DeXa — Hedera for Everyone, Anywhere

Phone-first USSD & WhatsApp access to Hedera (EVM) for the Global South.

– If you can send a message, you can use Hedera –

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1) Problem → Opportunity

- 2-3B people lack reliable internet or smartphones; many rely on USSD/SMS or WhatsApp
- Web3 onboarding is complex: seed phrases, app installs, jargon, volatile fees
- Micro-transactions and community finance need fast, cheap, trusted rails

Opportunity: Bring Hedera's speed and low fees to the channels people already use daily.

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2) Solution — DeXa

DeXa bridges Hedera (EVM) to USSD and WhatsApp:

- USSD menus for feature phones (no data required)
- WhatsApp chat with natural-language commands
- Phone-number ↔ wallet mapping; PIN-protected actions
- Low, predictable fees with Hedera; fast finality

Result: Anyone can create a wallet, check balance, and send/receive HBAR from a basic phone.

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3) Product Overview

- Channels
  - USSD/SMS via telco partners; WhatsApp via Twilio Business API
- Core features
  - Wallet creation, balance, P2P payments by phone number
  - Group expense flows and optimal settlement (WIP)
  - Multi-language UX (English, French, Kiswahili; extensible)
- Safety
  - Webhook signature verification, encrypted secrets, PIN-gated actions
- Developer foundations

- Prisma/PostgreSQL schema; ethers v6; scripts to compile/deploy a UserRegistry contract

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4) Experience (User Journey)

- USSD (no internet)
  1. Dial short code → DeXa menu
  2. Create wallet → set 4-digit PIN
  3. View balance, send HBAR to a contact
- WhatsApp (conversational)
  1. “Create my wallet” → confirmation
  2. “Show balance” → balance
  3. “Send 1 HBAR to +2547… for airtime” → confirm → on-chain tx

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5) Why Hedera

- Sub-cent, predictable fees → viable micro-payments
- Fast finality, high throughput → great UX
- EVM-compatible → leverage familiar tools & contracts

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6) Architecture

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Channels             Backend (API)                      Data & Ledger
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USSD/SMS  --->       DeXa API (Node/TS, Express)    --> Prisma/PostgreSQL
WhatsApp --->           |                               Hedera EVM (Hashio RPC, 296)
                         |__ PIN-gated actions              \__ Optional UserRegistry (EVM)
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Slide-deck (one line): `USSD/SMS + WhatsApp -> DeXa API (Node/TS) -> Prisma/PostgreSQL + Hedera EVM (Hashio RPC, 296) [UserRegistry optional]`

- Channels: USSD/SMS (Africa’s Talking, telcos), WhatsApp (Twilio)
- Backend: Node + TypeScript (Express), Prisma/PostgreSQL
- Blockchain: Hedera EVM (Hashio RPC, Chain ID 296), optional UserRegistry contract

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7) Market & Use Cases

- Community & groups , micro-merchants, airtime/data top-ups Local remittances and
- bill splits; NGO disbursements
- Target regions: Africa, India, LATAM, Southeast Asia

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8) Business Model & GTM

- Revenue
  - Small transaction fee margin; enterprise integrations; developer APIs
- GTM
  - Partner with telcos/USSD aggregators, NGOs, fintech on/off-ramp providers
  - Country-specific playbooks (M-Pesa, UPI, PIX, GCash)

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9) Moat & Differentiation

- Works without smartphones or reliable internet (USSD)
- Familiar chat/phone UX → near-zero onboarding friction
- Hedera's low fees + finality → sustainable micro-transactions
- On-chain extensibility (registry, settlements, refunds)

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10) Roadmap

- Production USSD integration with regional gateways
- Hardened key management & custody options
- On-chain group settlements and smart refunds on Hedera
- Regional on/off-ramps; expanded language/accessibility

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11) Traction at Hackathon

- Working WhatsApp bot (create wallet, balance, P2P send)
- USSD prototype flows (create wallet, PIN, balance, send)
- Prisma schema + tests; contract compile/deploy scripts

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12) Team & Advisors

- Engineering: TypeScript/Node, Web3, telecom integrations, UX for low-bandwidth contexts
- Seeking advisors: telco partnerships, compliance/KYC, regional payments

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13) The Ask

- Pilot partners (telco/NGO/fintech) in Africa
- Funding/Grants/support to bring USSD to production and complete on-chain group
- flows Intros to regional on/off-ramp providers and compliance experts

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