

Dukan

Voice-AI ordering for India's neighbourhood supermarkets

Parth Sapra · Bolna FSE Assignment · May 2026

The Kirana Economy



The द in Dukan: Scaling the voice of India's retail backbone.

Phones Don't Scale

Massive Volume

13M+ neighbourhood supermarkets process **₹40 lakh-crore/year**. Most operations still rely entirely on manual phone orders.

Inefficiency Gap

Repetitive tasks dominate the workflow: **60–80% repeat callers** ordering the same regular baskets every week.

| The Cost Of Missed Calls

25%

Peak Hour Drop Rate

Conversion Breakdown

During peak hours, 1 in 4 customers cannot get through. When the phone is busy, customers default to instant-commerce competitors like **Zepto or Blinkit**.

Dukan aims to push call-to-order conversion from **60% to 90%+**.

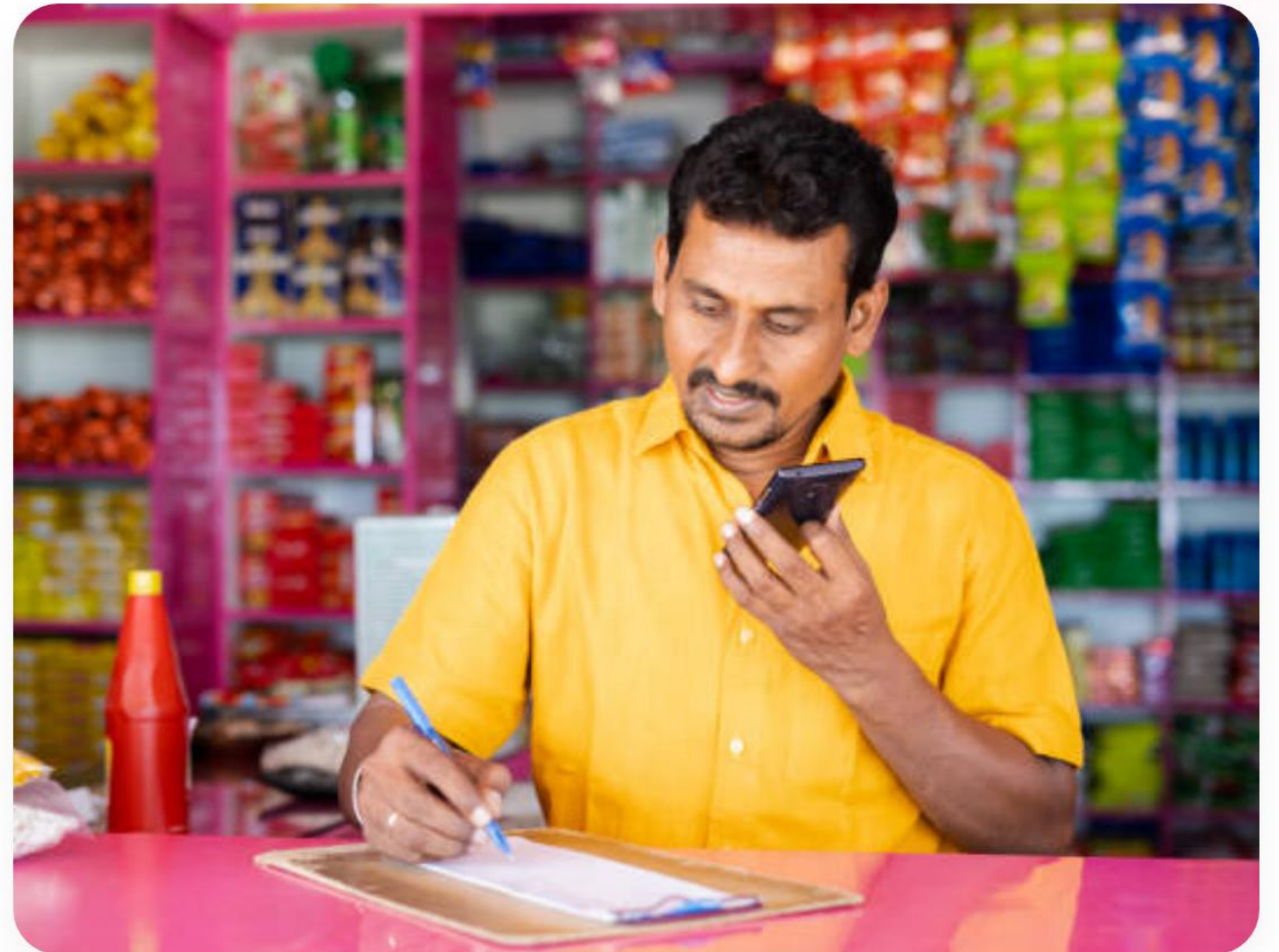
| The Voice-AI Workflow

 **Callback Flow:** Phone/Address saved upfront from web.

 **Native Greeting:** Bolna dials and greets in Hindi/English/Marathi.

 **Catalog Search:** Handles Devanagari, aliases, and units like "half kg".

 **Human Escalation:** Seamless handoff for complex disputes.



The Intelligence Layer



Code-Switching

Natural Hindi/English switching mid-sentence. Agent identifies "Half kg tamatar" seamlessly.



Realtime Sync

Dashboard reflects call indicators and order cards **before** the call even concludes.



Alias Matching

Search drops stop-words and matches romanised aliases against stock SKUs accurately.

| Provider-Agnostic Layer

The system is built on a **VoiceProvider interface**, allowing a single environment variable to swap backends (Bolna, Vapi, or Custom) without touching application code.

Stack: Next.js 15, TypeScript, Supabase Realtime, and Vercel.



The Agent's API Toolkit

Tool Name	Activation Trigger	Business Outcome
lookup_customer	Call Initiation	Retrieves ID, Name, Language, & History
catalog_search	Per Basket Item	Price, SKU, and In-stock validation
validate_address	Delivery Confirmation	Pincode and Zone validation
place_order	Explicit Confirmation	Generates Order ID and SMS dispatch

Monthly Operating Costs



Per-outlet savings: ~₹65k/month. Break-even achieved in Week 1.

Building The Moat

Dukan's value compounds over time through two proprietary datasets:

The Catalog Graph: Deep learning of aliases, local substitution rules, and brand preferences.

The User Graph: Saved address maps and order history that makes switching costs high for the merchant.



Product Roadmap



V1 (Current)



Outbound callback flow, 5 core tools,
Realtime dashboard.

Next 2 Weeks



WhatsApp confirmation and Razorpay
payment links.

Next Quarter



Last-order substitution prompts and
multi-outlet routing.

Questions?

Live: dukan-bice.vercel.app

Thank you for your time.

— Parth Sapra

Image Sources



https://media.istockphoto.com/id/1360178437/photo/indian-groceries-business-man-noting-orders-while-talking-with-customer-on-mobile-phone-at.jpg?s=612x612&w=0&k=20&c=uPN7_Rgeuktugb6jT8CSuZxcPERbygxaGBTkOJzzP58=

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