

E-Library

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Table of Contents

Product Development Roadmap Canvas	2
Problem Analysis Canvas	3
Value Proposition Canvas	6
MVP Prioritization for E-Library	8
Minimum Viable Customer Segment Prioritization	9
User Testing Canvas Framework	10

Vision	Strategy	Goals	Key Features	Milestones
<p>To close Ethiopia’s education gap by providing inclusive, affordable, and eco-friendly digital learning resources accessible in multiple local languages—both online and offline—to empower students, teachers, and lifelong learners nationwide.</p>	<ul style="list-style-type: none"> • Develop a multilingual digital platform (Amharic, Afaan Oromo, Tigrigna, Somali). • Provide low-bandwidth and offline access kits for rural/remote communities. • Leverage cloud infrastructure and open-source technologies for scalability. • Build partnerships with schools, NGOs, and government for curriculum alignment. • Integrate climate education modules for resilience and awareness. 	<ul style="list-style-type: none"> • Deliver equitable access to up-to-date learning resources for 100,000+ students by Year 3. • Enhance teacher effectiveness and student engagement with interactive content. • Reduce learning costs by 35% through digital materials. • Contribute to Ethiopia’s digital transformation and climate goals. • Differentiate from competitors through offline access, inclusivity, and curriculum alignment. 	<ul style="list-style-type: none"> • Multilingual access (Amharic, Afaan Oromo, Tigrigna, Somali, etc.). • Offline access hubs for rural areas. • Curriculum-aligned textbooks and interactive resources. • Voice-assisted search & inclusive design. • Community engagement tools (forums, feedback, peer learning). 	<ul style="list-style-type: none"> • Year 1: Finalize platform, pilot in 20 schools, reach 5,000 users. • Year 2: Scale to 100 schools in 4 regions, introduce offline kits, reach 25,000 users. • Year 3: Expand nationwide, integrate 4 major local languages, reach 100,000+ users. • Year 5: Become Ethiopia’s leading digital education platform with regional expansion.
	<p>Key Metrics</p> <ul style="list-style-type: none"> • User growth: number of students/teachers onboarded. • Engagement: frequency of logins, hours of content consumed. • Impact: % of students improving test scores. • Retention: monthly/annual active users. • Sustainability: CO₂ savings and trees preserved from reduced paper use. • Partnership growth: number of schools, NGOs, and bureaus engaged 		<p>Stakeholders</p> <ul style="list-style-type: none"> • Students & Teachers → Primary beneficiaries. • Schools & Universities → Integration partners. • NGOs & Donors → Funding, outreach, capacity building. • Government (MoE, Regional Bureaus) → Policy support, curriculum alignment. • Tech Partners (Ethio Telecom, startups) → Connectivity, platform development. 	

Product Development Roadmap Canvas

1. What is the Problem?	Root Cause Analysis: 5 Whys	Expand on the “Who”	Other stakeholders
<p>What? There is no centralized, affordable, and accessible digital platform in Ethiopia for students, teachers, and institutions to buy, sell, or rent educational resources such as textbooks, exam prep materials, short notes, and research projects.</p> <p>Who?</p> <ul style="list-style-type: none"> • Students (primary, secondary, university) • Teachers and educators • Schools, universities, and NGOs • Content creators (authors, teachers, publishers) <p>Why?</p> <ul style="list-style-type: none"> • Existing solutions are fragmented or unavailable. • Physical books are expensive, limited, and often outdated. • International platforms are not localized, affordable, or easy to access in Ethiopia. 	<p>Problem: Students and institutions lack access to quality educational resources.</p> <ol style="list-style-type: none"> 1. Why? → Physical textbooks and materials are expensive and limited in supply. 2. Why? → Printing, distribution, and logistics costs are high, especially for rural areas. 3. Why? → No centralized digital platform exists for affordable educational resources. 4. Why? → Previous digital initiatives are fragmented, donor-dependent, or not scalable. 5. Why? → Lack of investment, infrastructure, and a sustainable marketplace model in Ethiopia. 	<ul style="list-style-type: none"> • Primary users: Students (all levels), teachers. • Secondary users: Schools, universities, NGOs, libraries. • Content contributors: Local authors, teachers, publishers, top-performing students. • Indirect beneficiaries: Parents, community organizations, and employers (via better-educated youth). 	<ul style="list-style-type: none"> • Government / Ministry of Education: Curriculum alignment, policy support. • Publishers & Authors: Content creation, licensing, and monetization. • Tech providers / Payment platforms: Secure transactions, hosting, app maintenance. • NGOs & Donors: Support outreach, digital literacy initiatives. • Telecom companies: Provide internet connectivity and low-bandwidth solutions. • Parents & Community leaders: Platform adoption, trust-building, and local promotion.

Problem Analysis Canvas

Structured list of **proposed solutions** for the problem Ethio E-Library is addressing

Solution #	Proposed Solution
1	Develop a centralized digital library with textbooks, journals, and study materials.
2	Create a marketplace for buying, selling, and renting educational resources (books, exam prep, notes, projects).
3	Offer offline access and low-bandwidth support for rural and underserved areas.
4	Localize content in Amharic, Afaan Oromo, Tigrigna, and Somali.
5	Include exam preparation tools, past papers, and model answers.
6	Enable teachers and students to upload and share content safely, creating income opportunities.
7	Provide a mobile-friendly, user-friendly platform with voice-assisted search and progress tracking.
8	Integrate feedback loops and analytics for continuous improvement and content relevance.

Here’s a prioritized scoring table for the top 3 solutions of E-Library based on Feasibility, Desirability, and Viability:

Idea	Proposed Solution	Feasibility (1–10)	Desirability (1–10)	Viability (1–10)	Total
A	Educational Marketplace (buy, sell, rent books, exam prep, notes, projects)	8	10	9	27
B	Centralized Digital Library (textbooks, journals, study materials)	9	9	8	26
C	Offline & Low-Bandwidth Access for rural areas	7	10	7	24

Value Proposition Canvas

Value Proposition

Product/Service Features	Gain Creator Value Addition:
<ul style="list-style-type: none"> - Centralized marketplace for educational resources: textbooks, exam prep, notes, and projects. - Digital access with mobile-friendly and offline capabilities. - Local language support (Amharic, Afaan Oromo, Tigrigna, Somali). - User-generated content: teachers and students can upload/share materials. - Secure payment and rental options. 	<ul style="list-style-type: none"> - Centralizes access to textbooks, exam prep, notes, and projects for convenience. - Offers affordable and flexible rental/purchase options, reducing costs for students and schools. - Provides income opportunities for teachers and content creators. - Supports better learning outcomes through up-to-date, curriculum-aligned resources. <p>Innovative Features:</p> <ul style="list-style-type: none"> - Digital marketplace + rental model unique in Ethiopia. - Offline/low-bandwidth access for rural and underserved areas. - Local language support (Amharic, Afaan Oromo, Tigrigna, Somali). - Secure content sharing with ratings and verification - Personalized content recommendations and progress tracking.

Customer Profile

Gains	Customer Job
<ul style="list-style-type: none"> - Easy access to learning resources. - Reduced cost of study materials. - Convenience of online/offline access. - Improved academic success and exam preparation. - Income generation opportunities. - Inclusive participation through local language support. <ul style="list-style-type: none"> - Community collaboration via sharing, rating, and feedback. 	<p><input type="checkbox"/> Tasks / Activities:</p> <ul style="list-style-type: none"> • Students: Study, revise, complete projects, access additional learning materials • Teachers: Share, organize, and curate learning resources • Schools/Institutions: Provide up-to-date materials, reduce costs, improve learning outcomes <p><input type="checkbox"/> Features Sought:</p> <ul style="list-style-type: none"> • Offline access • Local language support • Marketplace for renting/sharing materials • Personalized recommendations • Progress tracking

	<p>Pain Reliever</p> <p>Solutions to Challenges:</p> <ul style="list-style-type: none">▪ Provides affordable and flexible access to textbooks, exam prep, notes, and projects.▪ Centralized platform reduces time spent searching for materials▪ Offline and low-bandwidth access addresses connectivity issues.▪ Local language support ensures inclusivity▪ Verified and rated content ensures quality. <p>Risk Mitigation:</p> <ul style="list-style-type: none">- Secure payment and content-sharing- Ratings and feedback system for trust- Analytics track engagement to improve- Offline access reduces dependency on		<p>Pains</p> <ul style="list-style-type: none">▪ High costs for textbooks, exam prep materials, and projects▪ Limited access to curriculum-aligned content, especially in rural areas▪ Time wasted searching for reliable resources▪ Connectivity issues preventing online learning▪ Outdated or irrelevant materials▪ Low engagement or motivation due to lack of interactive content▪ Exclusion or language barriers for non-Amharic speakers	
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MVP Prioritization for E-Library

No	All Product/Service Components & Features	Prioritized List (Essential / Nice-to-Have)	MVP (Key Essential Features)
1	Centralized marketplace for textbooks, exam prep, notes, projects	Essential	Core marketplace with search and browse functionality
2	Digital access via mobile & desktop	Essential	Mobile-friendly interface for online access
3	Offline access / low-bandwidth mode	Essential	Downloadable content for offline use
4	Local language support (Amharic, Afaan Oromo, Tigrigna, Somali)	Essential	Key languages for pilot regions
5	User-generated content (teachers/students can upload/share)	Nice-to-Have	Limited content upload by selected pilot users
6	Secure payment / rental options	Nice-to-Have	Simple free-access model or token system for initial pilot
7	Personalized recommendations & progress tracking	Nice-to-Have	Basic content bookmarking and simple usage tracking
8	Ratings and feedback for content quality	Nice-to-Have	Optional user rating system for pilot phase

Minimum Viable Customer Segment Prioritization

Customer Segment	Urgency of Need (1–10)	Paying Capacity (1–10)	Easement of Access (1–10)	Total
A – Students	9	4	8	21
B – Teachers	7	6	7	20
C – Schools / Institutions	8	8	5	21

User Testing Canvas Framework

<p>Customer Sub/Segment profile</p> <ul style="list-style-type: none"> - Who they are: Secondary school students, university students, and teachers. - What we know: They struggle with limited access to up-to-date textbooks, exam prep, and affordable learning materials. Many rely on photocopies, outdated books, or peer sharing. - Why this segment: They experience the most urgent pain (lack of affordable, accessible resources) and stand to gain the most from Ethio E-Library. - Where they are: Schools, universities, libraries, and online communities (Telegram, WhatsApp, Facebook, youth forums) 		<p>Testing Scenario/Format</p> <p>Scenario/Format: Prototype/MVP demo sessions with guided tasks (e.g., searching, renting, or uploading a resource).</p> <p>Where: Selected schools, universities, and community libraries in Addis Ababa and regional towns.</p> <p>Communication: In-person workshops, focus group discussions, and follow-up via online surveys (Telegram/WhatsApp)</p>	<p>Results</p> <p>Proven/Validated: Demand for centralized digital marketplace, offline access, local language support, and affordable rental/purchase options.</p> <p>Didn't Work: Upload/sharing feature confusing; rental/payment system unclear.</p>
<p>Motivation for solving their problem:</p> <ul style="list-style-type: none"> - Students: Affordable, convenient access to up-to-date study materials. - Teachers: Platform to share resources and earn income. - Schools: Reduce costs, improve student outcomes, and ensure curriculum alignment. <p>They are solving their problem by using photocopies, limited and outdated textbooks, small school libraries, and informal note-sharing among peers and teachers.</p>	<p>What further frustrations do they have?</p> <p>They face high costs, outdated or fragmented materials, lack of local language content, poor curriculum alignment, and limited access in rural or low-connectivity areas.</p>		<p>Learning & Insights</p> <ol style="list-style-type: none"> 1. What went well: Users liked the centralized marketplace, offline access, local language support, and affordable rental/purchase options. 2. What went bad: Some users found navigation confusing, and uploading/sharing content as well as rental/payment features were unclear. 3. Next improvements: Simplify the interface, add tutorials or tooltips, optimize offline access, and refine the rental/payment workflow.

<p>Key Assumptions to Be Tested:</p> <ul style="list-style-type: none"> • Students prefer a digital marketplace over physical books. • Offline access is essential for usability in low-connectivity areas. • Teachers are willing to upload and share learning materials. • Users are willing to pay small fees for rentals or purchases. • Local language support increases engagement and adoption. • Personalized recommendations improve learning outcomes and retention. 	<p>Success Criteria:</p> <ul style="list-style-type: none"> • At least 70% of users can find and access materials without assistance. • Positive feedback on affordability, offline access, and local language support. • Teachers successfully upload and share content that students actively use. • Early adopters show willingness to pay for rentals/purchases. <p>Failure Criteria:</p> <ul style="list-style-type: none"> • Users struggle to navigate the platform without guidance. • Negative feedback on usability, offline functionality, or local language support. • Teachers do not upload or share materials. • Users are unwilling to engage with the rental/payment system. 	<p>Next Steps:</p> <ul style="list-style-type: none"> • Simplify the platform interface and navigation for easier use. • Add tutorials, guides, and tooltips for key features like uploading, renting, and offline access. • Refine and test the rental/payment workflow to ensure clarity and ease of use. • Expand pilot testing to more schools, universities, and community centers. • Collect continuous feedback from users to iterate and improve features. • Monitor engagement metrics and adoption rates to validate assumptions and guide future development.
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