🗄 1. SmartVAS Self-Service Portal

A centralized platform where users can browse, activate, deactivate, and manage all value-added services.

🔧 Features:

- VAS catalog with filters (e.g., entertainment, storage, safety)
- One-click subscription/unsubscription
- Notifications for new offers and renewals
- Admin panel to manage VAS packs
- Analytics dashboard for user behavior

💡 Tech Add-ons:

- Twilio (SMS)
- JWT Auth
- Spring Boot + React

🎼 2. Caller Tune Management System

Allows users to browse, preview, and set caller tunes from a rich library of songs.

🔧 Features:

- Browse by language/genre
- Preview tone audio
- Set default or custom caller tune
- Subscription history
- Admin uploads new content

💡 Tech Add-ons:

- AWS S3 for audio
- Media player component in frontend

- PostgreSQL for user preferences

📦 3. VAS Feedback & Rating System

Collects feedback for each VAS service and gives insight into user satisfaction and retention.

🔧 Features:

- Users rate VAS packs (1–5 stars)

- Submit comments or issues

- Admin views service-wise ratings

- Word cloud and sentiment analysis (bonus)

💡 Tech Add-ons:

- MongoDB for flexible feedback storage

- Chart.js/Recharts for visual reporting

- Basic ML sentiment classification (optional)

📦 4. Add-On Data Pack Purchase System

A microservice for purchasing data boosters, roaming packs, or OTT subscriptions instantly.

🔧 Features:

- Real-time data usage monitoring

- One-click purchase of add-ons

- Auto-renewal toggle

- Recharge/payment simulation

💡 Tech Add-ons:

- Razorpay/Stripe test API

- Kafka (for transaction logging - optional)

- Spring Boot Scheduler for renewals

👪 5. VAS Family Sharing & Parental Controls

Allows a primary user to manage VAS across family members, with content restrictions and usage controls.

🔧 Features:

- Create family profiles

- Set VAS packs per user (e.g., kids get only learning content)

- Parental approval workflow

- View activity logs and usage limits

💡 Tech Add-ons:

- Role-based access (parent/child)

- Email/SMS alert integration

- Spring Security + Angular/React Role Guarding

🔁 Common Tech Stack for All

Layer	Technology
Frontend	React or Angular
Backend	Spring Boot (Java 17)
Database	PostgreSQL / MongoDB
Auth	Spring Security + JWT
UI Charts	Chart.js, Recharts

Layer	Technology
DevOps (Optional)	Docker + Azure or AWS
Notifications	Twilio, Mailgun, or SendGrid