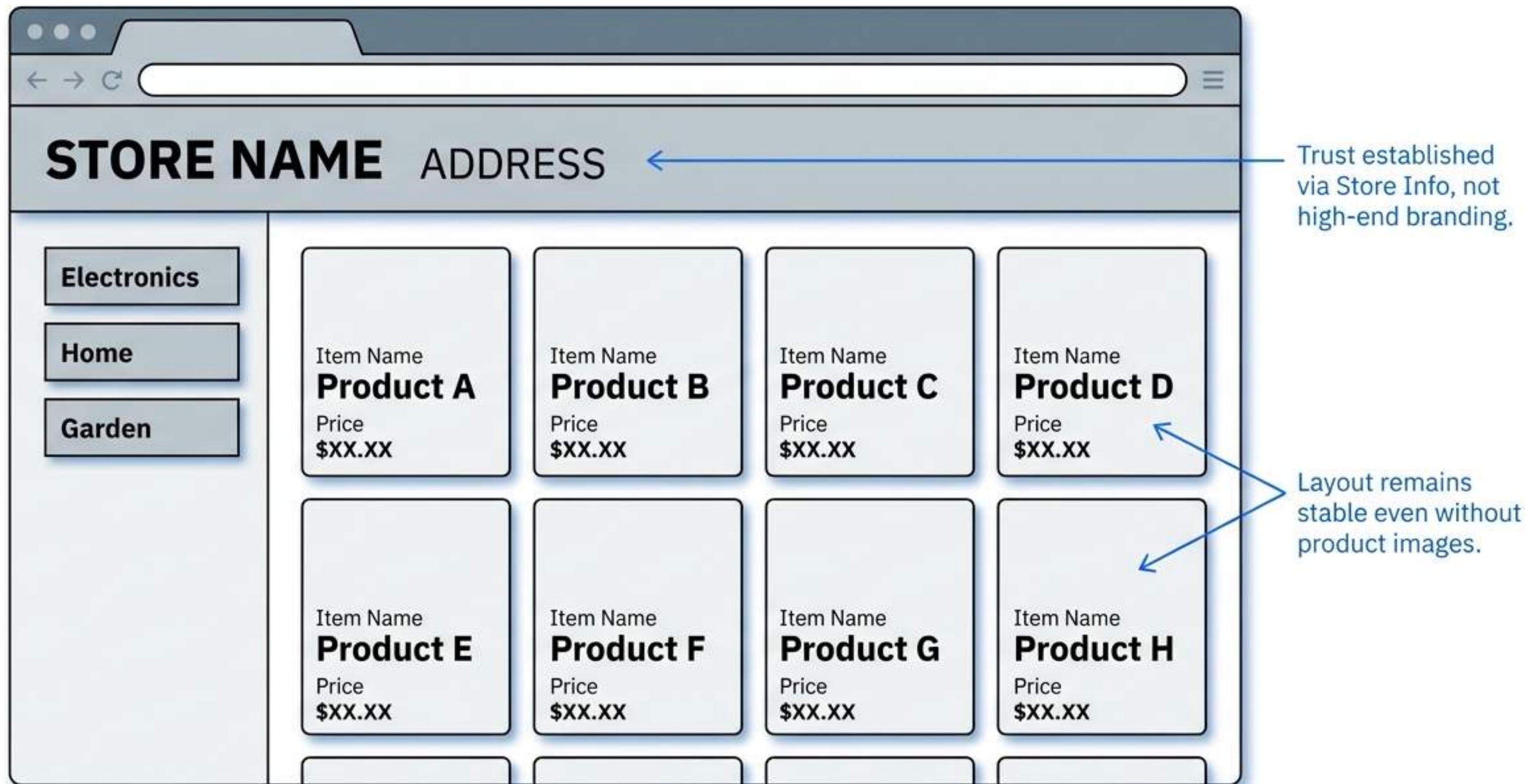
We were targeting merchants whose customers are accustomed to Flipkart, Amazon, and Swiggy. The challenge was making a compelling UI when the source material lacks all visual appeal—no photos, no offers, just raw data.

The Architecture of Elastic Categorisation

The basis of e-commerce is the categorisation of products. The solution required a hierarchy that could expand or contract based on the merchant's sophistication. The complexity is hidden until the data requires it to surface.



The Solution: Web Interface

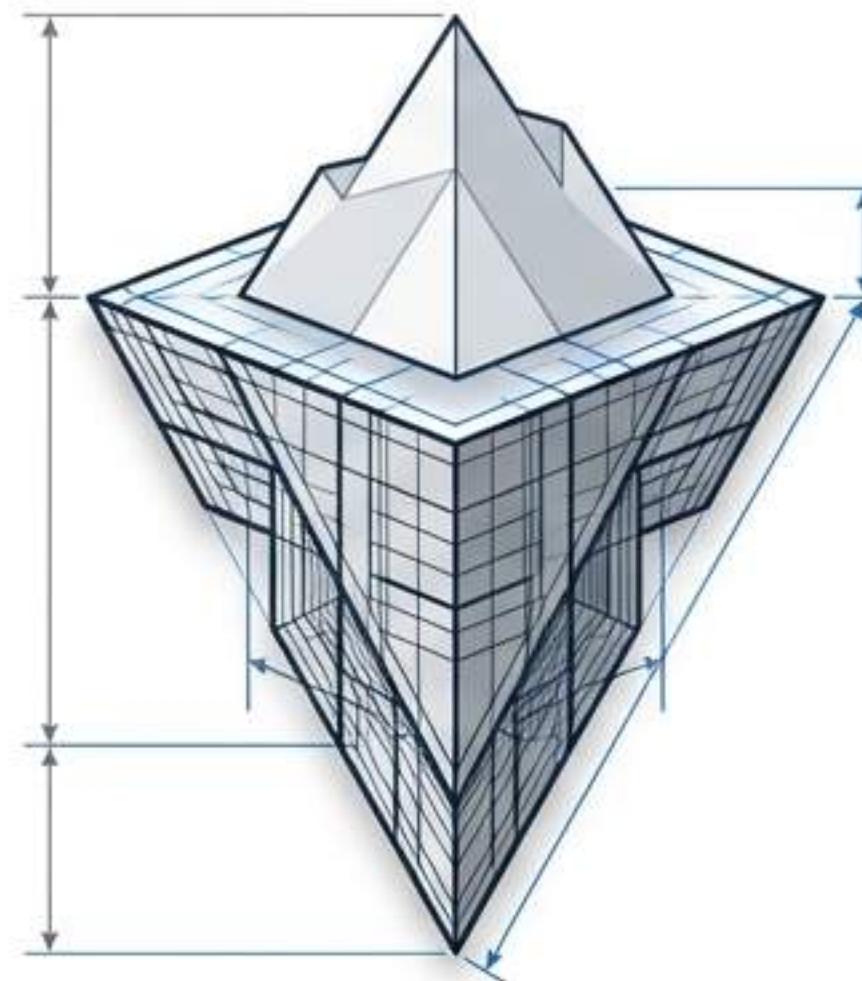


The Solution: Mobile Experience



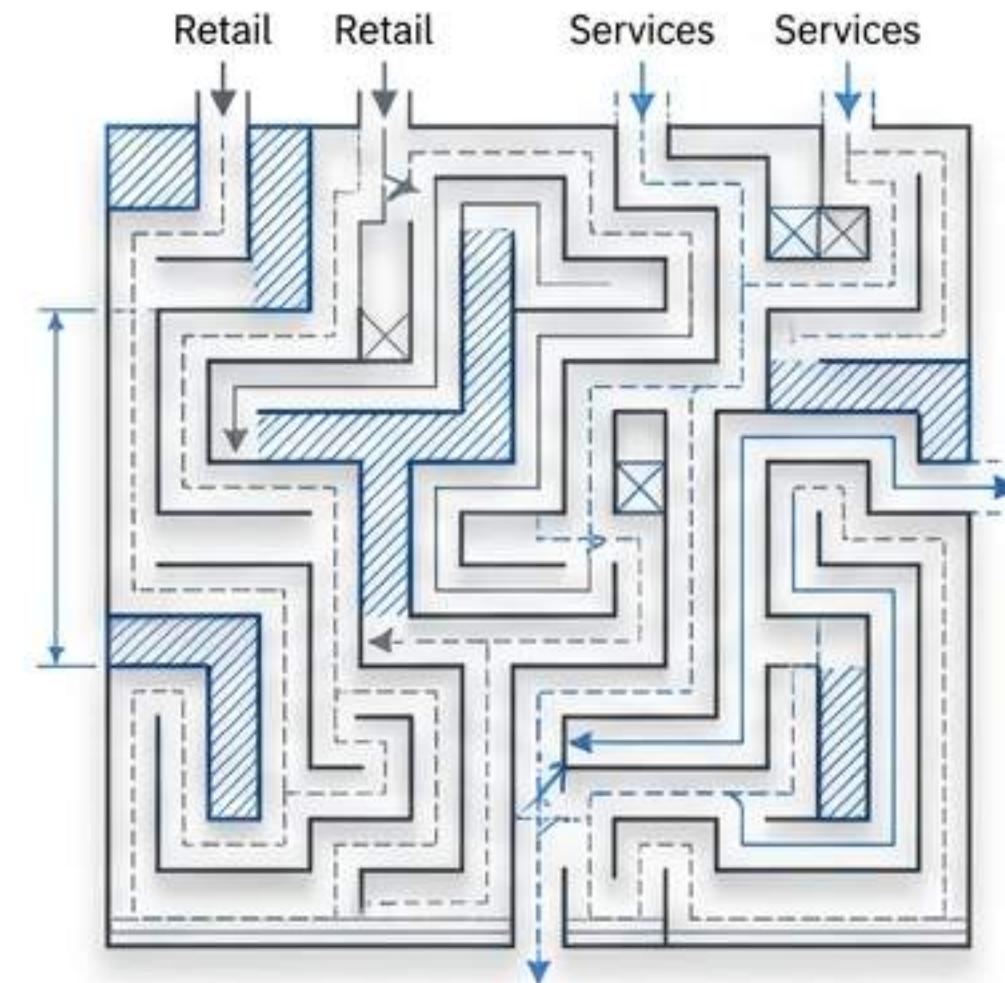
Translating complex dependency trees into a linear mobile flow.

Strategic Learnings



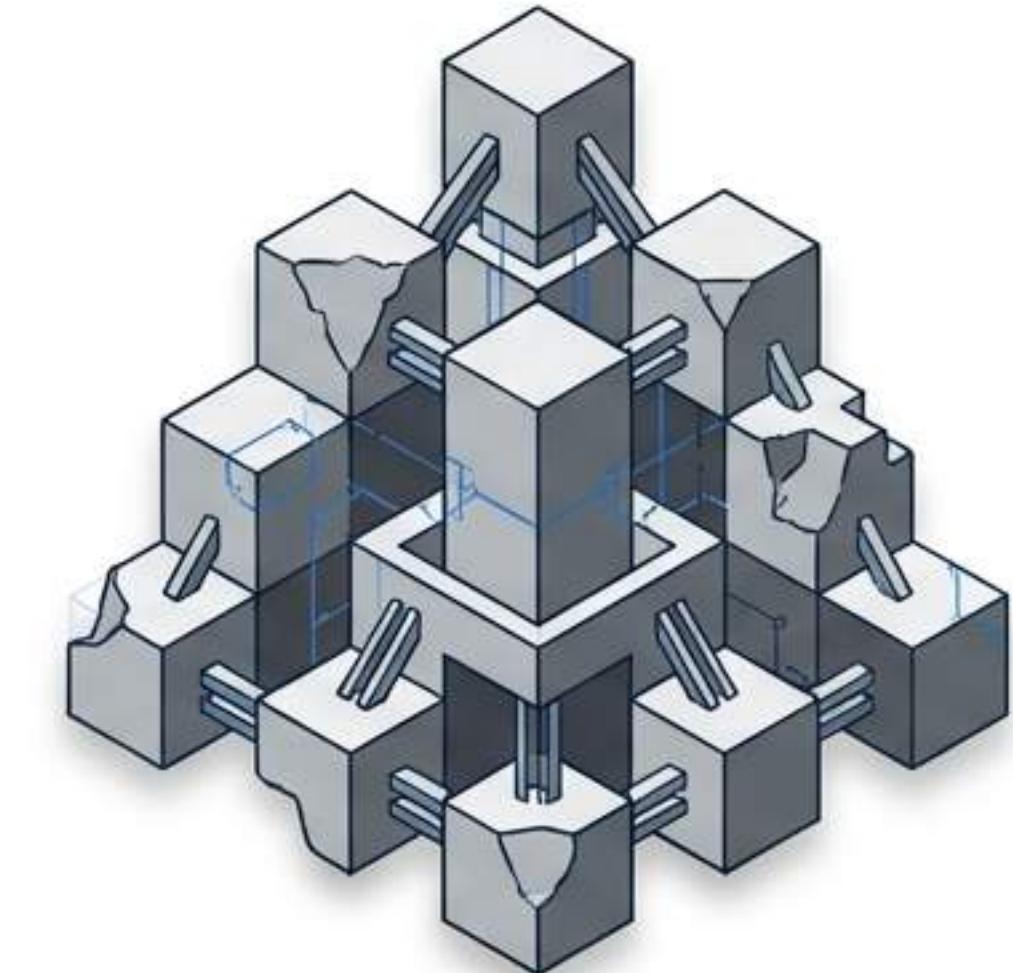
The Illusion of Simplicity

It looked easy to design an e-commerce interface, but back-end logic is deceptively deep.



Edge Cases are the Foundation

You cannot design the 'happy path' first when industries (Retail vs. Services) contradict each other.



Data Agnosticism

A scalable platform must function beautifully even when the input data is ugly or incomplete.

“It looked easy to design... but deep down when you work with teams it is different.”

— Madhavan, Product Designer

CONCLUSION: True UX capability is not just about making things look good; it is about organising the chaos of the real world into a system that feels simple.