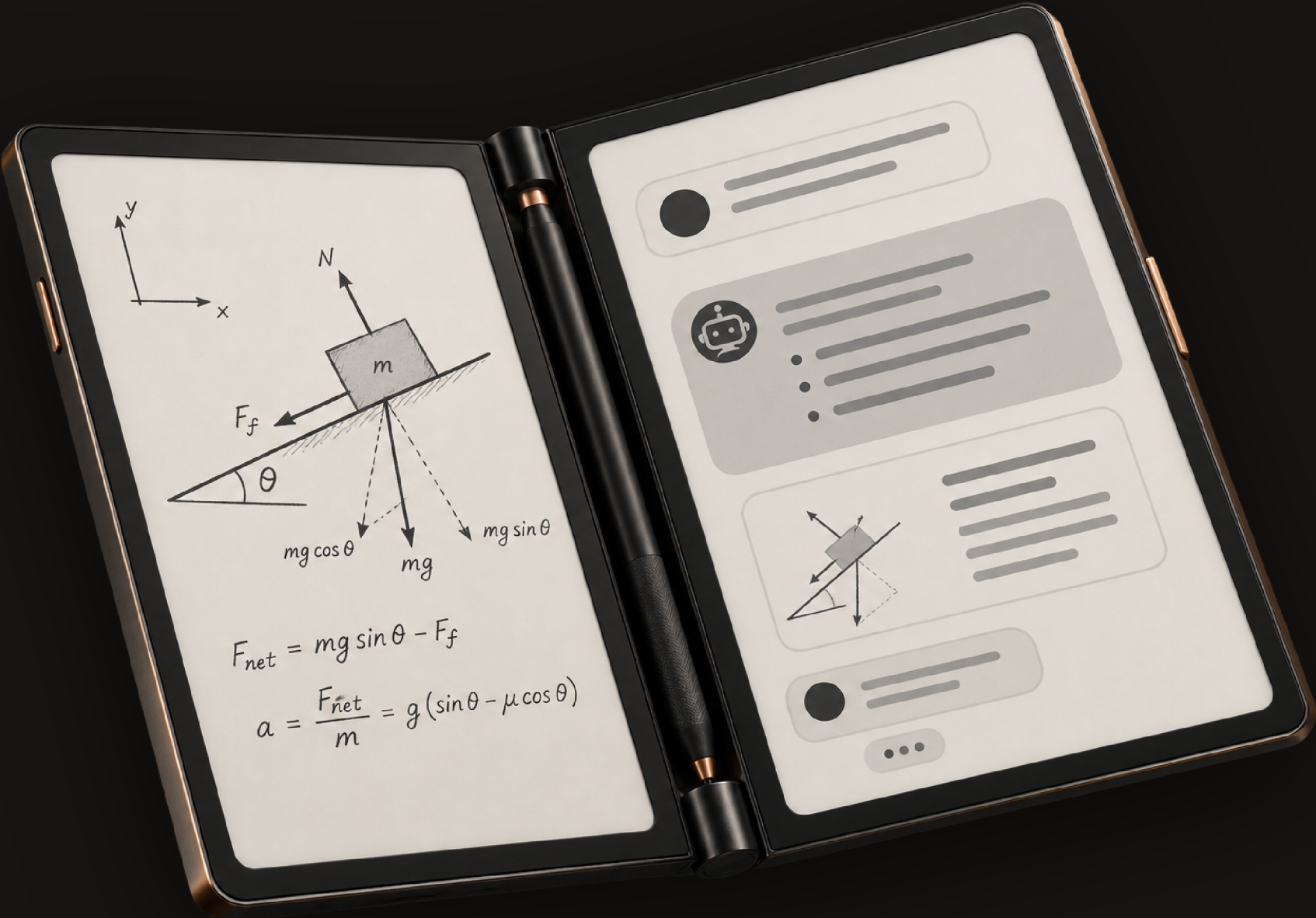
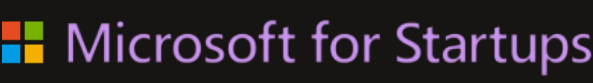


CONFIDENTIAL INVESTOR PRESENTATION

A quieter place to think.

A dual-screen reflective learning notebook.
Engineered around how students actually read, derive, and retain.

READ • WORK IT OUT • UNDERSTAND



THE PROBLEM

The lesson is not the problem.
Everything around it is.

01 / THE INTENT

A focused study session

Read chapter 9 on Electromagnetic Induction. Work through derivation question 4. Understand the physical mechanism step-by-step.

IDEAL WORKFLOW: SUSTAINED COGNITIVE DEEP WORK

02 / THE REALITY

General-purpose screens are built to interrupt

Short-form videos, algorithm notifications, group chats, and backlit eye strain fight for the student's dopamine every 90 seconds. We ask children to focus on appliances engineered to do everything else.

“This is a design architecture failure — not a teenage willpower defect.”

SYSTEMIC FRICTION

One student. Five connected points of friction.

01 / ATTENTION

Focus Dilution

Entertainment algorithms sit right beside academic textbooks. Constant tab switching ruins deep working memory.

02 / WORKFLOW

Broken Continuity

Reading theory on a screen while writing notes in a physical spiral pad breaks train of thought and posture.

03 / PHYSICALITY

Heavy Burden & Glare

Students lug 6–8 kg school bags daily while suffering from 4+ hours of harsh backlit LCD eye strain.

04 / ECONOMICS

Compounding Costs

Parents spend ₹1.1L–₹1.7L across 5 years buying books, stationery, coaching, and short-lived consumer tablets.

05 / INFRASTRUCTURE

Cloud Anxiety

EdTech apps fail when broadband buffers. Schools and homes need offline-first, air-gapped dependability.

All five problems originate from using multi-purpose consumer entertainment gadgets for serious study.

THE DUAL BURDEN / CONSOLIDATED STACK

Learning should demand intellectual rigor —
not physical exhaustion or financial compounding.

THE STUDENT'S PHYSICAL TOLL

6–8 kg 4.2 hrs
DAILY BACKPACK LOAD LCD BLUE LIGHT STRAIN

- **Heavy Physical Burden:** Thick NCERT textbooks, reference guides, exam exemplars, and rough notebooks hauled daily.
- **Digital Eye Strain:** Backlit tablets emit intense short-wavelength blue light causing asthenopia, headache, and fragmented sleep.
- **Postural Strain:** Hunching over cramped desks trying to juggle separate reading materials and writing paper.

THE PARENT'S 5-YEAR FINANCIAL STACK

₹1.1L – ₹1.7L
TOTAL FRAGMENTED EXPENDITURE (CLASSES 8–12)

Textbooks, reference guides & modules	₹25,000 – ₹35,000
Paper notebooks, registers, pens & stationery	₹12,000 – ₹15,000
Local doubt-clearing tutoring & coaching	₹50,000 – ₹80,000
Consumer tablet / laptop (fragile, replaced)	₹25,000 – ₹40,000

- KITAB REPLACES BOTH: A 420g dual e-paper thinking surface consolidating 5 years of books, stationery, and Socratic doubt guidance into a single ₹35,000 purchase.

SCHOOLS & INSTITUTIONS

A digital classroom should not depend on constant connectivity or IT anxiety.

01 / POLICY COMPLIANCE

Zero Camera. Zero Feed.

Global trend: 45,000+ schools worldwide have banned consumer smartphones and tablets. KiTab has zero browser, zero cameras, zero social media — designed to comply with classroom mandates.

02 / INFRASTRUCTURE INDEPENDENCE

100% Offline Core Lessons

Lessons, textbooks, derivations, and the Socratic SLM engine live completely on-device. Class never stalls when campus broadband drops.

03 / ADOPTION BURDEN

Turnkey Educator Workflow

No complicated mobile device management (MDM) or software server installs. Local teacher sync allows distributing lesson notes effortlessly.

THE COGNITIVE INSIGHT

Two pages.
One uninterrupted train of thought.

LEFT SCREEN: READ

“When light strikes a concave surface at 30° , calculate the reflected focal ray...”

On a single screen or tablet, you lose context every time you switch to a notepad or calculator. With KiTab, the left display holds the textbook anchor while the right display serves as your active working surface.

SAHAY SOCRATIC PROMPT: “What happens to the focal angle when the radius doubles? Try sketching the normal first.”

RIGHT SCREEN: DERIVE & WRITE

3.4X

LONGER SUSTAINED ATTENTION SPAN

Cognitive research proves that parallel visual continuity (seeing source material while synthesizing notes) dramatically reduces cognitive switching fatigue and increases concept retention in STEM subjects.

THE THINKING SURFACE & SOCRATIC WORKFLOW

Not another tablet. An integrated surface engineered for deep mastery.

01 / READ (LEFT DISPLAY)

Paper-Like Reading

10.3" E-ink Carta 1200 reflective display. Zero backlight glare, crisp 300 PPI typography, outdoor daylight readability. Built for multi-hour sustained STEM textbook sessions without eye fatigue.

02 / WRITE (RIGHT DISPLAY)

Zero-Lag Workpad

4,096-level pressure EMR stylus. Natural paper friction feel, sub-25ms pen latency, infinite palm rejection. Solve algebraic equations, sketch geometry diagrams, and annotate directly beside text.

03 / ASK (ON-DEVICE AI)

Sahay Socratic Engine

A tutor that provides cognitive handholds, never shortcuts. Analyzes student's handwritten work in real time, diagnoses misconceptions, and offers Socratic hints without spoiling the final answer.

HARDWARE MEETS PEDAGOGY: READ → DERIVE → SOCRATIC REFLECTION → MASTERY

ZERO APPS • ZERO NOTIFICATIONS • AIR-GAPPED PRIVACY

STAKEHOLDER VALUE

Useful to the student.
Reassuring to everyone around them.

STUDENT

Read → Try → Ask

An effortless, unbroken study rhythm. Instant doubt guidance without the shame of asking in crowded tuition classes. 6 kg lighter school bag.

PARENT

Buy → Support → Trust

Peace of mind. No fears of gaming addiction, pornography, or algorithmic distraction. A single upfront investment replacing compounding recurring expenses.

EDUCATOR

Guide → Observe → Adapt

Complies with classroom device bans. Curriculum-aligned modules. Offline distribution of verified teacher notes and homework sets.

THE SOLUTION / PRODUCT ARCHITECTURE

Not five more apps.
One coherent learning tool.

01 / FOCUS

Dedicated Study OS

Custom lean Linux environment. No web browser, no social feeds, no notifications. Only rigorous learning tools.

02 / CONTINUITY

Dual-Page Synergy

Read on the left page. Derivation scratchpad on the right. Both surfaces work together without visual friction.

03 / COMFORT

Reflective Displays

Zero backlight emission. Read effortlessly under direct sunlight or study lamps without circadian disruption.

04 / PREDICTABLE COST

Device-Led Ownership

No mandatory recurring subscriptions. Buy the tool once; access core NCERT and CBSE curricula permanently.

05 / ACCESS

Offline Reliability

Core curriculum, dictionaries, and Socratic hints function 100% offline. Zero dependency on high-speed internet.

UNIT ECONOMICS

33%–48% Gross Margin

Hardware gross margin protected by ₹0 marginal cloud API inference burn and subsidized Azure infrastructure.

TARGET MARKET & PHASED ROLLOUT

Not every student on Day 1.
The right beachhead families — expanding into scale.

THE INITIAL BEACHHEAD (CLASSES 8-12 STEM)

Classes 8–12

HIGH-STAKES BOARD & COMPETITIVE EXAM FAMILIES

- **Geographic Focus:** Delhi-NCR (Gurugram, South Delhi, Noida).
- **Household Profile:** Income >₹15 LPA; education-focused parents already spending ₹50k–₹80k annually on coaching institutes.
- **Urgent Buying Trigger:** Severe concern over iPad/phone distraction during board exam prep and heavy daily bag weights.
- **Willingness to Pay:** High willingness to spend ₹35,000 upfront for a distraction-free, dedicated learning appliance.

THREE-PHASE EXPANSION HORIZON

PHASE 00 / IMMEDIATE CATALYST (₹10 LAKHS)

Partner School Pilots (15–25 Units)

Classroom pilot deployments across 2 partner Delhi-NCR private schools to secure binding paid institutional purchase orders.

PHASE 01 / MONTHS 1-6 (₹4.50 CR SEED)

500-Unit Wave 1 Cohort (Schools & Direct)

Deliver first commercial pilot batch to partner schools and verified CBSE STEM pre-order households with white-glove onboarding.

PHASE 02 / MONTHS 6-18 (SCALE)

Mass Manufacturing & B2B Distribution (5,000 Units)

Turnkey EMS production, nationwide institutional school distribution, and multi-state board expansion across Bharat.

GO-TO-MARKET EXECUTION

Start close. Earn deep trust.
Then unlock institutional distribution.

01 / DEMONSTRATE

Family Salon Sessions

High-touch physical demonstrations with parent groups and student study circles in Gurugram and South Delhi. Parents hold the device and see the zero-distraction focus firsthand.

02 / LEARN & ITERATE

Wave 1 Cohort Evidence

Measure daily active study hours, stylus tip wear, screen contrast satisfaction, and Socratic hint utility. Prove academic retention uplift with concrete user telemetry.

03 / DELIVER

Direct Local Fulfillment

Small batch manufacturing with local service and warranty support. Word-of-mouth parent referral networks in residential societies and school parent WhatsApp communities.

COMPETITIVE POSITIONING

Others optimize the glass.
We design the deep study workflow.

GENERAL TABLETS (iPAD / GALAXY)

Versatile Media Toys

- **Pros:** Powerful GPUs, vibrant displays.
- **Fatal Flaw:** Built for consumption and entertainment. Notifications destroy focus. LCD blue light exhausts eyes within 45 minutes.
- **Cost:** ₹45,000 – ₹1,10,000 with accessories.

E-PAPER NOTEBOOKS (reMARKABLE)

Executive Notepad Only

- **Pros:** Excellent handwriting feel, paper-like.
- **Fatal Flaw:** Single screen limits dual-page reading/working. Zero curriculum intelligence. No Socratic doubt clearing. Luxury executive pricing.
- **Cost:** ₹40,000 – ₹60,000.

KITAB / THE TARGET

Dedicated Study Appliance

- **Advantage:** Dual-screen reading + working continuity.
- **Intelligence:** On-device Socratic AI hints aligned to CBSE/NCERT curriculum.
- **Safety:** Zero camera, zero social feeds, 100% offline.
- **Price:** ₹35,000 all-inclusive with pen.

BUSINESS MODEL & UNIT ECONOMICS

Own the tool. Keep the learning.
Software-grade margins on hardware appliance sales.

INDICATIVE DEVICE PRICING

₹35,000

TARGET RETAIL ASP (INCLUDES DUAL DEVICE + EMR PEN)

- **BOM Target:** ₹23,550 at scale (75k+ units) • Initial pilot batch BOM ~₹27,800.
- **Gross Margin:** 33% at launch batch → 48% at production volume.
- **Zero Hidden Costs:** Core curriculum, NCERT modules, and on-device Socratic tutor included for the full life of the hardware.

WHY OUR MARGINS ARE DEFENDED

- **Zero Cloud Inference Drag:** Because our Socratic SLM runs locally on-device, each student query costs CypherAsh ₹0.00 in cloud API bills.
- **Subsidized Cloud Infrastructure:** Curriculum fine-tuning and telemetry fully funded by Microsoft Founders Hub (\$150,000 Azure credits).
- **High LTV Upsell Potential (Future):** Optional premium coaching test series, regional language expansion packs, and institutional enterprise licenses.

TECHNICAL READINESS / TRL 4/5 LAB PROTOTYPE

Proprietary on-device AI.

Benchmarked performance with zero cloud latency.

9.2

TOKENS / SECOND

Local SLM Throughput

4-bit quantized Socratic SLM executing directly on edge CPU/NPU cores without network dependency.

<200 ms

TIME-TO-FIRST-TOKEN

Near-Zero Latency

Instant Socratic hints while solving derivations. 10x faster than cloud round-trip API calls on mobile data.

₹0.00

MARGINAL CLOUD API COST

Zero Inference Burn

Zero recurring bills from OpenAI or Anthropic. Gross margins stay locked at 48% regardless of student usage intensity.

100%

AIR-GAPPED PRIVACY

Student Data Safety

Student drafts, handwriting, and queries never leave the device. Fully compliant with DPDP Act 2023.

• HARDWARE STATUS: Single-screen electronic paper firmware qualified; dual-panel flexible FPC hinge and power bus active on test bench.

LABORATORY BENCH TRL 4/5 QUALIFICATION COMPLETE

INSTITUTIONAL VALIDATION & COMMERCIAL TRACTION

Backed by global tech leaders.
Validated by active pre-order customer demand.

 INCEPTION MEMBER

NVIDIA Inception Member

- Official Member status in NVIDIA's elite global deep-tech startup accelerator.
- Direct engineering access to **TensorRT-LLM** edge model quantization and Jetson embedded toolkits.
- GPU compute access for model distillation, edge AI acceleration, and GTC showcase visibility.

 **Microsoft for Startups**

\$150,000 Azure Pathway

- Verified Legal Entity: **CypherAsh Labs Pvt Ltd.**
- 5-Milestone Progression: \$200 → \$5k → **\$25k (with 2-yr extension)** → \$50k → **\$150,000.**
- 100% subsidizes synthetic curriculum training, model fine-tuning, and device telemetry — saving >₹1.2 Cr in cash R&D burn.

COMMERCIAL TRACTION & INSTITUTIONAL PIPELINE

Pre-Orders & School Pilots

- Active **₹5,000 founding family pre-orders** & organic waitlist on kitab.cypherash.com.
- **2 Delhi-NCR Private Schools** in advanced pilot evaluation following hands-on demonstrations.
- Immediate ₹10 Lakhs prototyping catalyst deployed to manufacture pilot units and secure paid institutional purchase orders.

FOUNDER & EXECUTION ARCHITECTURE

Built hands-on by a systems builder.
Scaled through trusted specialist partners.

FOUNDER & SYSTEMS ARCHITECT

Yash Pratap Singh

Founder & Systems Architect, CypherAsh Labs • Gurugram

- **Dual Technical Academia:** Pursuing **B.Tech in Artificial Intelligence & Machine Learning (AI-ML)** from **MDU Rohtak**, concurrently with **B.Sc. in Computer Science** from **IU International University of Applied Sciences, Germany**.
- **Fiduciary & Fund Management Track Record:** Managed and operated a **₹2.5 Crore private hedge fund for 2+ years**, implementing quantitative algorithmic strategies, rigorous capital allocation, and risk management models.
- **10+ Years Embedded Systems Builder:** Hands-on electronics, microcontrollers, and custom Linux kernel developer since age 14.
- **Extreme Capital Efficiency:** Built fully functional TRL 4/5 single-screen e-paper prototype and on-device Socratic AI runtime on less than **₹4.5L total capital**.

• RARE HYBRID: Deep hard-tech systems engineering + quantitative fiduciary capital management.

THREE FUNCTIONAL EXECUTION PILLARS

01 / BUILD (IN-HOUSE CORE IP)

Custom Linux OS, E-Ink Drivers & Local SLM

Low-latency stylus pipeline, quantized inference runtime, and mechanical chassis design developed directly in-house.

02 / VALIDATE (PEDAGOGY PARTNERS)

CBSE Curriculum Alignment & Teacher Testing

Collaborating with experienced STEM educators in Delhi-NCR to benchmark hint pedagogy, question trees, and study loops.

03 / DELIVER (TIER-1 EMS PARTNERS)

Turnkey Manufacturing, Tooling & Certification

Partnering with ISO-certified contract manufacturing facilities in NCR for tooling, SMT lines, and BIS compliance.

• OPERATING MODEL: High-leverage core engineering team orchestrating industrial manufacturing partners.

EXECUTION MILESTONES / CAPITAL ROADMAP

A disciplined two-tier execution plan.
₹10 Lakhs pilot proves demand → ₹4.50 Cr scales production.

IMMEDIATE CATALYST • ₹10 LAKHS

School Pilot Batch & Paid Orders

- **15–25 Pilot Units:** Fast-track SMT assembly and bench bring-up using validated TRL 4/5 hardware.
- **Classroom Deployments:** Live study programs across 2 partner Delhi–NCR private schools.
- **Pedagogical Validation:** Field metrics on screen comfort, stylus notes, and offline Socratic tutoring.
- **Proof Gate:** Convert classroom pilot cohorts into binding paid institutional purchase orders.

MONTHS 1–6 • ₹4.50 CR SEED (PHASE 1)

Industrial EVT & Wave 1 Cohort

- **Hardware Industrialization:** Custom dual-display mainboard and 360° torque hinge tooling.
- **Edge AI Optimization:** On-device quantized SLM acceleration via NVIDIA TensorRT (<200ms latency).
- **500–Unit Wave 1 Batch:** Deliver initial paid school orders and founding family pre-orders.
- **Proof Gate:** >80% weekly study retention and institutional renewal commitments.

MONTHS 6–18 • ₹4.50 CR SEED (PHASE 2)

Tooling, BIS & Mass Production

- **Tooling & Compliance:** Hard steel injection molds; full BIS, CE, and RoHS safety certifications.
- **5,000 Commercial Units:** High-volume turnkey assembly with Tier-1 EMS manufacturing partner.
- **National Distribution:** Roll out institutional B2B school networks and curated D2C channels.
- **Proof Gate:** ₹15+ Cr revenue run-rate; profitable unit economics; Series A institutional unlock.

THE HORIZON

One dependable device.
A national learning infrastructure.

HORIZON 1 / IMMEDIATE

The Dedicated Notebook

Consumer launch of KiTab dual-screen device. Robust, repairable, distraction-free study appliance for high-school CBSE students.

HORIZON 2 / MEDIUM TERM

The Connected Classroom

Local peer-to-peer classroom synchronization. Teachers beam custom worksheets and assess class comprehension offline in real-time.

HORIZON 3 / LONG TERM

Pan-India Vernacular Ecosystem

Multi-lingual AI tutoring in Hindi, Marathi, Tamil, and Bengali. Regional state board curricula and institutional school trust partnerships.

THE INVITATION / FINANCING ROADMAP

A structured two-stage capital path.
₹10 Lakhs pilot catalyst • ₹4.50 Crore institutional seed.

STAGE 0 / IMMEDIATE PROTOTYPING CATALYST

₹10 Lakhs Prototyping Grant

- **Capital Source:** DST NIDHI PRAYAS, MeitY TIDE 2.0, or Angel Prototyping Grant.
- **Hardware Units:** Build 15–25 functional dual-screen KiTab pilot devices.
- **Classroom Pilot:** Run structured pilot programs across 2 partner Delhi–NCR private schools.
- **Key Commercial Deliverable:** Secure binding paid institutional purchase orders from schools to de-risk full seed scale.

STAGE 1 / SCALE PRODUCTION HORIZON

₹4.50 Crore Institutional Seed

- **Capital Source:** Hardware VCs, EdTech Seed Funds, and Technology Family Offices.
- **Tooling & Compliance:** Steel injection tooling, CNC dies, and full BIS/CE/RoHS safety certifications.
- **Commercial Production:** 500–unit Wave 1 cohort and 5,000 commercial units with Tier-1 EMS partner.
- **National Scale:** Fulfill institutional school contracts, expand nationwide D2C, and unlock Series A.

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APPENDIX A / COST DISCIPLINE & BOM BREAKDOWN

A rigorous cost model.
Target BOM of ₹23,550 at production scale.

₹12,400 DUAL E-PAPER PANELS Displays & EMR Two 10.3" E-ink Carta 1200 reflective panels + Wacom/EMR digitizer layer and protective PMMA cover glass.	₹4,200 MAINBOARD & NPU Compute & Memory Rockchip RK3566/RK3588 quad/octa-core ARM SoC with NPU, 4GB LPDDR4x RAM, 64GB eMMC 5.1 flash storage, Wi-Fi/BT module.	₹2,650 CHASSIS & HINGE Mechanical Enclosure Anodized aluminum alloy outer casing, dual-axis 360-degree torque hinge mechanism, internal magnesium mid-frames.	₹4,300 BATTERY & ACCESSORIES Power, Pen & Pack 4,200 mAh Li-Po dual-cell battery, 4096-pressure EMR stylus with replacement nibs, USB-C fast cable, and eco-packaging.
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NOTE: Target BOM calculated for volume run of 75,000+ units. Pilot batch (500 units) estimated at ~₹27,800. Additional buffer allocated for customs, warranty, and freight.

APPENDIX B / CAPITAL ALLOCATION

Capital follows evidence.
Deployment tranches for the ₹4.50 Crore seed round.

PHASE 0 CATALYST • ₹10 LAKHS PROTOTYPING GRANT: Manufactures 15–25 pilot devices • Executes classroom pilots in 2 partner Delhi–NCR schools • Secures binding paid institutional purchase orders

DE-RISKS SEED STAGE

TRANCHE 01 • 28.9% ₹1.30 Cr HARDWARE ENGINEERING & EVT Dual-screen custom PCB layout, display waveform timing controller, power bus optimization, and custom firmware bring-up.	TRANCHE 02 • 22.2% ₹1.00 Cr WAVE 1 PRODUCTION COHORT (500 UNITS) Procurement of BOM components, SMT line assembly, pilot batch QA, and white-glove onboarding for Delhi–NCR schools & families.	TRANCHE 03 • 18.9% ₹0.85 Cr TOOLING & CERTIFICATIONS Hard steel injection tooling for chassis, hinge CNC dies, BIS compulsory registration, SAR, and EMC testing.
TRANCHE 04 • 14.4% ₹0.65 Cr PEDAGOGY TEAM & SLM DISTILLATION Curriculum specialists for CBSE Classes 8–12 STEM question trees and on-device Socratic model prompt engineering.	TRANCHE 05 • 10.0% ₹0.45 Cr GO-TO-MARKET & INSTITUTIONAL SALES Institutional school B2B pipeline, salon demo events, warranty logistics, customer support infrastructure, and packaging.	TRANCHE 06 • 5.6% ₹0.25 Cr CONTINGENCY RESERVE Component buffer against global display lead times, currency fluctuation, and unplanned yield iterations.