

Mirai Dub AI — App Concept & Business Direction

Executive Summary

Mirai Dub AI is a mobile-first video translation and dubbing platform designed to democratize global content reach for creators and marketers. By leveraging AI-powered lip-sync technology (via Replicate/HeyGen), the app enables users to instantly translate their video content into multiple languages with natural-looking lip synchronization—removing the uncanny valley that plagues most dubbing solutions.

The core value proposition: "Create once, reach the world."

In the Creator Economy, audience reach is currency. Language barriers represent the single largest artificial ceiling on a creator's potential audience. A creator with 1M English-speaking followers is leaving 6B+ non-English speakers on the table. Mirai Dub AI removes that ceiling.

Problem Statement & Market Opportunity

The Problem

- **Language barriers limit creator growth** — 75% of internet users are non-English speakers, yet most creator content remains monolingual
- **Traditional dubbing is prohibitively expensive** — Professional dubbing costs \$75-150+ per minute of video
- **Existing AI dubbing looks fake** — Poor lip-sync creates viewer distrust and disengagement
- **Technical friction kills adoption** — Current solutions require desktop software, technical expertise, or agency involvement
- **Time-to-publish matters** — Creators need to post consistently across markets; waiting days for translations kills momentum

The Opportunity

Market Segment	Size	Growth
Creator Economy	\$250B+ (2024)	22% CAGR
Video Localization Market	\$3.1B (2024)	6.2% CAGR
AI Video Generation	\$550M (2024)	35%+ CAGR
Social Media Marketing Software	\$72B (2024)	18% CAGR

Key Insight: The intersection of Creator Economy × AI Video × Localization is underserved. Most localization tools target enterprise; most creator tools ignore localization. Mirai Dub AI sits at this intersection.

Product Vision & Value Proposition

Vision Statement

Empower every creator to become a global creator—without learning a new language, hiring translators, or losing their authentic voice.

Core Value Propositions

Audience	Pain Point	Mirai Dub AI Solution
Content Creators	Limited to single-language audience	One-tap expansion to 50+ language markets
UGC Marketers	Expensive multi-market campaigns	10x reduction in localization costs
Course Creators	Can't sell internationally	Instant course localization for global sales
Small Businesses	Can't afford video marketing localization	Affordable per-video pricing
Agencies	Slow turnaround on localized content	Same-day delivery for clients

Unique Selling Proposition (USP)

"Lip-sync so real, viewers won't know it's AI."

This is your wedge. The HeyGen model you're using is currently best-in-class for natural lip synchronization. Lead with this differentiator heavily—most competitors produce obviously-fake dubbing that destroys viewer trust.

Target Audience Deep Dive

Primary Persona: "The Scaling Creator"

Demographics

- **Age:** 22-38
- **Platforms:** YouTube, TikTok, Instagram Reels
- **Follower count:** 50K-2M
- **Content type:** Educational, lifestyle, commentary
- **Revenue:** \$50K-500K/year from content

Psychographics

- Growth-obsessed; constantly looking for competitive edges
- Time-poor; values tools that save time over tools with features
- Mobile-native; creates, edits, and publishes from phone
- Budget-conscious but willing to pay for ROI

Jobs to Be Done

- "Help me reach Spanish-speaking audiences without learning Spanish"
- "Help me test if my content resonates in other markets"
- "Help me repurpose my best-performing content for new audiences"

Secondary Persona: "The Global Marketer"

Demographics

- **Role:** Marketing Manager, Social Media Manager, Growth Lead
- **Company size:** 10-500 employees (SMB/Mid-market)
- **Industry:** SaaS, E-commerce, DTC brands, Education

Jobs to Be Done

- "Help me run video ads in LATAM without hiring a localization agency"

- "Help me test international markets before committing to full localization"
- "Help me maintain brand consistency across language markets"

Product Features & MVP Scope

MVP Feature Set (v1.0)

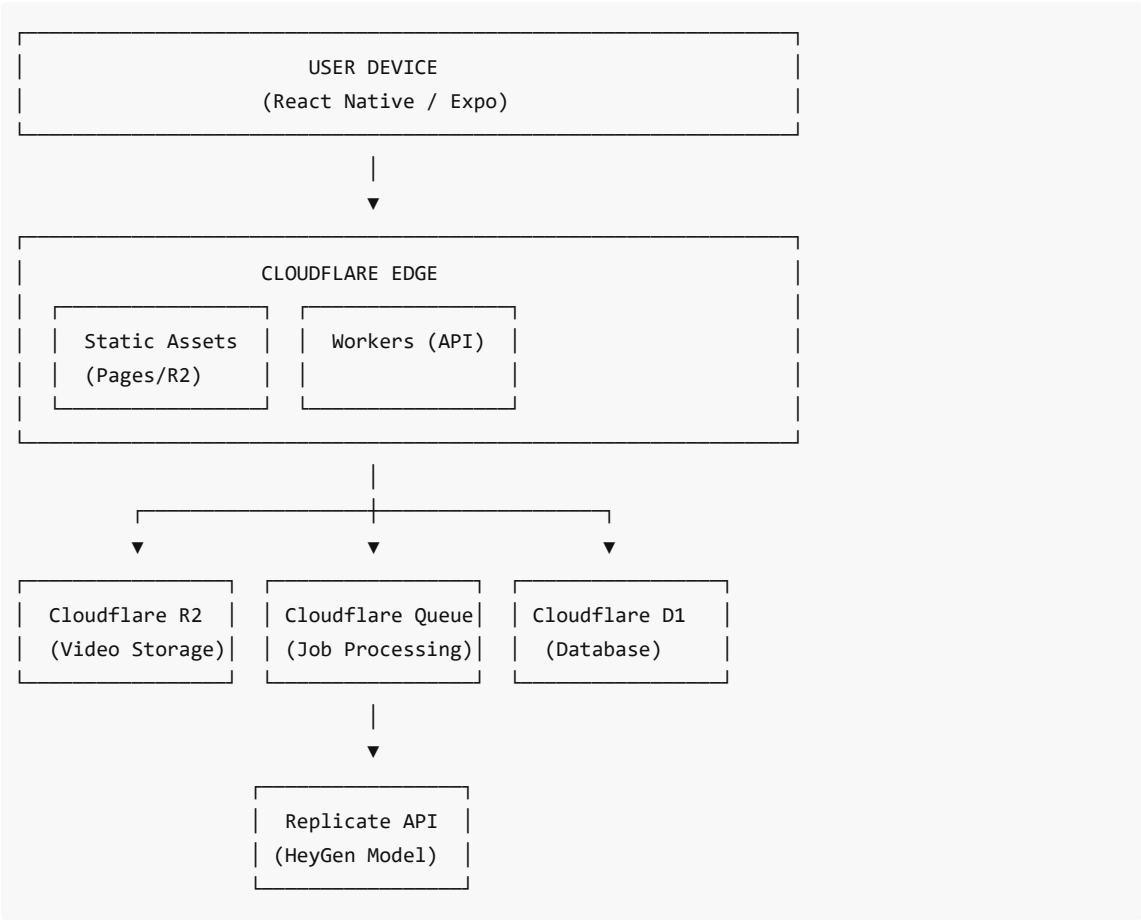
Feature	Priority	Description
Onboarding Flow	P0	3-4 screen walkthrough with before/after demo
Anonymous Trial	P0	1 free video (no account required)
Video Upload	P0	Support all mobile formats (MOV, MP4, HEVC)
Language Selection	P0	Choose target language from supported list
AI Translation + Dubbing	P0	Integration with Replicate/HeyGen API
Video Preview	P0	Thumbnail + 4-second preview of result
Video Download	P0	Download translated video to device
Account Creation	P0	Better Auth integration (+2 bonus videos)
Credit System	P0	Duration-based credit consumption
Credit Purchase	P0	Polar Payments integration
Job Queue System	P0	Cloudflare Queue-based processing
Job Status Updates	P0	Real-time status (processing, complete, failed)

Post-MVP Features (v1.1+)

Feature	Phase	Description
Push Notifications	v1.1	Notify when video is ready
Video History	v1.1	View all past translations
Subscription Plans	v1.2	Monthly/annual plans with included minutes
Social Account Linking	v2.0	Connect TikTok, YouTube, Instagram
Auto-Post to Socials	v2.0	One-tap publish to connected accounts
Multi-Language Batch	v2.0	Translate to multiple languages at once
Language Account Management	v2.5	Manage separate accounts per language
Analytics Dashboard	v3.0	Track performance across languages
Team/Agency Features	v3.0	Multi-user accounts, client management

Technical Architecture

High-Level System Design



Video Processing Pipeline

1. **User Upload** → Presigned R2 URL → Direct Upload to R2
2. **Queue Message Created** (job_id, video_ref, target_lang)
3. **Worker Picks Up Message**
 - Video Duration Calculation
 - Send to Replicate for Translation
 - Generate Thumbnail + 4s Preview
4. **Upload Results to R2**
5. **Update DB** (job complete)
6. **Notify User** (poll/push)

Database Schema (Drizzle ORM)

```
// Core Tables

users
├─ id (uuid, pk)
├─ email (optional - anonymous users may not have)
├─ device_fingerprint
├─ ip_hash
├─ created_at
```

```

└─ trial_videos_used (default: 0)
└─ bonus_videos_available (default: 0)
└─ credits_balance (default: 0)

videos
└─ id (uuid, pk)
└─ user_id (fk)
└─ original_url (r2 path)
└─ translated_url (r2 path, nullable)
└─ thumbnail_url (r2 path, nullable)
└─ preview_url (r2 path, nullable)
└─ source_language (detected or specified)
└─ target_language
└─ duration_seconds
└─ credits_consumed
└─ status (enum: pending, processing, completed, failed)
└─ created_at
└─ completed_at

transactions
└─ id (uuid, pk)
└─ user_id (fk)
└─ type (enum: purchase, consumption, bonus)
└─ credits_amount
└─ polar_payment_id (nullable)
└─ video_id (nullable, for consumption)
└─ created_at
└─ metadata (json)

jobs
└─ id (uuid, pk)
└─ video_id (fk)
└─ replicate_job_id
└─ status
└─ error_message (nullable)
└─ started_at
└─ completed_at
└─ retry_count

```

Credit Consumption Logic

Credits per video = $\text{ceil}(\text{duration_seconds} / 60) * \text{CREDIT_RATE}$

Where CREDIT_RATE = 10 credits per minute (adjustable)

Examples:

- 30 second video = 10 credits (1 minute minimum)
- 90 second video = 20 credits (rounds up to 2 minutes)
- 5 minute video = 50 credits

Monetization Strategy

Progressive Trust Model

Phase	Trigger	Offer	Goal
Phase 1	First app open	1 free video (anonymous)	Zero-friction trial
Phase 2	Creates account	+2 bonus videos	Capture email, enable payments
Phase 3	Uses all free videos	Credit purchase	Monetization

Pricing Structure (Credits)

Package	Credits	Price	\$/Credit	Use Case
Starter	100	\$9.99	\$0.10	Testing, occasional use
Creator	300	\$24.99	\$0.083	Regular creator
Pro	750	\$49.99	\$0.067	Frequent creator
Agency	2000	\$99.99	\$0.05	High volume

Future: Subscription Tiers (v1.2+)

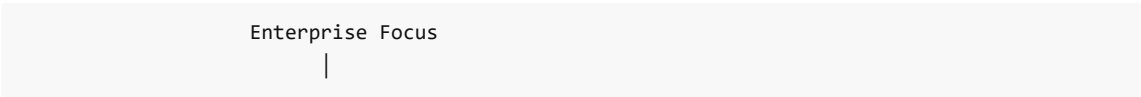
Tier	Price/mo	Included Minutes	Overage Rate
Hobby	\$19/mo	30 min	\$0.50/min
Creator	\$49/mo	90 min	\$0.40/min
Pro	\$99/mo	250 min	\$0.30/min
Business	\$249/mo	750 min	\$0.20/min

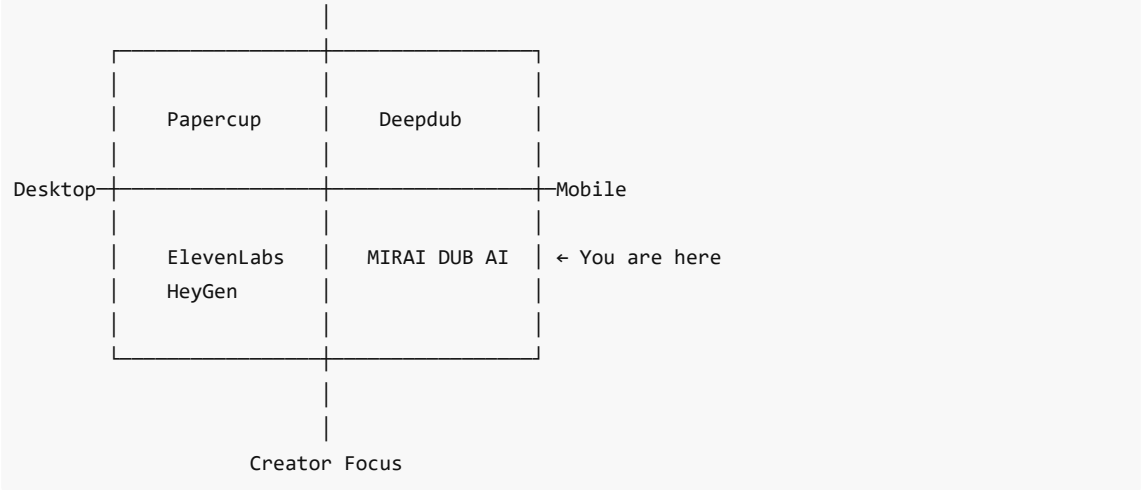
Unit Economics Target

Metric	Target
Replicate API Cost	~\$0.02-0.04/min video
Cloudflare Costs	~\$0.005/job (storage, compute)
Target COGS	<30% of revenue
Target Gross Margin	>70%

Competitive Positioning

Competitive Landscape





Competitive Advantages

Competitor	Their Weakness	Mirai Dub AI Advantage
HeyGen Direct	Web-only, complex UI, expensive	Mobile-native, simple, creator pricing
ElevenLabs	Audio-only (no lip sync)	Full video with lip sync
Papercup	Enterprise-only, slow, expensive	Self-serve, instant, affordable
Rask.ai	Desktop-focused, learning curve	Phone-first, zero learning curve
Kapwing	Dubbing is a side feature	Dubbing is the core product

Positioning Statement

For social media creators and video marketers who want to expand their audience globally, **Mirai Dub AI** is a mobile video translation app that delivers instant AI dubbing with photorealistic lip sync. Unlike desktop tools and enterprise platforms, Mirai Dub AI lets you translate and publish in under 5 minutes, right from your phone.

Go-to-Market Strategy

Phase 1: Creator-Led Growth (Months 1-3)

Strategy: Seed to 50-100 mid-tier creators, let them demonstrate product value. **Tactics:**

- **Creator Seeding Program:** Identify 100 creators (50K-500K followers) in growth-oriented niches (finance, education, business). Offer 500 free credits (\$50 value) for review.
- **Before/After Content Machine:** Create viral-worthy before/after comparison content.
- **"Your Clone Speaks Spanish" Hook:** Lead with emotional/novelty hook.

Phase 2: Paid Acquisition (Months 3-6)

Strategy: Once product-market fit is validated, scale via paid channels. **Channels (Priority Order):**

1. TikTok Ads
2. YouTube Ads
3. Meta Ads
4. Google Ads

Target CAC: <\$15 **Target LTV:** >\$75

Phase 3: B2B & Agency (Months 6-12)

Strategy: Expand to agencies and SMB marketing teams. Tactics:

- Agency partner program
- Integration with existing marketing tools
- Case studies
- LinkedIn/Outbound

Onboarding Flow Design

- **Screen 1: Hook**
 - **Visual:** Split-screen showing same creator speaking English on left, fluent Spanish with perfect lip sync on right.
 - **Copy:** "What if you spoke every language? Mirai Dub AI translates your videos with lip sync so real, viewers can't tell it's AI."
 - **CTA:** "See the magic →"
- **Screen 2: How It Works**
 - **Visual:** 3-step animation (Upload → Select Language → Download).
 - **Copy:** "Create once. Reach the world. 1. Upload any video. 2. Pick your language. 3. Download & post."
 - **CTA:** "Try it free →"
- **Screen 3: Social Proof**
 - **Visual:** Carousel of creator testimonials/stats.
 - **Copy:** "Join 10,000+ creators going global. 'I gained 50K Spanish-speaking followers in 2 weeks' — @CreatorName"
 - **CTA:** "Get started →"
- **Screen 4: Free Trial Offer**
 - **Visual:** Credit/gift icon animation.
 - **Copy:** "Your first video is on us. Try Mirai Dub AI free — no account needed. Sign up for 2 more free videos."
 - **CTA:** "Translate my first video 🎬 "

Success Metrics & KPIs

North Star Metric

Videos Translated Per Week (Active Usage)

Funnel Metrics

Stage	Metric	Target (Month 1)	Target (Month 6)
Awareness	App Store impressions	50K	500K
Acquisition	Downloads	2K	25K

Activation	First video translated	40% of downloads	50% of downloads
Retention	Returned for 2nd video (7d)	30%	40%
Revenue	Converted to paid	5% of activated	10% of activated
Referral	Organic shares/invites	0.3 per user	0.5 per user

Unit Economics Targets

- **CAC:** <\$15
- **LTV:** >\$75
- **LTV:CAC Ratio:** >5:1
- **Payback Period:** <30 days
- **Gross Margin:** >70%

Product Roadmap

Q1: Foundation (MVP)

- Core app with upload/translate/download flow
- Anonymous trial + account creation
- Credit-based payments (Polar)
- Basic job queue architecture
- App Store launch

Q2: Retention & Monetization

- Push notifications for job completion
- Video history and re-download
- Subscription tiers
- Referral program
- In-app feedback collection

Q3: Distribution & Growth

- Social account linking
- One-tap publish to connected accounts
- Multi-language batch translation
- Creator program

Q4: Scale & B2B

- Team/agency accounts
- Analytics dashboard
- API access
- White-label option
- Enterprise tier

Risk Assessment & Mitigation

Risk	Likelihood	Impact	Mitigation
Replicate API reliability	Medium	High	Build retry logic, queue dead-letter handling, consider backup providers

Replicate price increases	Medium	High	Negotiate volume pricing early, build abstraction layer for multi-provider
Poor lip-sync quality	Low	Critical	Quality checks before delivery, refund policy for failures
Competitor copies mobile approach	High	Medium	Move fast, build brand loyalty, focus on creator community
App Store rejection	Low	High	Follow guidelines strictly, have web fallback
Credit card fraud	Medium	Medium	Polar handles most, add velocity limits
Copyright/legal concerns	Low	Medium	Terms of service, user attestation of content ownership

Immediate Next Steps

Week 1-2: Technical Foundation

- Set up Cloudflare account
- Initialize Expo project
- Set up Drizzle ORM
- Implement Better Auth flow
- Test Replicate API integration

Week 3-4: Core Flow

- Build upload flow
- Implement job queue system
- Build video processing worker
- Create basic UI

Week 5-6: Payments & Polish

- Integrate Polar Payments
- Implement credit system
- Build onboarding flow
- Add thumbnail/preview generation

Week 7-8: Launch Prep

- App Store assets
- TestFlight beta
- Bug fixes and optimization
- Submit to App Store review
- Prepare launch marketing content

Summary

Mirai Dub AI has a clear market opportunity at the intersection of Creator Economy growth and AI video technology maturation. The mobile-first approach is a genuine differentiator.

Key success factors:

- **Quality:** The HeyGen lip-sync must deliver on the "can't tell it's AI" promise

- **Speed:** Sub-10-minute turnaround
- **Simplicity:** 3-tap experience
- **Distribution:** Leverage creators' own content

The moat isn't the AI (that's commoditizing). The moat is the mobile-native experience + creator community + workflow integration. Build the best product for the creator workflow, and you win.