

Dynamic Bilingual Ad Delivery Platform

Reaching Multilingual Audiences in Real Time

A mobile-first bilingual ad platform delivering dynamic campaigns in English and Chinese with instant updates, push notifications, and zero redeployment.

Executive Summary

A marketing solutions provider helping local businesses connect with customers digitally partnered with our team to build a bilingual mobile ad delivery platform. The solution was designed to display ads dynamically, support both English and Chinese, and enable instant content updates without re-publishing the app.

The platform integrates a cloud CMS with API-based ad delivery, a real-time push notification service, and a web admin panel giving marketing teams full control over campaigns with no developer involvement required for updates.

About the Client

Industry

Marketing & Digital Advertising

Organisation Type

Private, Local Digital Promotions

Coverage

Multilingual markets (EN / ZH)

Objective

Build a bilingual mobile app with dynamic ad delivery and real-time content updates via a web backend.

Business Context

The client specialises in local digital promotions, reaching audiences across multilingual markets. As demand for targeted, localised ad campaigns grew, their existing static app could not keep pace requiring developer effort for every content update and offering no bilingual capability.

The goal was a unified digital platform capable of:

Dynamic Ad Display	Bilingual Support	Instant Content Updates
Cloud-powered delivery with live updates	English & Chinese in a single app	No redeploys, no developer dependency

Key Challenges

The client's marketing team faced growing pressure to deliver faster, more targeted campaigns — but their technology stack imposed hard limits on speed, language reach, and operational flexibility.

1. Static ad content required developer involvement for every update, causing delays.
2. No bilingual capability — campaigns could only be delivered in a single language.
3. Audience reach was limited to English-speaking users, excluding Chinese-language customers.
4. No push notification system to alert users about new promotions in real time.
5. Manual content management with no centralised admin panel for campaign oversight.
6. App republishing required for any content or campaign change, slowing time-to-market.
7. No analytics on ad engagement or audience segmentation by language preference.
8. Inconsistent campaign messaging across channels due to lack of central content control.

Our Approach - Human Centred, Data-Driven

We tackled each challenge with a modular, scalable system designed for real-time content delivery and multilingual engagement. By blending a clean mobile UX with a powerful cloud backend, we ensured marketing teams could move fast without touching code.

The Solution — Dynamic Bilingual Ad Delivery Platform

EvvoMobility developed a bilingual mobile app integrated with a real-time web backend enabling instant ad delivery, live campaign management, and localised push notifications across English and Chinese audiences.

How It Works

Admins upload ads and campaigns on the web portal. The system pushes updates instantly to all user devices, and users receive alerts in their preferred language. All content is managed centrally, ensuring campaign consistency across every channel.

Solution Highlights

Dynamic Ad Display

Cloud CMS with API-based ad delivery serves fresh content to the app in real time - no redeloys, no delays.

Bilingual Language Framework

Full English and Chinese support built into the app, with content served in the user's preferred language automatically.

Push Notification Service

Real-time push alerts notify users of new promotions and campaigns the moment they go live on the admin portal.

Web Admin Panel

A dedicated web portal allows marketing teams to upload, schedule, and manage all ad content without developer support.

Cloud Content Delivery

Centralised content management ensures every user device receives consistent, up-to-date campaign messaging instantly.

API-Based Architecture

Decoupled frontend and backend allow independent scaling and rapid integration of new ad formats or third-party tools.

Key Technologies Used

- 1. Cloud CMS with API-Based Ad Delivery** Headless content management system serving dynamic ad content to mobile clients via REST APIs.
 - 2. Bilingual Language Framework** Internationalisation (i18n) layer supporting English and Chinese content in a single unified app.
 - 3. Real-Time Push Notification Service** Cloud messaging infrastructure delivering instant campaign alerts to segmented user audiences.
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Results & Business Impact

The Dynamic Bilingual Ad Delivery Platform delivered immediate, measurable gains across engagement, reach, and operational efficiency transforming how the client manages and distributes campaigns.

Performance Metric	Before	After	Impact
Ad Engagement Rate	Low / static	+70% increase	70% uplift
Audience Reach	English only	2x growth	Bilingual reach
Content Update Speed	Days (redeploy)	40% faster	Instant live updates
Campaign Management	Developer dependent	Self-serve portal	Zero dev overhead
Push Notification Reach	None	Real-time delivery	New channel unlocked

"With Evvo, we update campaigns instantly, no downtime, no redeploys."

— Client, Marketing Solutions Provider

Roadmap & Future Enhancements

The platform is built with scalability in mind, enabling continuous evolution through AI-driven personalisation, expanded language support, and richer analytics.

1. Audience Segmentation Engine

Deliver targeted ads based on user language preference, location, and in-app behaviour patterns.

2. Additional Language Support

Expand beyond English and Chinese to support Malay, Tamil, and other regional languages.

3. AI-Powered Ad Recommendations

Use machine learning to surface the most relevant promotions to each user based on engagement history.

4. Advanced Campaign Analytics

Real-time dashboard tracking impressions, clicks, conversions, and language-split performance metrics.

5. Third-Party Ad Network Integration

Connect with external ad networks and DSPs to expand inventory and monetisation options.

6. Scheduled & Geo-Targeted Campaigns

Enable time-based and location-aware campaign delivery for hyper-local marketing precision.



Let's connect and collaborate.

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