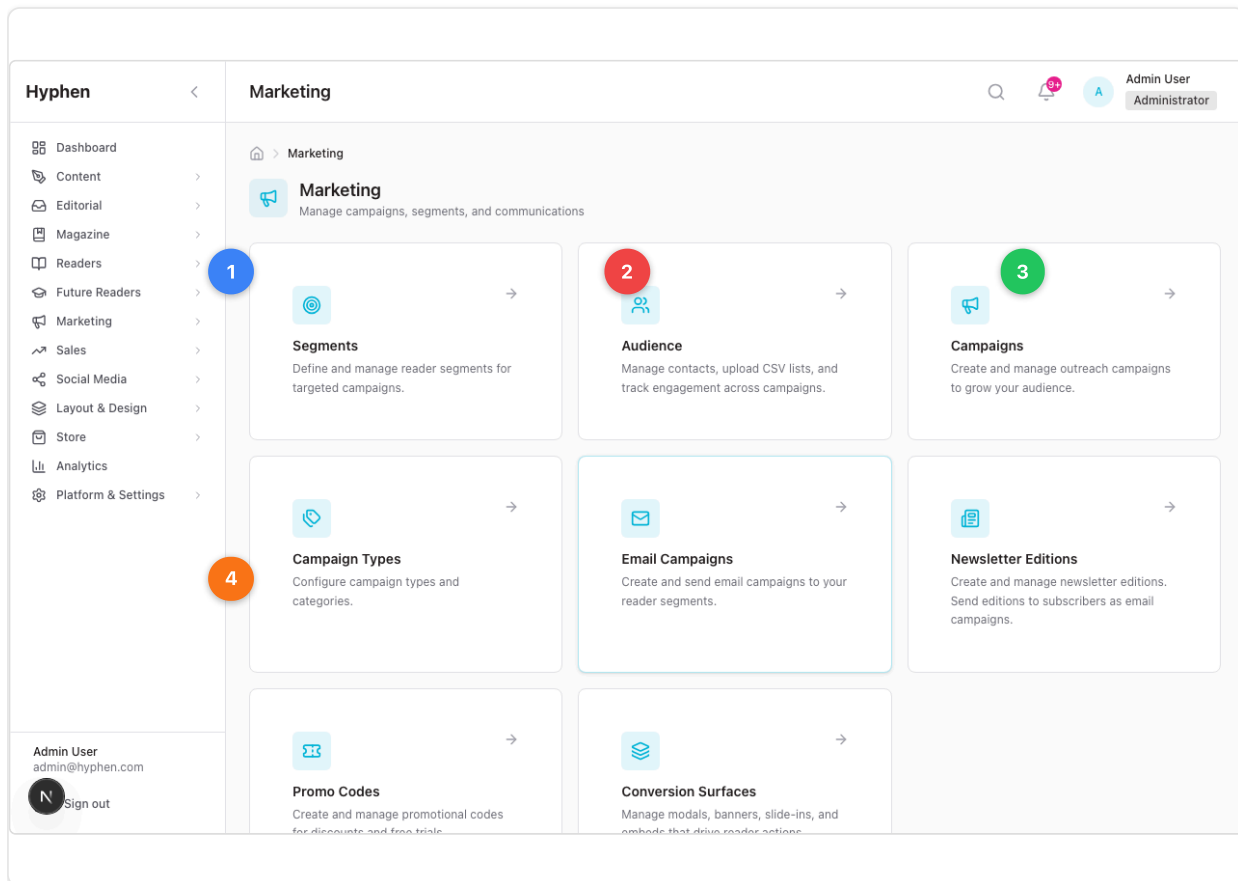


Marketing Features

Complete guide to audience management, campaigns, email marketing, promo codes, and conversion surfaces

Version 1.1 | Updated 2026-04-11 | Marketing Teams, Campaign Managers, Audience Teams, QA, Operations



The marketing hub — your starting point for all marketing features

- 1 Segments — build targeted audience groups with filters
- 2 Campaigns — create and manage outreach campaigns
- 3 Email Campaigns — send templated emails to segments
- 4 Promo Codes — generate discount codes for campaigns

1. Executive Overview

What It Does

The Marketing Features module provides a comprehensive marketing, outreach, and audience engagement system for the Hyphen Publishing Platform. It enables publication administrators to:

- **Build and manage audience contact lists** from CSV imports, campaign submissions, and newsletter signups
- **Create targeted user segments** with advanced filtering across both registered readers and external audience contacts
- **Launch outreach campaigns** with customizable landing pages, dynamic forms, event content, incentives, and social integration
- **Send email campaigns** to segmented audiences using templated emails with engagement tracking
- **Manage newsletter editions** authored in Strapi CMS, sent as email campaigns, and archived for readers
- **Create and distribute promotional codes** with configurable discount types and validity rules
- **Deploy conversion surfaces** (modals, banners, slide-ins) with targeting rules and trigger-based activation on the Reader Portal
- **Track engagement analytics** across campaigns, email deliveries, and conversion surfaces with integrated GA4 and internal metrics

Who Uses It

Role	Access Level
Marketing Admin	Full access: create, edit, publish, delete campaigns; manage audience, segments, email campaigns, promo codes, conversion surfaces
Editor / Content Manager	Campaign read access; may publish campaigns depending on RBAC
Viewer	Read-only access to campaigns and metrics
Reader (Public)	Accesses campaign landing pages, newsletter archive, receives emails/notifications

Business Problem It Solves

Publications need to grow their readership, retain subscribers, and promote events/content. This module provides a unified platform to:

- Acquire new readers through outreach campaigns (student programs, events, lead generation)
- Convert anonymous visitors to subscribers through strategically-placed conversion surfaces
- Engage existing audiences through segmented email campaigns and newsletters
- Track marketing ROI through integrated analytics across all channels

2. Feature Scope

In Scope

Feature	Status
Audience Contact Management (CRUD, CSV import/export)	Implemented
User Segment Builder (advanced multi-source filtering)	Implemented
Outreach Campaign CRUD (7-step wizard, 5+ campaign types)	Implemented
Campaign Landing Pages (reader portal, template-based)	Implemented
Campaign Publishing Workflow (draft → active → completed → archived)	Implemented
Campaign Submissions & Review (approval/rejection with email)	Implemented
Campaign Invitations (segment-targeted email invitations)	Implemented
Email Campaigns (template-based, scheduled/immediate send)	Implemented
Newsletter Editions (Strapi CMS content, send-as-campaign bridge)	Implemented
Promotional Codes (percentage/fixed/trial_days, auto-generation)	Implemented
Conversion Surfaces (6 surface types, 7 trigger types, targeting)	Implemented
Campaign Types (admin-manageable, seeded from enum)	Implemented
Social Media Integration (social post creation from campaigns)	Implemented
QR Code Generation (for campaign landing pages)	Implemented
Campaign Statistics & Analytics	Implemented
Email Engagement Webhooks (SendGrid, Mailchimp)	Implemented
Cron-based Automation (scheduled emails, campaign lifecycle, invitations)	Implemented

Out of Scope

- A/B testing for conversion surfaces (planned for future)
- Geographic targeting for conversion surfaces (planned)
- Webhook events for campaign lifecycle (planned)
- Content-aware inline embed positioning (planned)
- Admin preview mode for conversion surfaces (planned)

[Related Modules / Dependencies](#)

Module	Dependency Type
User & Subscription Management (04)	Segments query Reader and Subscription models; promo codes create subscriptions
Admin Settings & RBAC (11)	All marketing endpoints enforce permission-based access control
Notifications & Email System (14)	Email campaigns use shared email service (SendGrid/SMTP); webhooks update delivery metrics
Reader Portal (13)	Campaign landing pages, newsletter archive, conversion surfaces render here
Social Media Management (08)	Campaigns link to SocialCampaign for cross-channel posting
Homepage Layout & Templates (03)	Campaign pages extend the page template system (DynamicTemplate, SectionRenderer)
E-Commerce / Shopify (09)	Conversion surfaces can link to products
Strapi CMS	Newsletter editions are authored and stored in Strapi

3. Roles & Permissions

Marketing Permissions

Permission Key	Description	Required For
<code>MARKETING_SEGMENTS_READ</code>	View segments	Segments list, segment detail
<code>MARKETING_SEGMENTS_CREATE</code>	Create segments	New segment
<code>MARKETING_SEGMENTS_UPDATE</code>	Edit segments	Edit segment filters
<code>MARKETING_SEGMENTS_DELETE</code>	Delete segments	Remove unused segments
<code>MARKETING_CAMPAGNS_READ</code>	View campaigns, audience, promo codes	Campaign list, detail, audience list
<code>MARKETING_CAMPAGNS_CREATE</code>	Create outreach campaigns	New campaign wizard
<code>MARKETING_CAMPAGNS_UPDATE</code>	Edit campaigns, publish/unpublish	Edit campaign, status transitions
<code>MARKETING_CAMPAGNS_DELETE</code>	Delete campaigns	Remove campaigns
<code>MARKETING_SUBMISSIONS_READ</code>	View submissions	Submissions tab
<code>MARKETING_SUBMISSIONS_REVIEW</code>	Approve/reject submissions	Submission approval workflow
<code>MARKETING_SUBMISSIONS_EXPORT</code>	Export submission data	CSV export
<code>MARKETING_EMAIL_CAMPAGNS_READ</code>	View email campaigns	Email campaign list
<code>MARKETING_EMAIL_CAMPAGNS_CREATE</code>	Create email campaigns	New email campaign
<code>MARKETING_EMAIL_CAMPAGNS_UPDATE</code>	Edit email campaigns	Edit draft campaigns
<code>MARKETING_EMAIL_CAMPAGNS_DELETE</code>	Delete email campaigns	Remove unsent campaigns
<code>MARKETING_EMAIL_CAMPAGNS_SEND</code>	Send/schedule email campaigns	Send action

Additional Related Permissions

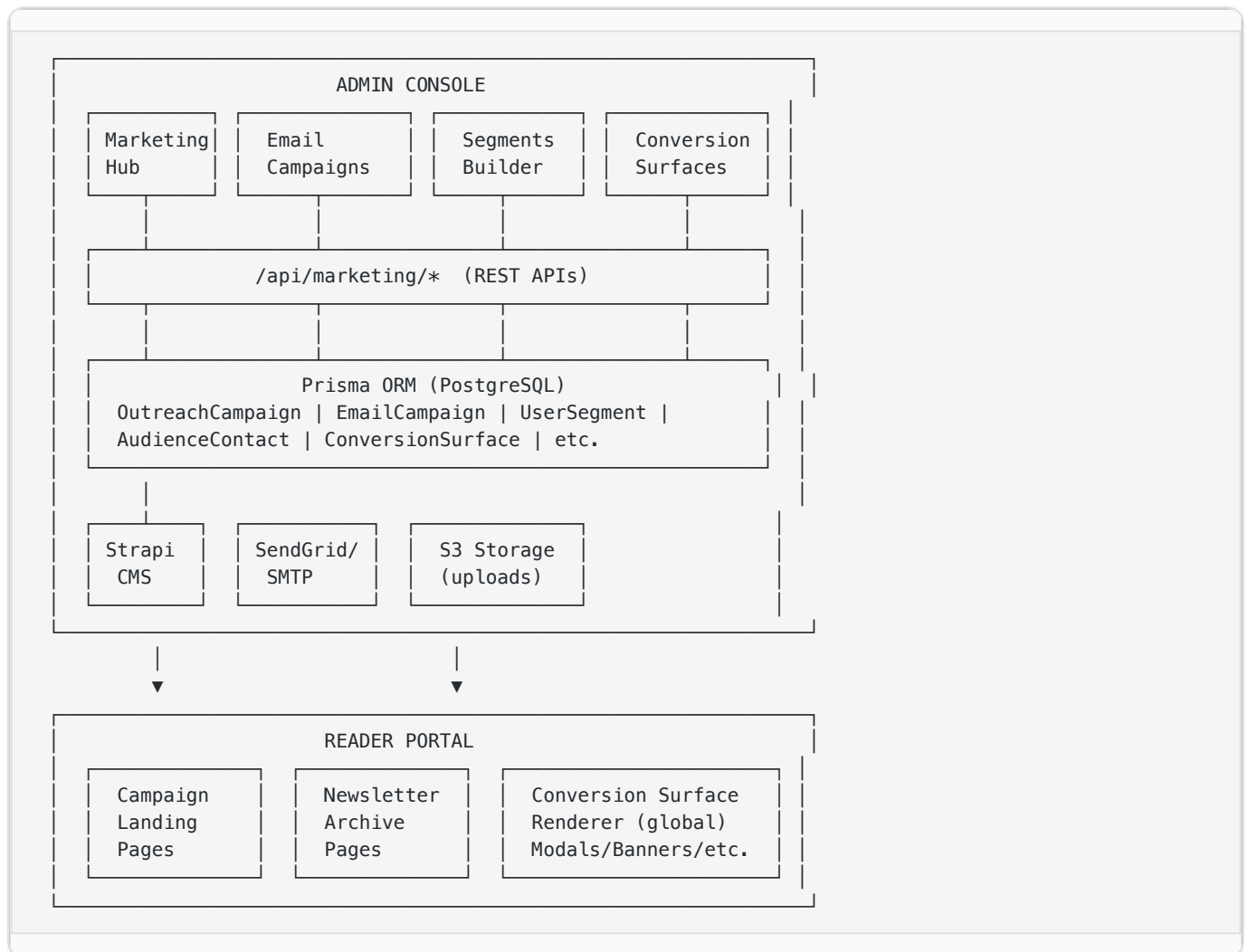
Permission Key	Used By
<code>SETTINGS_READ</code>	View email templates and preferences
<code>SETTINGS_UPDATE</code>	Create/edit email templates and preferences

RBAC Configuration

Permissions are assigned to roles in **Admin Console** → **Settings** → **Roles & Permissions**. Each role can be granted specific marketing permissions. The Marketing Hub page itself controls card visibility based on permissions — users without `MARKETING_CAMPAGNS_READ` will not see the Campaigns card.

4. Architecture & Design Overview

System Architecture

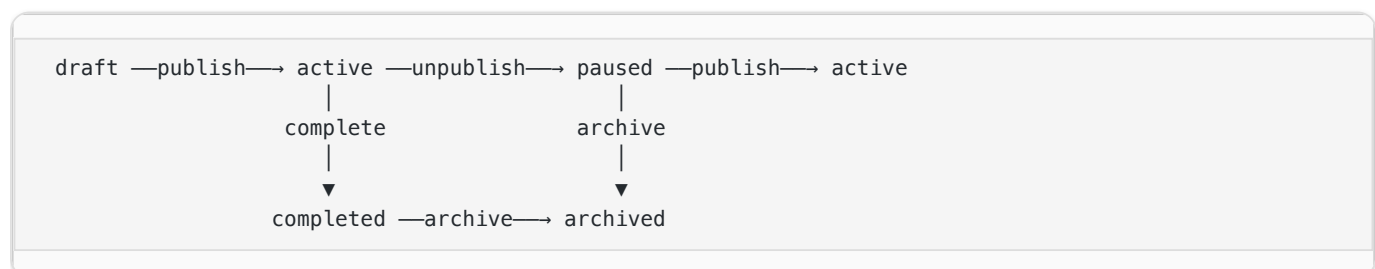


Key Entities & Models

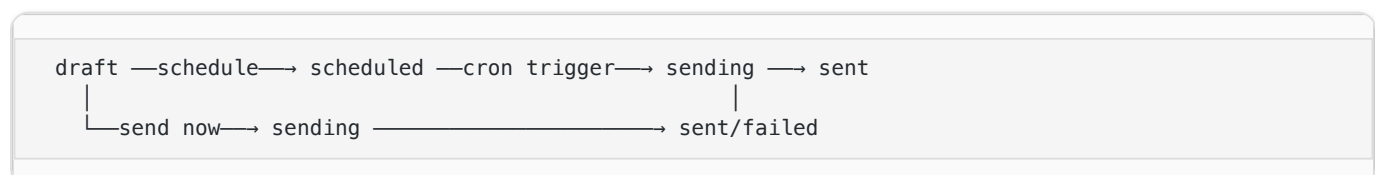
Model	Purpose	Storage
OutreachCampaign	Outreach campaigns with landing page config, form fields, event details	Prisma
CampaignSubmission	Form submissions from campaign landing pages	Prisma
CampaignInvitation	Email invitations sent to segments for campaigns	Prisma
CampaignType	Admin-manageable campaign type definitions	Prisma
CampaignNotifyRequest	"Notify me" requests from expired campaign visitors	Prisma
UserSegment	Audience segment with JSON filter criteria	Prisma
AudienceContact	External contacts imported via CSV or created from submissions	Prisma
EmailCampaign	Email campaigns with template, segment targeting, delivery metrics	Prisma
EmailTemplate	Reusable email templates with Handlebars variable support	Prisma
PromotionalCode	Auto-generated promo codes linked to campaigns	Prisma
DiscountCoupon	Admin-created reusable discount codes	Prisma
ConversionSurface	Promotional surfaces (modals, banners) with targeting/trigger config	Prisma
ConversionEvent	Interaction events (impression, click, dismiss, conversion)	Prisma
NewsletterEdition	Newsletter content editions	Prisma (local mirror) + Strapi (authoring)

Workflow / State Models

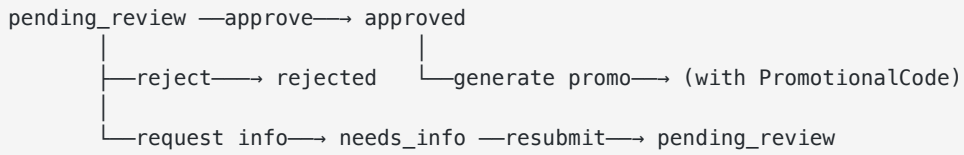
Outreach Campaign Status Flow:



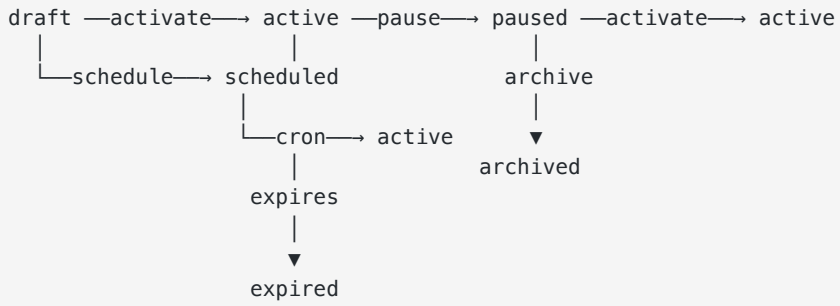
Email Campaign Status Flow:



Campaign Submission Status Flow:



Conversion Surface Status Flow:



[5. Prerequisites & Setup Requirements](#)

[Critical Prerequisites \(Must be configured before marketing features work\)](#)

[1. Email Provider Configuration](#)

Marketing relies heavily on email delivery. Without a configured email provider, email campaigns, invitations, and submission notifications will fail.

Setting	Location	Required
<code>SENDGRID_API_KEY</code>	Environment variable	Yes (if using SendGrid)
<code>SMTP_HOST</code> , <code>SMTP_PORT</code> , <code>SMTP_USER</code> , <code>SMTP_PASS</code>	Environment variable	Yes (if using SMTP)
<code>EMAIL_FROM_ADDRESS</code>	Environment variable	Yes
<code>EMAIL_FROM_NAME</code>	Environment variable	Yes

Verify: Admin Console → Settings → Email → SMTP Status. Should show `configured: true`.

[2. Email Templates](#)

Campaign-related emails (approval, rejection, invitation, notification) require email templates to be seeded.

Action: Seed default templates by calling `POST /api/marketing/email-templates/seed` or creating them manually in Admin Console → Settings → Email Templates.

Required template keys:

- `campaign_submission_approved`
- `campaign_submission_rejected`
- `campaign_invitation`
- `campaign_notify_new_campaign`

[3. Email Preferences & Branding](#)

Configure email branding (logo, colors, publication name, footer, unsubscribe link) in Admin Console → Settings → Email Preferences to ensure all outgoing emails look professional and comply with CAN-SPAM requirements.

[4. Strapi CMS Configuration \(for Newsletters only\)](#)

Newsletter editions are authored in Strapi. Required settings:

Setting	Location	Required For
<code>STRAPI_URL</code>	Environment variable	Newsletter CRUD
<code>STRAPI_API_TOKEN</code>	Environment variable	Newsletter CRUD

Newsletter editions content type must exist in Strapi with fields: title, slug, previewText, content, plainTextContent, editionNumber, topic, publishDate, coverImage, status, isFeatured, priority.

[5. S3 Storage Configuration \(for file uploads\)](#)

Campaign form submissions may include file uploads (selfies, ID cards, documents).

Setting	Location	Required For
<code>AWS_S3_BUCKET</code>	Environment variable	Campaign file uploads
<code>AWS_ACCESS_KEY_ID</code>	Environment variable	Campaign file uploads
<code>AWS_SECRET_ACCESS_KEY</code>	Environment variable	Campaign file uploads
<code>AWS_REGION</code>	Environment variable	Campaign file uploads

[6. Cron Job Configuration](#)

Automated tasks require the cron system to be running.

Cron Endpoint	Purpose	Recommended Interval
<code>GET /api/cron/send-scheduled-emails</code>	Send due email campaigns	Every 1-5 minutes
<code>GET /api/cron/campaign-status</code>	Auto-complete expired campaigns, send notifications	Every 15-30 minutes
<code>GET /api/cron/send-invitations</code>	Send scheduled invitations	Every 5 minutes
<code>GET /api/cron/expire-invitations</code>	Expire overdue invitations	Every hour
<code>GET /api/cron/invitation-reminders</code>	Send weekly invitation reminders	Weekly

All cron endpoints require: `Authorization: Bearer <CRON_SECRET>`

[7. Webhook Configuration \(for email engagement tracking\)](#)

To track email opens, clicks, bounces, and unsubscribes:

SendGrid:

- Register webhook URL: `{ADMIN_CONSOLE_URL}/api/webhooks/sendgrid`
- In SendGrid Dashboard → Settings → Mail Settings → Event Webhook
- Optional: Set `SENDGRID_WEBHOOK_VERIFICATION_KEY` for signature verification

Mailchimp/Mandrill:

- Register webhook URL: `{ADMIN_CONSOLE_URL}/api/webhooks/mailchimp`
- In Mandrill Dashboard → Settings → Webhooks
- Optional: Set `MAILCHIMP_WEBHOOK_KEY` for HMAC-SHA1 verification

8. Reader Portal URL Configuration

Campaign landing pages render on the Reader Portal. The Admin Console needs to know the Reader Portal URL for preview links and public campaign URLs.

Setting	Location
NEXT_PUBLIC_READER_URL	Admin Console environment variable
NEXT_PUBLIC_ADMIN_API_URL	Reader Portal environment variable (to fetch campaign data from Admin API)

9. RBAC Permission Assignment

Ensure the appropriate roles have marketing permissions assigned. Navigate to **Admin Console** → **Settings** → **Roles & Permissions** and grant the marketing permission group to roles that need access.

10. GA4 Configuration (for conversion surface analytics)

Conversion surfaces fire custom GA4 events. If you use Google Analytics:

Setting	Location
NEXT_PUBLIC_GA_MEASUREMENT_ID	Reader Portal environment variable

GA4 events tracked: `conversion_surface_impression`, `conversion_surface_click`, `conversion_surface_dismiss`, `conversion_surface_conversion`, `coupon_copied`, `newsletter_signup`, `registration_start`.

6. Sub-Module: Audience Contacts

The screenshot displays the 'Audience' management interface. At the top, there's a search bar and buttons for 'Export', 'Upload CSV', and 'Add Contact'. Below the search bar, several campaign tags are visible, such as 'campaign:bu-student-outreach' and 'campaign:mu-srudents-outreach'. A table below shows 145 contacts found. The table has columns for Name, Email, Phone, Institution, Location, Tags, Source, and Created. The contacts listed are all 'Registered reader' with email addresses from test3@test.com to test7@test.com, all created 10 days ago.

NAME	EMAIL	PHONE	INSTITUTION	LOCATION	TAGS	SOURCE	CREATED
- Reader	test7@test.com	-	-	-	Registered reader	reader_registration	10 days ago
- Reader	test6@test.com	-	-	-	Registered reader	reader_registration	10 days ago
- Reader	test5@test.com	-	-	-	Registered reader	reader_registration	10 days ago
- Reader	test4@test.com	-	-	-	Registered reader	reader_registration	10 days ago
- Reader	test3@test.com	-	-	-	Registered reader	reader_registration	10 days ago

The audience contacts page shows imported and collected contacts with search, filters, and segment assignment.

Purpose

Manage external audience contacts (people not yet registered as readers) for use in segments, campaign invitations, and email campaigns.

Access

Admin Console → Marketing → Segments → Contacts tab (Also accessible via Marketing → Audience, which redirects to the Contacts tab)

Key Features

6.1 View Contacts

- Table view with columns: Name, Email, Phone, Institution, Tags, Source, Created
- Search by name or email
- Filter by tags
- Sort by any column
- Pagination

[6.2 Add Single Contact](#)

1. Click "Add Contact" button
2. Fill in fields: Email (required), Name, Phone, Institution, Designation, City, State, Country, Tags
3. Click **Save**
4. Contact is created with `source: 'manual'`

[6.3 Bulk Import via CSV](#)

1. Click "Upload CSV" button
2. Drag-and-drop or browse to select a CSV file
3. **Column Mapping Step:** The system auto-detects columns. Map CSV columns to contact fields (email, name, phone, institution, etc.)
4. **Preview Step:** Review first 5 rows of mapped data
5. Click **Upload**
6. System upserts contacts by email (creates new, updates existing)
7. Results summary shows: created, updated, skipped, errors

CSV Requirements:

- Must have an `email` column (required)
- All other columns are optional
- Duplicate emails are updated (not duplicated)
- Tags can be specified as comma-separated values

[6.4 Edit Contact](#)

- Click any contact row to open the **Edit Contact** modal
- Modify fields and click **Save**

[6.5 Delete Contact](#)

- Select one or more contacts → click **Delete** in bulk actions
- Or click delete icon on individual row
- Soft delete by default (`isActive = false`)
- Hard delete available with `?hard=true` query parameter (API only)

[6.6 Export Contacts](#)

- Click **Export** to download all active contacts as CSV

[6.7 Auto-Created Contacts](#)

Contacts are automatically created (upserted) from:

- Campaign form submissions: Tagged `campaign_submission`, with source detail of campaign name
- Newsletter signups: Tagged `newsletter_signup`

These auto-created contacts appear in the Contacts tab and can be included in segments.

[Business Rules](#)

- Email must be unique across all contacts
 - Contacts with `isActive = false` are excluded from segments and email sends
 - Unsubscribed contacts (`unsubscribedAt` set) are excluded from non-forced email sends
 - A contact can be linked to a Reader record via `readerId` (one-to-one)
-

7. Sub-Module: User Segments

The screenshot displays the 'Segments' page in the Hyphen Admin Console. The page header includes the Hyphen logo, a search icon, a notification icon, and the user profile 'Admin User Administrator'. The main content area is titled 'Segments' and includes a sub-header 'Create and manage user segments for targeted campaigns and communications' and a '+ New Segment' button. Below this is a search bar and a table of segments.

NAME	MEMBERS	FILTERS	UPDATED	ACTIONS
E2E-oxnu UI Segment	27	0 filters	23 days ago	⋮
E2E-oxnu Newsletter Opted Newsletter opted-in	6	1 filter	23 days ago	⋮
E2E-oxnu All E2E Contacts All e2e test contacts	27	1 filter	23 days ago	⋮
E2E-o54r UI Segment	27	0 filters	23 days ago	⋮
E2E-o54r Newsletter Opted Newsletter opted-in	6	1 filter	23 days ago	⋮
E2E-o54r All E2E Contacts All e2e test contacts	27	1 filter	23 days ago	⋮
E2E-I56k UI Segment	27	0 filters	23 days ago	⋮
E2E-I56k Newsletter Opted Newsletter opted-in	6	1 filter	23 days ago	⋮

Create and manage audience segments with advanced filtering for targeted campaigns and communications.

Purpose

Create targeted audience groups by combining filter criteria across both registered readers and audience contacts. Segments are used for email campaigns and campaign invitations.

Access

Admin Console → Marketing → Segments → Segments tab

Key Features

7.1 View Segments

- List view with columns: Name, Member Count, Filters (summarized), Created By, Last Counted
- Search by segment name
- Click any segment to view/edit

7.2 Create Segment

1. Click "New Segment"
2. Enter segment Name and optional Description

3. Build Filters using the sidebar filter groups:

Filter Group	Filter Options
Contact Source	Readers, Audience Contacts, All
Campaign	Participated in specific campaign
User Tier	Free, Basic, Premium, etc.
Account Status	Active, Inactive, Banned
Subscription Status	Active, Expired, Cancelled, Trial
Email Verified	Yes / No
Newsletter Opt-In	Subscribed / Not subscribed
Audience Tags	Tags assigned to audience contacts
Registration Date	Date range filter
Last Active Date	Date range filter

4. Filters use **AND logic** between groups and **OR logic** within a group
5. The **right sidebar** shows a live member count (debounced, updates as you change filters)
6. Click "**Preview Members**" to see a sample of matching members
7. Click **Save Segment**

[7.3 Edit Segment](#)

- Open segment → modify filters → member count updates in real-time → Save

[7.4 Preview Members](#)

- Click "**Preview Members**" or open the segment → see paginated list of matching members
- Shows both readers and audience contacts with source labels
- Can exclude specific members from the segment preview

[7.5 Export Segment](#)

- "**Export**" downloads segment members as CSV
- Includes both readers and audience contacts with a `source` column

[7.6 Delete Segment](#)

- Only allowed if the segment is **not used by active campaigns or invitations**
- Attempting to delete a segment in use shows an error message

[Business Rules](#)

- Segment member count is auto-calculated when filters change
- Segments resolve members dynamically at query time (not static lists)

- When Contact Source includes "Audience Contacts" or "All", the segment queries both `Reader` and `AudienceContact` tables
 - The `lastCountedAt` timestamp tracks when the member count was last refreshed
 - Segment filter criteria are stored as a JSON object on the `UserSegment` model
-

8. Sub-Module: Outreach Campaigns

The screenshot displays the 'Outreach Campaigns' management interface. At the top, there's a search bar and filters for 'All', 'Draft', 'Active', 'Paused', 'Completed', and 'Archived'. A 'New Campaign' button is visible in the top right. The main table lists campaigns with the following data:

NAME	TYPE	STATUS	DATE RANGE	SUBMISSIONS
E2E-oxnu WizNoIncentive No incentive test. Synthetic: wizard_incentive_none. Prefix: E2E-oxnu	General	Draft	Mar 20 – Apr 18, 2026	0
E2E-oxnu WizFreeTrial Free trial incentive test. Synthetic: wizard_incentive_trial. Prefix: E2E-oxnu	General	Draft	Mar 20 – Apr 18, 2026	0
E2E-oxnu WizFixedDiscount Fixed discount incentive test. Synthetic: wizard_incentive_fixed. Prefix: E2E-oxnu	General	Draft	Mar 20 – Apr 18, 2026	0
E2E-oxnu WizEventDetails Event details heavy test. Synthetic: wizard_event_details. Prefix: E2E-oxnu	Event Registration	Draft	Apr 2 – Apr 4, 2026	0
E2E-oxnu WizRichLanding Rich landing page test. Synthetic: wizard_rich_landing. Prefix: E2E-oxnu	Event Registration	Draft	Mar 20 – Apr 18, 2026	0
E2E-oxnu WizUploadFields	General	Draft	Mar 20 – Apr 18, 2026	0
E2E-oxnu WizFullEvent A comprehensive student outreach program targeting university students across India...	Student Outreach	Draft	Mar 20 – Jun 17, 2026	0

The campaigns page shows all outreach campaigns with status, type, dates, and quick actions.

Purpose

Create multi-purpose outreach campaigns with customizable landing pages, dynamic forms, incentives, event content, and post-event materials.

Access

Admin Console → Marketing → Campaigns

Campaign Types

Type	Use Case
student_outreach	Student recruitment programs (with institution verification)
event	Conference, webinar, workshop registration (with rich event content)
lead_gen	Lead generation with form capture
institutional	Institutional partnership campaigns
general	General-purpose outreach

Additionally, admins can create custom campaign types via the Campaign Types management page.

[8.1 Create Campaign \(7-Step Wizard\)](#)

Navigate to **Marketing** → **Campaigns** → **New Campaign**

Step 1: Basics

- Campaign Name (required)
- URL Slug (required, unique, auto-generated from name)
- Campaign Type (select from admin-managed types)
- Description
- Start Date (required)
- End Date (required)

Step 2: Form Fields Build the campaign registration form using the form field builder:

- Add fields with types: text, email, phone, url, number, date, textarea, select, radio, checkbox, photo_selfie, photo_id_card, file_upload, institution_picker
- Configure per field: label, placeholder, required, help text, validation rules (minLength, maxLength, min, max, pattern), options (for select/radio/checkbox)
- Reorder fields via drag-and-drop
- Also configure Notify Form fields (shown on expired campaigns)

Step 3: Landing Page

- Landing Page Title
- Landing Page Subtitle
- Landing Page Content (rich text / HTML)
- Hero Image (via Media Picker)
- Success Title & Message (shown after form submission)
- Expired Title & Message (shown when campaign is past end date)
- Testimonials (add multiple: name, role, location, quote, rating, avatar via Media Picker)

Step 4: Event Details (for event-type campaigns)

- **Speakers:** Name, Role, Bio, Talk Title, Photo (Media Picker), Social Links (Twitter, LinkedIn, Website)
- **Schedule:** Multi-day agenda with sessions (time, title, description, speaker dropdown, location, type: keynote/panel/workshop/break/networking)
- **Partners:** Name, Logo (Media Picker), Tier (title_sponsor/partner/supporter/media_partner), Website
- **Why Attend:** Benefits list (title, description, icon)
- **Venue Info:** Name, Address, City, Map URL, Directions

- **Live Stream:** URL, Type (YouTube/Vimeo/Custom)

Step 5: Post-Event Content (for completed events)

- **Gallery:** Multiple images via Media Picker with captions
- **Winners:** Display mode (ranked/flat/categorized), Winner entries (name, award, category, rank, description, photo)
- **Recording URL:** Link to event recording
- **Resources:** Downloadable files (title, URL, type, description, thumbnail)

Step 6: Incentive

- Incentive Type: none, free_trial, percentage_discount, fixed_discount
- Incentive Value (e.g., 30 days trial, 20% off)
- Incentive Description
- Promo Code Prefix (for auto-generated codes)
- Promo Validity Days
- Linked Subscription Plan

Step 7: Review

- Comprehensive preview of all configured sections
- Click **Create Campaign** to save as draft

[8.2 Edit Campaign](#)

Navigate to **Marketing** → **Campaigns** → [Campaign Name] → **Edit**

All fields from the creation wizard are editable. Changes are saved immediately on form submission.

Important: Status changes are NOT allowed through the edit form. Use the Publish/Unpublish actions on the campaign detail page.

[8.3 Campaign Detail Page \(7 Tabs\)](#)

Navigate to **Marketing** → **Campaigns** → [Campaign Name]

Tab	Description
Details	Campaign info, form fields preview, incentive details, custom messages
Submissions	Submission management with approval workflow (see Section 10)
Invitations	Email invitation management (see Section 11)
Layout & Style	Page template picker and visual editor for campaign landing page
QR Code	Auto-generated QR code linking to campaign landing page URL
Statistics	Campaign metrics: total submissions, pending/approved/rejected counts, conversion rate
Social	Link to social campaign, compose social posts about the campaign

8.4 Layout & Style Tab

The Layout & Style tab integrates with the platform's page template system:

- **Select Template:** Choose from available campaign-compatible templates
- **Configure Sections:** Customize the order and content of campaign page sections
- **Save Draft:** Save template changes without publishing
- **Publish:** Push template changes live to the reader portal
- **Preview:** Opens the reader portal campaign page in a new tab for visual review

Note: The preview requires the Reader Portal to be running. If preview shows "Preview Unavailable", verify `NEXT_PUBLIC_READER_URL` is correctly configured and the Reader Portal is running.

8.5 QR Code Tab

Generates a QR code linking to `{READER_URL}/campaigns/{slug}`. Can be downloaded for use in physical marketing materials.

8.6 Statistics Tab

Shows real-time campaign metrics:

- Total Submissions
- Pending Review Count
- Approved Count
- Rejected Count
- Conversion Count (submissions that resulted in subscriptions)
- Counts are sourced from actual submission records (not denormalized counters)

9. Sub-Module: Campaign Publishing & Landing Pages

Purpose

Control campaign visibility and manage the lifecycle of campaign landing pages accessible to the public.

Publishing Workflow

Publish a Campaign

1. Navigate to the campaign detail page
2. Ensure the campaign is in **Draft** or **Paused** status
3. Click "**Publish**"
4. System validates campaign completeness:
 - Name is set
 - Slug is set
 - Start date and end date are set
 - At least one form field is configured
5. If validation passes: status changes to **Active**
6. The campaign landing page is now live at `{READER_URL}/campaigns/{slug}`

Unpublish a Campaign

1. From an **Active** campaign, click "**Unpublish**"
2. Status changes to **Paused**
3. The landing page shows a "Campaign Paused" message to visitors

Complete a Campaign

1. From an **Active** campaign, click "**Complete**"
2. Status changes to **Completed**
3. The landing page shows an "Event Recap" or expired state with notify form

Archive a Campaign

1. From a **Completed** or **Paused** campaign, click "**Archive**"
2. Status changes to **Archived**
3. Campaign is hidden from public access

Landing Page URL

Every campaign has a public URL: `{READER_URL}/campaigns/{slug}`

This URL is displayed prominently on the campaign detail page with a **copy** button.

[Landing Page Behavior by Status](#)

Campaign Status	Landing Page Behavior
Draft	Not accessible (404)
Active (before start date)	Shows "Upcoming" state with countdown, notify form
Active (within date range)	Full campaign page with form, event content if applicable
Active (event-type, during event)	"Happening Now" badge, live stream embed, schedule with "now" indicator
Paused	Shows "Campaign Paused" message
Completed	Shows event recap: gallery, winners, resources, testimonials, notify form
Archived	Not accessible (404)

[Event-Type Campaign: 3-State Rendering](#)

Event-type campaigns have enhanced rendering based on timing:

Upcoming State (before start date): Hero → Why Attend → Info → Countdown → Speakers → Schedule → Venue → Registration Form → Partners → Notify Form

Active State (during event): Hero (with "Happening Now") → Live Stream → Why Attend → Info → Schedule (with "now" indicator) → Speakers → Venue → Form (if capacity) → Partners → Testimonials

Completed State (after end date): Hero (recap) → Info → Gallery → Winners → Testimonials → Resources → Speakers → Partners → Notify Form (for next event)

10. Sub-Module: Campaign Submissions & Review

Purpose

Process and review form submissions from campaign landing pages, including approval workflows and promo code generation.

Access

Campaign Detail → Submissions tab

10.1 View Submissions

- Table view with columns: Submitted At, Submitter Info, Status, Reviewed By, Actions
- Filter by status: All / Pending Review / Approved / Rejected / Needs Info
- Search submissions
- Status count badges on each filter tab

10.2 Review a Submission

1. Click on a submission row to expand details
2. View all form field responses, uploaded files (selfie, ID card, documents)
3. Choose an action:

Action	Result
Approve	Status → <code>approved</code> . Optional: send approval email using <code>campaign_submission_approved</code> template
Reject	Status → <code>rejected</code> . Requires rejection reason. Optional: send rejection email with reason
Request Info	Status → <code>needs_info</code> . Notifies submitter to provide additional information

10.3 Generate Promo Code

After approving a submission:

1. Click "Generate Promo Code"
2. System generates a unique code using the campaign's `promoCodePrefix`
3. Code is linked to the submission (one-to-one)
4. Code type, value, and validity are based on campaign incentive settings
5. Approval email includes the generated promo code

10.4 Bulk Operations

- Select multiple submissions → **Bulk Approve** or **Bulk Reject**
- Requires `MARKETING_SUBMISSIONS_REVIEW` permission

10.5 Submission Data Flow

```
Reader submits form on landing page
  → POST `/api/marketing/campaigns/public/{slug}/submit`
  → Creates CampaignSubmission record
  → Increments campaign counters (totalSubmissions, pendingCount)
  → Upserts AudienceContact from form data (email, name, phone)
  → Admin reviews in Submissions tab
  → Approve → sends approval email → optionally generates promo code
  → Reject → sends rejection email with reason
```

11. Sub-Module: Campaign Invitations

Purpose

Send targeted email invitations to segmented audiences to drive campaign participation.

Access

Campaign Detail → Invitations tab

11.1 View Invitations

- List of all invitations for the campaign
- Status badges: Draft / Scheduled / Sending / Sent / Failed
- Delivery metrics per invitation: Recipient Count, Delivered, Opened, Clicked, Registered

11.2 Create Invitation

1. Click "New Invitation"
2. **Select Segment:** Choose from existing segments (which now include audience contacts)
3. View segment **member count** to confirm audience size
4. **Write Subject Line:** Supports `{{campaign_name}}` variable
5. **Compose Email Content:** Rich text with variable support:
 - `{{user_name}}` — Recipient name
 - `{{campaign_name}}` — Campaign name (auto-resolved)
 - `{{campaign_url}}` — Landing page URL with UTM parameters
 - `{{incentive_description}}` — Incentive details
6. **Preview:** See rendered email with sample data
7. Choose action:
 - **Save as Draft** — Save without sending
 - **Send Now** — Send immediately
 - **Schedule** — Set a future date/time for automated send

11.3 Send Invitation

1. From a draft invitation, click "Send"
2. System resolves segment members at send time
3. Emails are dispatched using `campaign_invitation` template

4. Campaign URL includes UTM parameters: `?utm_source=email&utm_medium=invitation&utm_campaign={slug}&source=email_invite`
5. Status transitions: `draft → sending → sent` (or `failed`)
6. Recipient emails are snapshotted on the invitation record for audit

[11.4 Scheduled Invitations](#)

- Scheduled invitations are picked up by the `send-invitations` cron job
- Processed when `scheduledAt <= now` and status is `scheduled`

[11.5 Template Variable Resolution](#)

The invitation composer now correctly resolves `{{campaign_name}}` to the actual campaign name in both the slider header and email content display. This was fixed as part of the marketing feature review.

12. Sub-Module: Email Campaigns

The screenshot displays the 'Email Campaigns' management interface. It features a sidebar with various marketing and content management tools. The main area shows a list of campaigns with the following data:

NAME	STATUS	SEGMENT	SCHEDULE / SENT	OPEN RATE	CLICK RATE
E2E-oxnu Welcome Email (Copy) E2E-oxnu Welcome to Hyphen!	Draft	E2E-oxnu All E2E Contacts	—	—	—
E2E-oxnu Newsletter Digest E2E-oxnu Weekly Digest	Draft	E2E-oxnu All E2E Contacts	—	—	—
E2E-oxnu Welcome Email E2E-oxnu Welcome to Hyphen!	Draft	E2E-oxnu All E2E Contacts	—	—	—
E2E-o54r Newsletter Digest E2E-o54r Weekly Digest	Draft	E2E-o54r All E2E Contacts	—	—	—
E2E-o54r Welcome Email E2E-o54r Welcome to Hyphen!	Draft	E2E-o54r All E2E Contacts	—	—	—
E2E-I56k Newsletter Digest E2E-I56k Weekly Digest	Draft	E2E-I56k All E2E Contacts	—	—	—
E2E-I56k Welcome Email E2E-I56k Welcome to Hyphen!	Sent	E2E-I56k All E2E Contacts	Mar 19, 2026	0.0%	—
E2E-hhi5 Newsletter Digest E2E-hhi5 Weekly Digest	Draft	E2E-hhi5 All E2E Contacts	—	—	—

Create and send templated email campaigns to segmented audiences with engagement tracking.

Purpose

Send template-based or custom HTML email campaigns to segmented audiences with scheduling and engagement tracking.

Access

Admin Console → Marketing → Email Campaigns

12.1 View Email Campaigns

- List with columns: Name, Subject, Segment, Status, Sent At, Open Rate, Click Rate
- Status tabs: Draft / Scheduled / Sending / Sent / Failed
- Count badges per tab

12.2 Create Email Campaign

1. Click "New Email Campaign"
2. Configure:

- **Name** (required)
 - **Subject Line** (required, supports `{{variable}}` interpolation)
 - **Email Template** — select from existing templates OR provide custom HTML
 - **Target Segment** — select segment for audience targeting
3. Save as draft

[12.3 Send Email Campaign](#)

Send Now:

1. Open a draft email campaign
2. Click "Send Now"
3. System resolves segment members
4. Enforces newsletter opt-in check (unless `forceSend=true`)
5. Sends emails in batches via SendGrid/SMTP
6. Status: `draft → sending → sent`

Schedule:

1. Open a draft email campaign
2. Click "Schedule"
3. Set the scheduled date/time
4. Status: `draft → scheduled`
5. The `send-scheduled-emails` cron picks it up when due
6. Cron atomically claims the campaign (`scheduled → sending`) to prevent double-send
7. Status: `sending → sent`

[12.4 Duplicate Campaign](#)

- Click "Duplicate" to create a copy as a new draft
- Useful for recurring campaigns with slight modifications

[12.5 Email Campaign Metrics](#)

After sending, the campaign shows engagement metrics:

- **Delivered:** Emails successfully delivered
- **Opened:** Unique opens
- **Clicked:** Unique link clicks

- **Bounced:** Hard/soft bounces
- **Unsubscribed:** Recipients who unsubscribed

Metrics are updated via SendGrid/Mailchimp engagement webhooks in real-time.

[12.6 Delete Email Campaign](#)

- Only **unsent** campaigns (draft/scheduled) can be deleted
 - Sent/sending campaigns cannot be deleted (for audit compliance)
-

13. Sub-Module: Newsletter Editions

Purpose

Author newsletter editions in Strapi CMS, manage their lifecycle, send them as email campaigns, and provide a reader-facing archive.

Architecture Note

Newsletter editions use a **dual-storage** approach:

- **Strapi CMS:** Source of truth for content authoring (rich text editing, cover images, SEO)
- **Admin Console API:** Acts as proxy to Strapi, bridges to Prisma `EmailCampaign` for email delivery

Access

Admin Console → Marketing → Newsletters

13.1 View Newsletter Editions

- List with status tabs: All / Draft / Published / Featured / Archived
- Search by title
- Columns: Title, Edition Number, Topic, Status, Publish Date

13.2 Create Newsletter Edition

1. Click "New Newsletter"
2. Fill in:
 - **Title** (required)
 - **Edition Number** (auto-incremented or manual)
 - **Topic** (for archive filtering)
 - **Preview Text** (teaser shown in archive cards)
 - **Publish Date**
 - **Cover Image** (via Media Picker)
 - **HTML Content** (rich text editor)
 - **Plain Text Content** (fallback for text-only email clients)
 - **External Archive URL** (optional, for linking to external archive)
3. Save (creates in Strapi as draft)

[13.3 Publish Newsletter](#)

1. Open a draft edition
2. Click "Publish"
3. Uses Strapi v5 publish action API
4. Edition becomes visible in the public newsletter archive at `{READER_URL}/newsletters`

[13.4 Send Newsletter as Email Campaign](#)

1. From the newsletters list, click "Send as Campaign" (or from edition detail page)
2. A modal appears:
 - **Select Segment** — choose target audience
 - **Subject Line** — defaults to edition title
3. Click **Send**
4. System:
 - Fetches full content from Strapi
 - Creates a Prisma `EmailCampaign` with `newsletterEditionId` for traceability
 - Dispatches emails to segment members
5. The email campaign appears in the Email Campaigns list for tracking

[13.5 Reader Portal Newsletter Archive](#)

- Accessible at `{READER_URL}/newsletters`
 - **Topic filter pills**: Filter editions by topic
 - **Edition cards**: Show edition number, featured badge, topic tag, title, publish date, preview text
 - **Pagination**: Navigate through archive
 - **Individual edition page**: `{READER_URL}/newsletters/{slug}` — renders full HTML content
 - **ISR**: Archive page uses Incremental Static Regeneration with 5-minute revalidation
-

14. Sub-Module: Promotional Codes

Promo Codes
Create and manage discount coupon codes for subscriptions.

Search by code... All Active Inactive Expired

Code	Discount	Plan	Applies To	Usage	Valid Period	Status	Actions
E2E-0XNU-FIXED	INR 5 off	All plans	First payment	0 / 10	18 Mar 2026 - 18 Apr 2026	Active	
E2E-0XNU-EXPIRED	15% off	All plans	First payment	0 / 50	18 Jan 2026 - 18 Mar 2026	Expired	
E2E-0XNU-ACTIVE	20% off	All plans	First payment	0 / 100	18 Mar 2026 - 17 Jun 2026	Active	
E2E-054R-FIXED	INR 5 off	All plans	First payment	0 / 10	18 Mar 2026 - 18 Apr 2026	Active	
E2E-054R-EXPIRED	15% off	All plans	First payment	0 / 50	18 Jan 2026 - 18 Mar 2026	Expired	
E2E-054R-ACTIVE	20% off	All plans	First payment	0 / 100	18 Mar 2026 - 17 Jun 2026	Active	
E2E-L56K-FIXED	INR 5 off	All plans	First payment	0 / 10	18 Mar 2026 - 18 Apr 2026	Active	
E2E-L56K-EXPIRED	15% off	All plans	First payment	0 / 50	18 Jan 2026 - 18 Mar 2026	Expired	

Manage promotional codes with usage limits, expiration dates, and discount configurations.

Purpose

Create and manage discount codes for subscription plans. Promo codes can be admin-created (DiscountCoupon) or auto-generated from campaign submissions (PromotionalCode).

Access

Admin Console → Marketing → Promo Codes

14.1 Two Types of Promo Codes

Type	Model	Source	Purpose
Admin-Created Coupons	DiscountCoupon	Created manually by admins	Reusable discount codes (e.g., WELCOME20)
Campaign-Generated Codes	PromotionalCode	Auto-generated from approved campaign submissions	One-time codes tied to individual submissions

14.2 Create Admin Coupon

1. Click "New Promo Code"

2. Configure:

- **Code** (unique, e.g., `SUMMER2026`)
- **Description**
- **Discount Type:** Percentage or Fixed Amount
- **Discount Value** (e.g., 20% or \$10)
- **Linked Plan** (optional, restrict to specific subscription plan)
- **Billing Interval** (optional)
- **Max Uses** (total redemption limit)
- **Max Uses Per User**
- **Valid From / Valid To** dates
- **Options:** New subscribers only, applies to (FIRST_PAYMENT / N_CYCLES / ALL_RENEWALS), discount cycles, allow gift/bulk/institutional

3. Save

[14.3 Campaign Promo Code Auto-Generation](#)

When a campaign submission is approved and the campaign has incentive settings:

1. Admin approves submission → clicks "Generate Promo Code"
2. System generates a unique code: `{promoCodePrefix}-{random}`
3. Code is saved as `PromotionalCode` with:
 - Type: percentage, fixed, or trial_days (from campaign incentive settings)
 - Value: from campaign `incentiveValue`
 - Validity: from campaign `promoValidityDays`
 - Max redemptions: 1 (single use)
4. Code is linked to the submission record

[14.4 Public Promo Code Validation & Redemption](#)

Validate (`POST /api/promo-codes/validate` or `POST /api/promo/validate`):

- Checks both `PromotionalCode` and `DiscountCoupon` tables
- Returns discount type, value, validity
- Rate limited: 20 requests/minute/IP

Redeem (`POST /api/promo/redeem`):

- For `trial_days`: Atomically creates reader account + subscription in a transaction
 - For `percentage` / `fixed`: Atomically claims redemption slot
 - Rate limited: 5 requests/15 minutes/IP
-

15. Sub-Module: Conversion Surfaces

NAME	TYPE	GOAL	STATUS	PLACEMENT	IMPRESSIONS	CLICKS	CONVERSI
E2E-oxnu Promo Banner	Top Banner	Redeem Coupon	Draft	Top Full	0	0	
E2E-oxnu Newsletter Popup	Modal	Newsletter	Draft	Center	0	0	
E2E-o54r Promo Banner	Top Banner	Redeem Coupon	Draft	Top Full	0	0	
E2E-o54r Newsletter Popup	Modal	Newsletter	Draft	Center	0	0	
E2E-I56k Promo Banner	Top Banner	Redeem Coupon	Draft	Top Full	0	0	
E2E-I56k Newsletter Popup	Modal	Newsletter	Draft	Center	0	0	
E2E-hhi5 Promo Banner	Top Banner	Redeem Coupon	Draft	Top Full	0	0	
E2E-hhi5 Newsletter Popup	Modal	Newsletter	Draft	Center	0	0	
E2E-by01 Promo Banner	Top Banner	Redeem Coupon	Draft	Top Full	0	0	
E2E-by01 Newsletter Popup	Modal	Newsletter	Draft	Center	0	0	

Configure modals, banners, slide-ins, and inline prompts to convert readers into subscribers.

Purpose

Deploy promotional overlays (modals, banners, slide-ins, sticky notifications) on the Reader Portal with sophisticated targeting and trigger rules to drive reader actions.

Access

Admin Console → Marketing → Conversion Surfaces

15.1 Surface Types

Type	Behavior
modal	Full-screen overlay with backdrop
sticky_notification	Persistent notification bar
slide_in	Corner slide-in panel
top_banner	Full-width banner at page top
bottom_banner	Full-width banner at page bottom
inline_embed	Embedded within page content

15.2 Create Conversion Surface

1. Click "New Surface"
2. Configure:

Identity & Presentation:

- Name, Surface Type, Placement
- Title, Subtitle, Body Text
- Image URL
- Primary CTA (text + URL), Secondary CTA (text + URL)
- Background Color, Theme (light/dark/brand)

Conversion Goal:

- register, login, subscribe_paid, subscribe_newsletter, view_campaign, view_event, redeem_coupon, view_product, visit_pricing, custom_cta

Entity Links (optional):

- Linked Coupon (DiscountCoupon)
- Linked Plan (SubscriptionPlan)
- Linked Campaign (OutreachCampaign)
- Linked Event
- Linked Product
- Newsletter Slug

Targeting Rules (JSON):

- `audiences`: anonymous, registered, subscriber, newsletter_subscribed, newsletter_unsubscribed
- `pageTypes`: homepage, article, section, etc.
- `deviceTypes`: mobile, tablet, desktop
- `includeUrIs` / `excludeUrIs`: URL pattern matching
- `contentTypes`, `sections`, `tags`: Content-based targeting
- `utmSource`, `utmMedium`, `utmCampaign`: UTM parameter matching

Trigger Configuration:

- `page_load` — Show on page load (with optional delay)
- `time_on_page` — Show after N seconds

- `scroll_depth` — Show after scrolling to N%
- `exit_intent` — Show when mouse leaves viewport
- `page_view_count` — Show after N page views
- `after_article_read` — Show after scrolling to 100% of article
- `manual` — Programmatic trigger only

Frequency & Suppression:

- Frequency Limit + Unit (per session/day/week/month)
- Suppress After Dismiss (boolean)
- Suppress After Conversion (boolean)
- Suppress If Already Converted (boolean)

Scheduling:

- Status: draft, scheduled, active, paused
- Starts At / Ends At dates
- Priority (lower number = higher priority)

3. Save as draft

[15.3 Activate Surface](#)

1. Change status from `draft` → `active` (via PUT API)
2. Surface immediately begins displaying to eligible readers on the Reader Portal

[15.4 Reader Portal Rendering](#)

The conversion surface system uses a layered rendering architecture:

1. `GlobalConversionSurfaces` — Wraps the entire Reader Portal root layout
2. `ConversionSurfaceProvider` — React context that:
 - Detects device type (mobile/tablet/desktop)
 - Counts page views (stored in state, incremented per mount)
 - Fetches eligible surfaces from `GET /api/public/conversion-surfaces/eligible`
 - Filters through local suppression checks (localStorage for anonymous, server-side for authenticated)
 - Sorts by priority
 - Enforces **slot-based conflict resolution**: one modal at a time, one sticky at a time, banners can coexist
3. `ConversionSurfaceRenderer` — Evaluates trigger conditions and renders the appropriate surface component

Trigger Evaluation:

- `page_load`: Fires after optional `triggerDelaySeconds`
- `time_on_page`: Timer starts on mount, fires at `triggerDelaySeconds`
- `scroll_depth`: Monitors scroll position, fires when `triggerScrollPercent` is reached
- `exit_intent`: Listens for `mouseout` event leaving the viewport (desktop only)
- `page_view_count`: Compares provider's page view count against `triggerPageViews`
- `after_article_read`: Monitors scroll to 100% of content
- `manual`: Not automatically triggered

Frequency Enforcement:

- **Anonymous readers:** Client-side via localStorage (per-surface tracking)
- **Authenticated readers:** Server-side via ConversionEvent records

[15.5 Analytics](#)

Dual tracking approach:

1. **Internal** (ConversionEvent table): Stores every interaction with reader context (page, device, UTM, session)
2. **GA4:** Fires custom events for cross-platform attribution

Stats API (`GET /api/marketing/conversion-surfaces/{id}/stats`):

- Date range filtering
- Time series data
- Breakdowns by device, page, UTM
- Computed rates: CTR, conversion rate, dismiss rate, engagement rate

Denormalized counters on ConversionSurface model:

- `impressionCount`, `clickCount`, `dismissCount`, `conversionCount`
- Updated atomically on each event
- Used for fast list view display

[15.6 Coupon Integration](#)

Surfaces can link to `DiscountCoupon` records:

- Eligibility API validates coupon status (active, not expired, usage limit not reached)
- Reader Portal shows copyable coupon code with "Copy Code" button

- `coupon_copied` event tracked to both GA4 and internal analytics
 - Coupon code passed to checkout URL as parameter
-

16. Sub-Module: Campaign Types

Purpose

Define and manage reusable campaign type categories that appear in the campaign creation dropdown.

Access

Admin Console → Marketing → Campaign Types

Features

- **CRUD:** Create, read, update, delete campaign types
 - **Fields:** Name (unique), Slug (unique, auto-generated), Description, Icon (Lucide icon name), Active flag, Sort Order
 - **Seeded Defaults:** 5 types seeded from the system enum: Student Outreach, Event Registration, Lead Generation, Institutional, General
 - **Usage:** Campaign types appear in the campaign creation wizard and campaign edit form as a dropdown
 - **Deletion Protection:** Cannot delete a type that is linked to existing campaigns
-

17. Cron Jobs & Automation

Overview

Cron Endpoint	Purpose	Auth	Recommended Schedule
GET /api/cron/send-scheduled-emails	Send due email campaigns	CRON_SECRET	Every 1–5 min
GET /api/cron/campaign-status	Auto-complete expired campaigns; send notify emails	CRON_SECRET	Every 15–30 min
GET /api/cron/send-invitations	Send scheduled campaign invitations	CRON_SECRET	Every 5 min
GET /api/cron/expire-invitations	Expire overdue invitations	CRON_SECRET	Every hour
GET /api/cron/invitation-reminders	Weekly reminders for pending invitations	CRON_SECRET	Weekly

send-scheduled-emails

1. Finds all email campaigns with `status = 'scheduled'` and `scheduledAt <= now`
2. **Atomically** transitions status to `'sending'` (prevents double-send on concurrent cron runs)
3. Resolves segment members
4. Sends emails via SendGrid/SMTP
5. Updates status to `'sent'` or `'failed'`

campaign-status

1. Finds active campaigns where `endDate < now` → transitions to `'completed'`
2. Finds draft campaigns where `endDate < now` → transitions to `'archived'`
3. Looks up `CampaignNotifyRequest` records for campaigns that just became active → sends notification emails using `campaign_notify_new_campaign` template

send-invitations

1. Finds invitations with `status = 'scheduled'` and `scheduledAt <= now`
2. Resolves segment members for each invitation
3. Sends invitation emails
4. Updates status to `'sent'` or `'failed'`

[18. Webhook Integrations](#)

[SendGrid Engagement Webhook](#)

Endpoint: `POST /api/webhooks/sendgrid`

Events Processed:

Event	Action
<code>delivered</code>	Updates EmailLog status, increments campaign <code>delivered</code> count
<code>open</code>	Increments campaign <code>opened</code> count
<code>click</code>	Increments campaign <code>clicked</code> count
<code>bounce</code>	Updates EmailLog status to <code>bounced</code> , increments <code>bounced</code> count
<code>dropped</code>	Logs delivery failure
<code>spamreport</code>	Logs spam report
<code>unsubscribe</code>	Increments <code>unsubscribed</code> count

Authentication: ECDSA P-256 signature verification (optional, controlled by `SENDGRID_WEBHOOK_VERIFICATION_KEY`)

[Mailchimp/Mandrill Engagement Webhook](#)

Endpoint: `POST /api/webhooks/mailchimp`

Events Processed: `send`, `open`, `click`, `hard_bounce`, `soft_bounce`, `spam`, `unsub`

Authentication: HMAC-SHA1 signature verification (optional, controlled by `MAILCHIMP_WEBHOOK_KEY`)

URL Verification: `GET /api/webhooks/mailchimp` returns 200 OK for Mandrill webhook registration.

19. Reader Portal Rendering

Campaign Landing Pages

URL: `{READER_URL}/campaigns/{slug}`

Technology: Next.js App Router, Server Component with ISR (60-second revalidation)

Components (24 campaign section components):

Component	Purpose
CampaignHero	Hero image with title/subtitle, status badges, date range
CampaignInfo	Rich content rendering (HTML/description)
CampaignForm	Dynamic form builder with 12 field types (text, email, phone, select, radio, checkbox, textarea, date, institution_picker, photo_selfie, photo_id_card, file_upload), validation, file upload
CampaignCta	Call-to-action with incentive info (state-aware: hidden for expired/paused/completed)
CampaignSuccess	Post-submission confirmation with share/copy link
CampaignExpired	Expired state with messaging and notify form
CampaignUpcoming	Pre-start date state with countdown and notify form
CampaignPaused	Paused state with messaging and notify form
CampaignCountdown	Real-time countdown timer to start/end
CampaignSpeakers	Speaker grid with photos, bios, social links (Twitter/LinkedIn/Website)
CampaignSchedule	Multi-day agenda with session types, "Happening Now" indicator, ICS calendar download
CampaignVenue	Venue details with Google Maps embed iframe, address, city, directions
CampaignWhyAttend	Feature/benefit highlights grid with emoji icons
CampaignPartners	Partner logos grouped by tier (Title Sponsor, Partners, Supporters, Media Partners)
CampaignLiveStream	Live stream embed (YouTube/Vimeo/custom) with "LIVE NOW" / "Recording" badge
CampaignGallery	Post-event photo gallery with lightbox viewer and keyboard navigation
CampaignWinners	Awards display (ranked podium / flat grid / categorized groups)
CampaignResources	Downloadable resources with type badges (video/article/document)
CampaignTestimonial	Testimonial cards with quotes, ratings, and avatars
CampaignNotifyForm	Reusable "Get Notified" form for expired/upcoming/paused campaigns
CampaignNotifyFormSection	Wrapper for notify form as standalone section
CampaignProgramCalendar	Multi-track or timeline calendar view of event schedule
CampaignListingGrid	Grid of campaign cards with status badges for campaign listing pages
CampaignListingHero	Hero section for campaign listing pages

[Newsletter Archive](#)

URL: `{READER_URL}/newsletters`

Components:

- `NewsletterArchive` — Topic filter pills, paginated edition grid
- `NewsletterCard` — Edition card with number badge, topic, date, preview
- `NewsletterArchiveHeader` — Page header
- Individual edition: `{READER_URL}/newsletters/{slug}`

[Programs Discovery Page](#)

URL: `{READER_URL}/programs`

Features:

- Browse past/ongoing/upcoming campaigns
- Filter by campaign type, status, institute, city, country
- Card grid with status badges, date ranges, type badges
- Links to campaign landing pages

[Conversion Surfaces](#)

Renders globally across all Reader Portal pages via `GlobalConversionSurfaces` in the root layout.

See Section 15.4 for detailed rendering behavior.

20. Business Logic & Rules

Campaign Validation Rules

- Campaign slug must be unique across all campaigns
- Start date must be before end date
- At least one form field required before publishing
- Status transitions follow a strict state machine (see Section 4)
- Cannot delete a campaign that has submissions (use archive instead)

Segment Resolution Rules

- Filters use AND logic between groups, OR logic within a group
- When source includes "audience contacts", queries both Reader and AudienceContact tables
- Members are resolved dynamically at query time (not cached lists)
- Segment cannot be deleted if used by active campaigns or invitations

Email Campaign Rules

- Cannot update or delete sent/sending campaigns
- Scheduled campaigns are atomically claimed by cron to prevent double-send
- Newsletter opt-in is enforced by default (unless `forceSend=true`)
- Template variables use Handlebars syntax: `{{variable_name}}`

Conversion Surface Rules

- **Slot-based conflict resolution:** Maximum one modal, one sticky notification active simultaneously; banners can coexist
- **Priority:** Lower number = higher priority; when multiple surfaces compete for a slot, highest priority wins
- **Frequency capping:** Configurable per session/day/week/month
- **Suppression:** Can suppress after dismiss, after conversion, or if already converted
- **Targeting:** AND between dimension types, OR within a dimension
- **Soft delete:** Archive instead of hard delete (preserves analytics history)

Promotional Code Rules

- Campaign-generated codes are single-use (`maxRedemptions = 1`)
- Admin coupons can have configurable max uses and per-user limits

- Validation checks: code exists, is active, not expired, usage limit not reached
- `trial_days` redemption atomically creates reader account + subscription
- Rate limiting on public validation (20/min) and redemption (5/15min)

Contact/Audience Rules

- Email must be unique across audience contacts
 - Inactive contacts (`isActive = false`) are excluded from segments
 - Unsubscribed contacts are excluded from non-forced email sends
 - Auto-upsert from campaign submissions and newsletter signups is non-blocking (failures don't break primary flow)
-

21. End-to-End User Flows

Flow 1: Create and Launch an Outreach Campaign

1. Create Campaign Type (if needed)
Marketing → Campaign Types → Add → "Conference"
2. Build Audience Segment
Marketing → Segments → New Segment
→ Filter: Account Status = Active, Subscription = None
→ Save as "Non-Subscribers"
3. Create Campaign
Marketing → Campaigns → New Campaign
→ Step 1: Name, Slug, Type, Dates
→ Step 2: Form Fields (Name, Email, Phone, Institution)
→ Step 3: Landing Page (Hero, Content, Success/Expired messages)
→ Step 4: Event Details (Speakers, Schedule, Venue) – if event
→ Step 5: Post-Event Content – skip for now
→ Step 6: Incentive (Free Trial, 30 days)
→ Step 7: Review → Create
4. Configure Landing Page Template
Campaign Detail → Layout & Style tab
→ Select template → Save
5. Publish Campaign
Campaign Detail → Click "Publish"
→ Validates → Status = Active
→ Copy landing page URL
6. Send Invitations
Campaign Detail → Invitations tab → New Invitation
→ Select "Non-Subscribers" segment
→ Compose email → Send
7. Share on Social
Campaign Detail → Social tab

Flow 2: Newsletter Edition → Email Campaign

1. Create Newsletter Edition
Marketing → Newsletters → New Newsletter
→ Author content in form
→ Save as draft
2. Publish to Archive
Newsletter detail → Click "Publish"
→ Visible at `/newsletters/{slug}`
3. Send as Email Campaign
Newsletters list → "Send as Campaign" button
→ Select target segment
→ Confirm subject line
→ Send
4. Track Engagement
Marketing → Email Campaigns
→ Find campaign → View open/click/bounce metrics

Flow 3: Deploy a Conversion Surface

1. Create Coupon (optional)
Marketing → Promo Codes → New Code
→ Code: "SAVE20", 20% off
2. Create Conversion Surface
Marketing → Conversion Surfaces → New Surface
→ Type: Modal, Theme: Brand
→ Title: "Subscribe & Save 20%"
→ Link coupon: "SAVE20"
→ Goal: subscribe_paid
→ Targeting: anonymous + homepage + desktop
→ Trigger: exit_intent
→ Frequency: 1 per week
→ Suppress after conversion
3. Activate
Set status to "active"
→ Surface appears to matching readers on Reader Portal
4. Monitor
Conversion Surfaces list → View impression/click/conversion metrics
→ Detail → Stats → Time series, breakdowns

22. QA Scenarios & Test Matrix

Test Preconditions

- Email provider configured and verified (SMTP status = configured)
- Email templates seeded (4 campaign templates exist)
- Email preferences/branding configured
- RBAC permissions assigned to test role
- Cron secret configured
- Reader Portal running and accessible
- S3 storage configured (for file upload tests)
- At least one subscription plan exists (for promo code tests)

Scenario Matrix

A. Audience Contacts

#	Scenario	Steps	Expected Result
A1	Add single contact	Marketing → Segments → Contacts → Add Contact → Fill email + name → Save	Contact appears in table
A2	CSV upload — happy path	Upload valid CSV with email, name, phone columns	Created count matches, contacts in table
A3	CSV upload — duplicate emails	Upload CSV with existing emails	Updated count > 0, no duplicates
A4	CSV upload — missing email column	Upload CSV without email column	Error: email column required
A5	Edit contact	Click contact → Edit fields → Save	Fields updated
A6	Delete contact	Select contact → Delete	Contact removed from table (soft delete)
A7	Export contacts	Click Export	CSV downloads with all active contacts
A8	Auto-create from campaign submission	Submit campaign form with email	New contact appears with tag <code>campaign_submission</code>
A9	Auto-create from newsletter signup	Subscribe to newsletter	New contact appears with tag <code>newsletter_signup</code>
A10	Tag filtering	Add tags to contacts → Filter by tag	Only matching contacts shown

B. User Segments

#	Scenario	Steps	Expected Result
B1	Create segment — readers only	New Segment → Source: Readers → Subscription: Active → Save	Member count shows active subscribers
B2	Create segment — audience only	New Segment → Source: Audience Contacts → Tags: "campaign" → Save	Member count shows tagged contacts
B3	Create segment — mixed source	Source: All → Save	Count includes both readers and contacts
B4	Live member count preview	Change filters → Watch count update	Count updates within 500ms debounce
B5	Preview members	Click Preview Members	Paginated list with source labels
B6	Export segment	Click Export	CSV with source column
B7	Delete used segment	Try deleting segment used by active invitation	Error: segment in use
B8	Delete unused segment	Delete segment with no references	Segment removed
B9	Empty segment	Create segment with no matching filters	Count = 0, preview shows empty state

C. Outreach Campaigns

#	Scenario	Steps	Expected Result
C1	Create campaign — full wizard	Complete all 7 steps → Create	Campaign saved as draft
C2	Create campaign — minimal	Only required fields (name, slug, dates, 1 form field) → Create	Campaign saved
C3	Duplicate slug	Create campaign with existing slug	Error: slug must be unique
C4	Edit campaign	Edit → Change fields → Save	Fields updated
C5	Publish campaign	Draft → Publish	Status = active, landing page accessible
C6	Publish incomplete	Draft without form fields → Publish	Validation error
C7	Unpublish campaign	Active → Unpublish	Status = paused, landing page shows paused
C8	Complete campaign	Active → Complete	Status = completed
C9	Archive campaign	Completed → Archive	Status = archived, landing page 404
C10	Delete with submissions	Try deleting campaign with submissions	Error: use archive instead
C11	Delete without submissions	Delete draft campaign with no submissions	Campaign removed

D. Campaign Landing Pages (Reader Portal)

#	Scenario	Steps	Expected Result
D1	Active campaign page	Visit <code>/campaigns/{slug}</code> for active campaign	Full landing page renders
D2	Expired campaign page	Visit page for completed campaign	Expired state with recap content
D3	Upcoming campaign page	Visit page for campaign with future start date	Upcoming state with countdown
D4	Paused campaign page	Visit page for paused campaign	Paused message shown
D5	Draft/archived page	Visit page for draft/archived campaign	404 not found
D6	Form submission — happy path	Fill all required fields → Submit	Success message, submission created
D7	Form submission — validation	Submit with empty required fields	Validation errors shown per field
D8	Form — file upload	Submit form with file_upload field	File uploaded to S3, shown in submission
D9	Form — photo selfie	Use selfie field on mobile	Camera option available, photo uploaded
D10	Form — institution picker	Type institution name	Autocomplete suggestions appear
D11	Notify form (expired)	Submit notify form on expired campaign	NotifyRequest created
D12	Event page — speakers	Visit event campaign with speakers data	Speaker grid with photos and links
D13	Event page — schedule	Visit event with schedule	Multi-day agenda renders
D14	Event page — countdown	Visit upcoming event	Real-time countdown timer ticks
D15	Event page — live stream	Visit active event with live stream URL	Stream embed renders
D16	Event page — post-event	Visit completed event with gallery/winners	Gallery and winners render

E. Submissions & Review

#	Scenario	Steps	Expected Result
E1	View submissions	Campaign Detail → Submissions tab	List of submissions with status
E2	Approve submission	Select submission → Approve	Status = approved, approval email sent
E3	Reject submission	Select → Reject → Enter reason	Status = rejected, rejection email sent
E4	Request info	Select → Request Info	Status = needs_info
E5	Generate promo code	Approve → Generate Promo Code	Unique code generated, linked to submission
E6	Bulk approve	Select multiple → Bulk Approve	All selected approved
E7	Bulk reject	Select multiple → Bulk Reject	All selected rejected
E8	Permission check	User without REVIEW permission → Try approve	Action blocked / hidden

F. Email Campaigns

#	Scenario	Steps	Expected Result
F1	Create email campaign	New → Name, Subject, Template, Segment → Save	Draft campaign created
F2	Send now	Draft → Send Now	Status: draft → sending → sent
F3	Schedule send	Draft → Schedule → Set future time	Status = scheduled
F4	Scheduled delivery	Wait for cron trigger after scheduled time	Status: scheduled → sending → sent
F5	Duplicate campaign	Click Duplicate	New draft created with same content
F6	Delete draft	Delete draft campaign	Campaign removed
F7	Delete sent campaign	Try deleting sent campaign	Error: cannot delete sent campaigns
F8	Engagement tracking	Send campaign → Open email → Click link	Metrics update (delivered, opened, clicked)
F9	Newsletter opt-in enforcement	Send to segment with non-opted-in members	Non-opted-in members skipped (unless forceSend)

G. Conversion Surfaces

#	Scenario	Steps	Expected Result
G1	Create modal surface	New → Type: Modal → Configure → Save	Surface saved as draft
G2	Activate surface	Set status to active	Surface visible to matching readers
G3	Exit intent trigger	Set trigger: exit_intent → Move mouse out of viewport	Modal appears
G4	Scroll depth trigger	Set trigger: scroll_depth 50% → Scroll to 50%	Surface appears
G5	Time on page trigger	Set trigger: time_on_page 10s → Wait 10s	Surface appears
G6	Frequency capping	Set frequency: 1/week → Trigger → Dismiss → Revisit	Surface does not reappear
G7	Targeting — anonymous only	Target: anonymous → Visit as logged-in user	Surface does NOT appear
G8	Targeting — homepage only	Target: pageType: homepage → Visit article page	Surface does NOT appear
G9	Coupon copy	Surface with linked coupon → Click "Copy Code"	Code copied to clipboard, event tracked
G10	Conflict resolution	Create 2 active modals → Visit matching page	Only higher-priority modal shows
G11	Suppress after dismiss	Enable suppress → Dismiss surface → Revisit	Surface does not reappear
G12	Analytics tracking	Trigger surface → Interact	Events recorded in ConversionEvent + GA4

H. Cron Jobs

#	Scenario	Steps	Expected Result
H1	Cron auth	Call cron endpoint without CRON_SECRET	401 Unauthorized
H2	Campaign auto-complete	Active campaign past end date → Trigger cron	Status → completed
H3	Scheduled email delivery	Schedule email for past time → Trigger cron	Email sent, status → sent
H4	Double-send prevention	Trigger send-scheduled-emails twice concurrently	Only one run processes the campaign
H5	Invitation send via cron	Schedule invitation → Trigger cron	Invitation emails sent

I. Permissions / RBAC

#	Scenario	Steps	Expected Result
I1	No marketing read	User without MARKETING_CAMPAIGNS_READ → Visit /marketing	Campaigns card hidden
I2	Read only	User with READ but not CREATE → Try creating campaign	Create button hidden / action blocked
I3	No send permission	User without EMAIL_CAMPAIGNS_SEND → Try sending	Send button hidden / action blocked
I4	Full marketing admin	User with all marketing permissions	Full access to all features

23. Troubleshooting & Common Issues

Issue: Emails Not Being Sent

Symptoms: Email campaigns stuck in "sending", invitation emails not delivered

Check:

1. SMTP/SendGrid configuration: Admin → Settings → Email → SMTP Status
2. Verify `SENDGRID_API_KEY` or SMTP credentials in environment
3. Check email logs for delivery errors: Query `EmailLog` for status = 'failed'
4. Verify cron jobs are running (for scheduled sends)

Issue: Campaign Landing Page Shows 404

Symptoms: Published campaign not accessible at `/campaigns/{slug}`

Check:

1. Campaign status is `active` (not draft or archived)
2. Campaign dates: Start date must be in the past for active state
3. Reader Portal is running
4. `NEXT_PUBLIC_ADMIN_API_URL` is correctly configured in Reader Portal
5. Campaign slug matches the URL exactly

Issue: Conversion Surface Not Appearing

Symptoms: Active surface not showing on Reader Portal

Check:

1. Surface status is `active`
2. Targeting rules match the current page/device/user state
3. Frequency cap not exceeded (clear localStorage for anonymous testing)
4. Not suppressed by dismiss/conversion rules
5. Not blocked by conflict resolution (another higher-priority surface using the slot)
6. Trigger conditions met (e.g., scroll depth reached, time elapsed)

Issue: Campaign Preview Shows "Preview Unavailable"

Symptoms: Layout & Style tab shows iframe error

Check:

1. Reader Portal is running on the expected port
2. `NEXT_PUBLIC_READER_URL` is correctly set in Admin Console environment
3. No module boundary errors in Reader Portal (check console logs)

[Issue: Segment Shows 0 Members](#)

Symptoms: Segment with filters shows no matching members

Check:

1. Contact Source filter: Ensure correct source is selected (Readers vs Audience vs All)
2. Filter combination may be too restrictive (AND logic between groups)
3. For audience contacts: Ensure contacts are active (`isActive = true`)
4. For readers: Ensure matching subscription/status criteria exist

[Issue: Newsletter Editions Not Loading](#)

Symptoms: Newsletters page shows empty or errors

Check:

1. Strapi is running and accessible
2. `STRAPI_URL` and `STRAPI_API_TOKEN` are configured
3. Newsletter edition content type exists in Strapi
4. Editions have been published in Strapi (draft editions only show in admin)

[Issue: Webhook Metrics Not Updating](#)

Symptoms: Email campaign shows 0 opens/clicks after sending

Check:

1. Webhook URL registered in SendGrid/Mailchimp dashboard
2. Webhook endpoint is publicly accessible
3. Check webhook signature verification (disable temporarily for debugging)
4. Verify `X-SMTPAPI` `unique_args` are being set at send time

[Issue: Promo Code Redemption Fails](#)

Symptoms: Valid-looking code returns error on redemption

Check:

1. Code exists and `isActive = true`
 2. Code not expired (`validUntil` > now)
 3. Usage limit not reached (`currentRedemptions` < `maxRedemptions`)
 4. For campaign codes: Submission must be approved first
 5. Rate limiting: Max 5 redemptions per 15 minutes per IP
-

24. Known Limitations & Current Gaps

Planned but Not Yet Implemented

Feature	Status	Notes
A/B Testing for Conversion Surfaces	Planned	Run multiple variants with statistical significance tracking
Geographic Targeting	Planned	Target conversion surfaces by reader location
Webhook Events for Campaign Lifecycle	Planned	Events: created, activated, conversion, milestone
Automated Conversion Surface Expiration Cron	Planned	Auto-transition scheduled → active → expired
Admin Preview for Conversion Surfaces	Planned	Preview surface rendering before activation
Bulk Operations for Conversion Surfaces	Planned	Bulk pause, activate, archive
Template Library for Surfaces	Planned	Pre-built templates for common patterns
Content-Aware Inline Embed Positioning	Planned	Auto-position inline embeds based on article structure

Current Limitations

1. **No real-time websocket notifications** — Notification bell uses polling, not push
2. **Newsletter content authoring requires Strapi** — No built-in rich text editor for newsletters in Admin Console
3. **Conversion surface preview** — Cannot preview a surface's appearance in Admin Console before activating
4. **Campaign form field types** — No conditional logic (show/hide fields based on other field values)
5. **Segment caching** — Segments resolve dynamically on every query; large segments may have latency
6. **Email campaign retry** — Failed campaigns must be manually retried (no automatic retry)
7. **Invitation tracking** — Individual recipient open/click tracking depends on email provider webhook reliability
8. **Conversion surface inline embed** — Requires manual template configuration; no automatic content-aware positioning

25. Appendix

A. API Endpoint Reference

Admin Marketing APIs (Base: </api/marketing>).

Endpoint	Methods	Auth	Section
<code>/campaigns</code>	GET, POST	Session + RBAC	Campaigns
<code>/campaigns/[id]</code>	GET, PUT, DELETE	Session + RBAC	Campaigns
<code>/campaigns/[id]/publish</code>	POST	Session + RBAC	Publishing
<code>/campaigns/[id]/stats</code>	GET	Session + RBAC	Statistics
<code>/campaigns/[id]/qr-code</code>	GET	Session + RBAC	QR Code
<code>/campaigns/[id]/submissions</code>	GET, POST	Session + RBAC	Submissions
<code>/campaigns/[id]/submissions/[submissionId]</code>	GET, PUT	Session + RBAC	Submissions
<code>/campaigns/[id]/submissions/[submissionId]/generate-promo</code>	POST	Session + RBAC	Promo Codes
<code>/campaigns/[id]/submissions/bulk</code>	POST	Session + RBAC	Submissions
<code>/campaigns/[id]/invitations</code>	GET, POST	Session + RBAC	Invitations
<code>/campaigns/[id]/invitations/[invitationId]</code>	GET, DELETE	Session + RBAC	Invitations
<code>/campaigns/[id]/invitations/[invitationId]/send</code>	POST	Session + RBAC	Invitations
<code>/campaigns/[id]/institutes</code>	GET, POST	Session + RBAC	Institutes
<code>/campaigns/[id]/social-campaign</code>	GET, POST	Session + RBAC	Social
<code>/campaigns/public/[slug]</code>	GET	None	Public Landing Page
<code>/campaigns/public/[slug]/submit</code>	POST	None	Public Form Submit
<code>/campaigns/public/[slug]/notify</code>	POST	None	Public Notify
<code>/campaigns/public/[slug]/upload</code>	POST	None	Public File Upload
<code>/campaigns/public/reference-data</code>	GET	None	Public Reference Data
<code>/campaigns/public/institutions</code>	GET	None	Public Institution Search
<code>/campaigns/public/programs</code>	GET	None	Public Programs Listing

Endpoint	Methods	Auth	Section
<code>/email-campaigns</code>	GET, POST	Session + RBAC	Email Campaigns
<code>/email-campaigns/[id]</code>	GET, PUT, DELETE	Session + RBAC	Email Campaigns
<code>/email-campaigns/[id]/send</code>	POST	Session + RBAC	Email Send
<code>/email-campaigns/[id]/preview</code>	POST	Session + RBAC	Email Preview
<code>/email-campaigns/[id]/duplicate</code>	POST	Session + RBAC	Email Duplicate
<code>/segments</code>	GET, POST	Session + RBAC	Segments
<code>/segments/[id]</code>	GET, PUT, DELETE	Session + RBAC	Segments
<code>/segments/[id]/preview</code>	GET	Session + RBAC	Segment Preview
<code>/segments/[id]/export</code>	GET	Session + RBAC	Segment Export
<code>/segments/preview</code>	POST	Session + RBAC	Preview w/o Save
<code>/audience</code>	GET, POST	Session + RBAC	Audience Contacts
<code>/audience/[id]</code>	GET, PUT, DELETE	Session + RBAC	Audience Contacts
<code>/audience/upload</code>	POST	Session + RBAC	CSV Upload
<code>/audience/export</code>	GET	Session + RBAC	CSV Export
<code>/promo-codes</code>	GET, POST	Session + RBAC	Promo Codes
<code>/promo-codes/[id]</code>	GET, PUT, DELETE	Session + RBAC	Promo Codes
<code>/promo-codes/validate</code>	POST	Session + RBAC	Validate Code
<code>/newsletters</code>	GET, POST	Session + RBAC	Newsletters
<code>/newsletters/[documentId]</code>	GET, PUT, DELETE	Session + RBAC	Newsletters
<code>/newsletters/[documentId]/publish</code>	POST	Session + RBAC	Newsletter Publish
<code>/newsletters/[documentId]/send</code>	POST	Session + RBAC	Newsletter Send

Endpoint	Methods	Auth	Section
<code>/newsletters/public</code>	GET	None	Public Archive
<code>/newsletters/public/{slug}</code>	GET	None	Public Edition
<code>/conversion-surfaces</code>	GET, POST	Session + RBAC	Conversion Surfaces
<code>/conversion-surfaces/{id}</code>	GET, PUT, DELETE	Session + RBAC	Conversion Surfaces
<code>/conversion-surfaces/{id}/stats</code>	GET	Session + RBAC	Surface Analytics
<code>/conversion-surfaces/{id}/duplicate</code>	POST	Session + RBAC	Surface Duplicate
<code>/campaign-types</code>	GET, POST	Session + RBAC	Campaign Types
<code>/campaign-types/{id}</code>	GET, PUT, DELETE	Session + RBAC	Campaign Types

Public APIs

Endpoint	Methods	Purpose
<code>/api/public/conversion-surfaces/eligible</code>	GET	Fetch eligible surfaces for reader context
<code>/api/public/conversion-surfaces/event</code>	POST	Track conversion surface events
<code>/api/promo/validate</code>	POST	Validate promo code (rate limited)
<code>/api/promo/redeem</code>	POST	Redeem promo code (rate limited)

B. Key Enums Reference

Enum	Values
OutreachCampaignStatus	draft, active, paused, completed, archived
OutreachCampaignType	student_outreach, event, lead_gen, institutional, general
CampaignSubmissionStatus	pending_review, approved, rejected, needs_info
CampaignInvitationStatus	draft, scheduled, sending, sent, failed
EmailCampaignStatus	draft, scheduled, sending, sent, failed
PromoCodeType	percentage, fixed, trial_days
ConversionSurfaceType	modal, sticky_notification, slide_in, top_banner, bottom_banner, inline_embed
ConversionSurfaceStatus	draft, scheduled, active, paused, expired, archived
ConversionGoal	register, login, subscribe_paid, subscribe_newsletter, view_campaign, view_event, redeem_coupon, view_product, visit_pricing, custom_cta
ConversionTrigger	page_load, time_on_page, scroll_depth, exit_intent, page_view_count, after_article_read, manual
ConversionEventType	impression, click, dismiss, conversion, coupon_copied
FrequencyUnit	session, day, week, month
NewsletterEditionStatus	draft, published, featured, archived

C. Email Template Keys

Template Key	Variables	Used By
campaign_submission_approved	user_name, campaign_name, promo_code, incentive_description	Submission approval
campaign_submission_rejected	user_name, campaign_name, rejection_reason	Submission rejection
campaign_invitation	user_name, campaign_name, campaign_url, incentive_description	Campaign invitations
campaign_notify_new_campaign	user_name, campaign_name, campaign_url	Notify requests

D. Environment Variables Summary

Variable	Required For	Used By
SENDGRID_API_KEY	Email delivery (SendGrid)	Admin Console
SMTP_HOST/PORT/USER/PASS	Email delivery (SMTP)	Admin Console
EMAIL_FROM_ADDRESS	All outgoing emails	Admin Console
EMAIL_FROM_NAME	All outgoing emails	Admin Console
STRAPI_URL	Newsletter editions	Admin Console
STRAPI_API_TOKEN	Newsletter editions	Admin Console
AWS_S3_BUCKET	File uploads	Admin Console
AWS_ACCESS_KEY_ID	File uploads	Admin Console
AWS_SECRET_ACCESS_KEY	File uploads	Admin Console
AWS_REGION	File uploads	Admin Console
CRON_SECRET	Cron job auth	Admin Console
NEXT_PUBLIC_READER_URL	Campaign preview links	Admin Console
NEXT_PUBLIC_ADMIN_API_URL	Campaign data fetch	Reader Portal
NEXT_PUBLIC_GA_MEASUREMENT_ID	GA4 analytics	Reader Portal
SENDGRID_WEBHOOK_VERIFICATION_KEY	Webhook signature verification	Admin Console
MAILCHIMP_WEBHOOK_KEY	Webhook signature verification	Admin Console

End of Marketing Features User Manual

[< Editorial & Content System](#)

[Complete guide to creating, reviewing, approving, and p...](#)

[Page Template System >](#)

[Complete guide to managing page templates, sections, ...](#)