



# Marketing Analytics Platform

## UX Design & Data Visualization

Board Presentation | 2025

Dashboard Design

Data Analytics

Cross-Functional



# Agenda

EY Marketing Analytics Platform | Board Presentation

## 01 Executive Summary

Business challenge, strategic objectives, and project scope

## 02 Design Process & Methodology

Discovery, journey mapping, wireframing, and high-fidelity design

## 03 Analytics & Data Visualization

Visualization strategy, chart selection, and accessibility

## 04 Platform Walkthrough

Home Dashboard and Analytics Dashboard deep-dive

## 05 Cross-Functional Collaboration

Team structure, roles, and cooperative practices

## 06 Key Design Decisions

Progressive disclosure, AI Copilot, mobile-first strategy

# Executive Summary

EY Marketing Analytics Platform — Strategic Overview

## THE CHALLENGE

EY's marketing teams operated across disconnected tools — CRM systems, ad platforms, and analytics suites — leading to fragmented decision-making, delayed reporting cycles, and missed optimization opportunities across campaigns.

## THE SOLUTION

A unified B2B marketing intelligence platform consolidating campaign performance, audience analytics, AI-driven recommendations, and reporting into a single, enterprise-grade dashboard serving multiple user types — from campaign managers to C-suite.

**\$2.4M**

▲ +12%

Revenue Tracked

**18.6K**

▲ +13%

Leads Managed

**39.4%**

▲ +16%

Conversion Rate

**\$1.9M**

▲ +8%

Monthly ARR

## KEY DELIVERABLES

Journey Maps

Wireframes

Hi-Fi UI

Design System

User Research

# Design Process & Methodology

Five-phase iterative UX process rooted in user-centered design

01

## Discovery & User Research

Stakeholder interviews, contextual inquiry with campaign managers, analysts & executives. Identified 3 primary pain points.

02

## Journey Mapping

Journey Experience Map + User Platform Journey artifacts spanning 5 lifecycle stages with touchpoints & metrics.

03

## Information Architecture

Low-fidelity wireframes validating navigation model, KPI hierarchy, visualization layout & AI integration placement.

04

## High-Fidelity UI Design

Full-color screens using EY brand system extended with accessible data visualization palette.

05

## Validation & Iteration

Usability testing with bi-weekly cross-functional design critiques. Progressive disclosure architecture validated.

# Journey Experience Map

Five-stage user journey mapped across touchpoints, pain points, and success metrics

## Journey Experience Map



### KEY FINDINGS BY STAGE

#### Onboarding

Pain: Complex multi-step setup, insufficient guidance

Metric: User Activation Rate

#### Campaign Creation

Pain: Unclear targeting options reduced confidence

Metric: Campaign Launch Success Rate

#### Optimization

Pain: Cluttered dashboards obscured actionable data

Metric: Key Metrics: Traffic, CRO KPIs

#### Insights & Actions

Pain: Customized analytics UI needed

Metric: Actionable Insights Usage Rate

#### Reporting

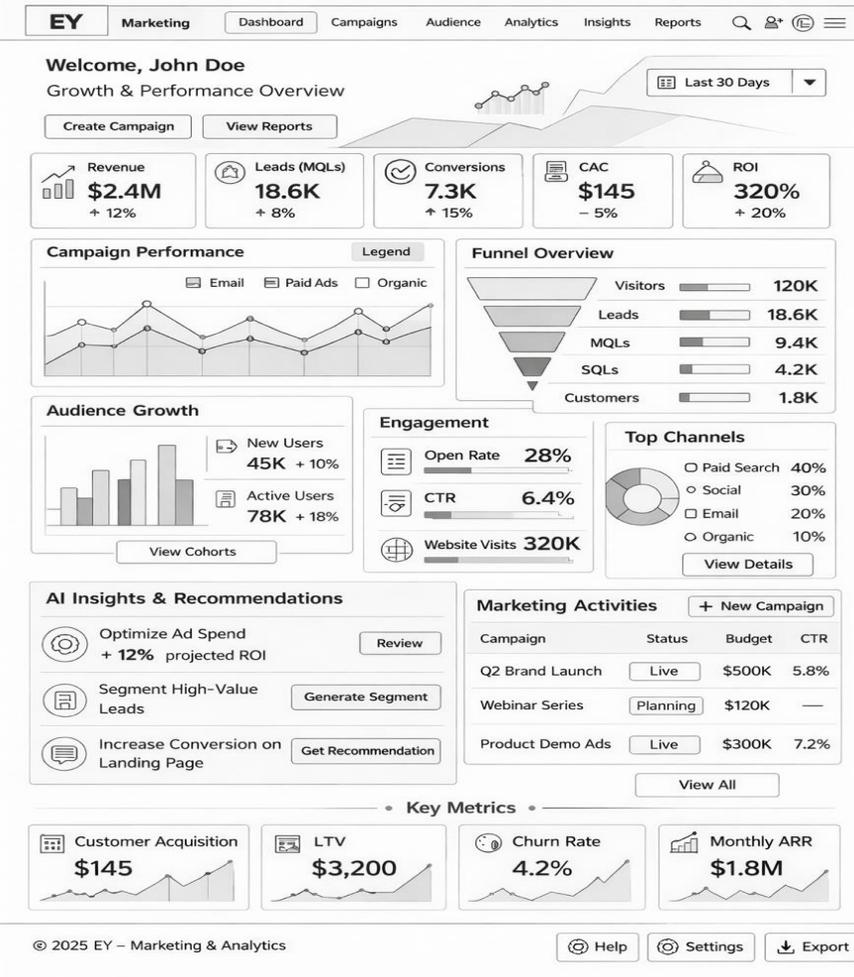
Pain: Time-consuming manual report generation

Metric: Retention Rate, MRR & LTV

# From Wireframe to High-Fidelity

Information architecture validated through low-fidelity prototyping before visual design commitment

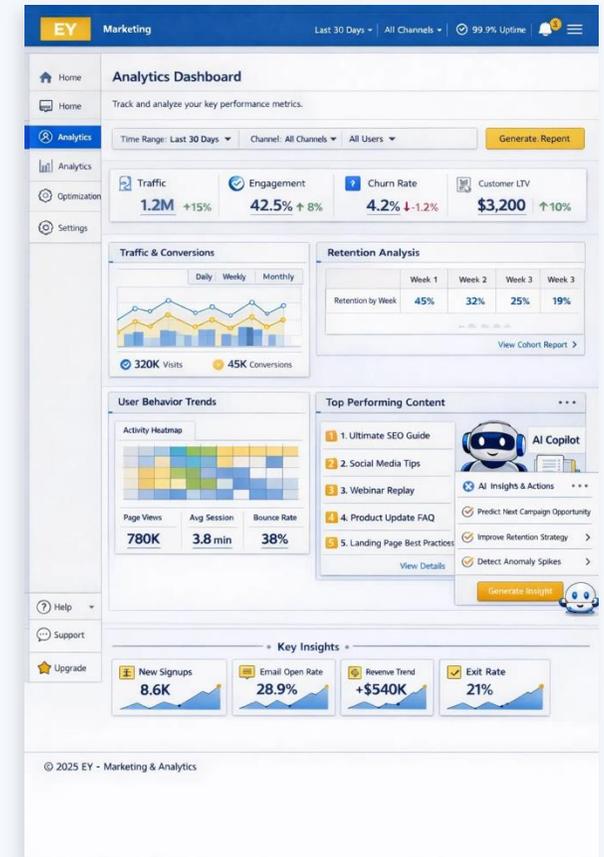
## LOW-FIDELITY WIREFRAME



## HOME DASHBOARD



## ANALYTICS DASHBOARD



- ✓ Progressive disclosure architecture across 3 information layers
- ✓ Persistent top nav: Dashboard · Campaigns · Audience · Analytics
- ✓ 5-metric KPI row establishes data context before detailed charts

# Analytics Dashboard

Deep-Dive Intelligence for Power Users | Campaign Analysts & Data Scientists



## Contextual Filter Bar

Time Range, Channels, Users — with Generate Report CTA. Communicates this is an action-oriented workspace.



## Retention Analysis

Cohort retention matrix (Week 1 vs Week 3) surfaces user drop-off patterns that inform re-engagement strategy.



## Dual-Axis Chart

Traffic volume (bars) vs conversion rate (line) across Daily/Weekly/Monthly controls. Correlates two KPIs in one view.



## Activity Heatmap

Grid visualization encoding behavioral intensity across time and category — maximum density with minimal complexity.

# Home Dashboard — Growth & Performance Overview

Primary entry point designed for daily campaign management



## Personalized Welcome + Onboarding Progress

"2/4 Tasks Completed" progress bar orients new users and drives activation toward first campaign launch.

## 4-Metric KPI Row with Trend Indicators

Revenue \$2.4M (+12%), Leads 18.6K (+13%), Conversion 39.4% (+16%), CAC \$145 (-5%). In-line arrows enable instant status assessment.

## Campaign Performance + Channel Breakdown

Bar-line combo chart answers channel performance questions without requiring additional navigation.

## AI Copilot — Task Panel

Boost Ad Spend · Identify High-Value Segments · Generate Report. Task-framing drives action vs. insight-only presentation.

## Key Metrics Footer — Executive KPIs

\$145 CAC · \$3,200 LTV · 4.2% Churn · \$1.9M ARR. Sparkline tiles provide business health without navigation.

# Data Analytics & Visualization Strategy

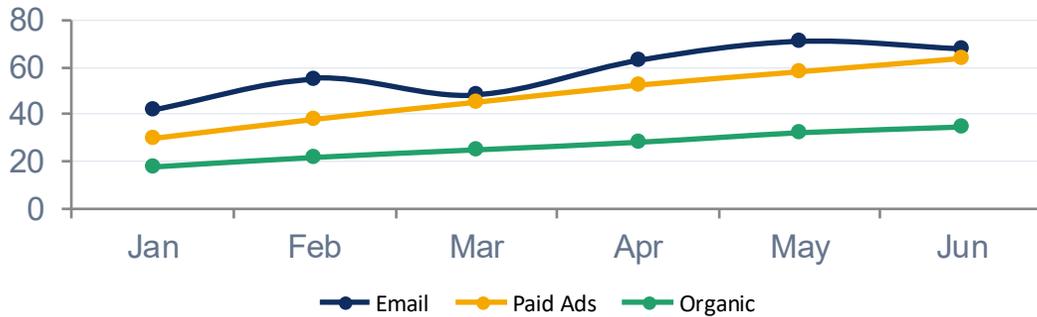
Every chart earns its place by answering a specific, documented user question

## CORE PRINCIPLE

Chart type selection followed a systematic visualization audit — each planned chart was mapped to a documented user information need before any visual design was created.

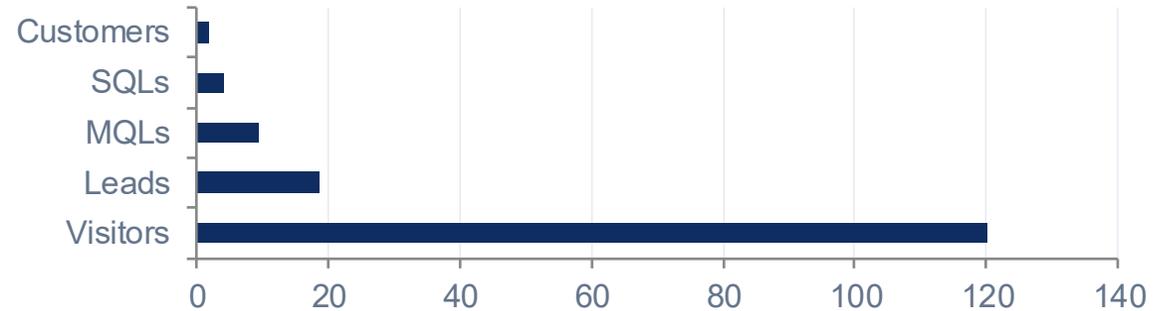
### Campaign Performance (Multi-Series Line)

Answers: How are campaigns trending across channels?

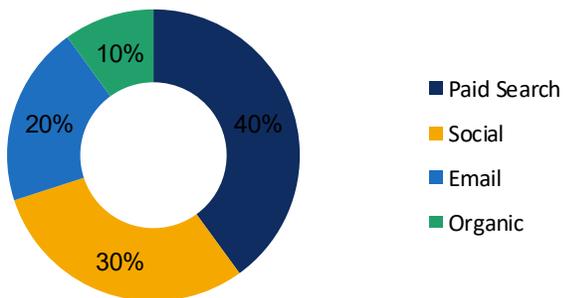


### Conversion Funnel (Horizontal Bar)

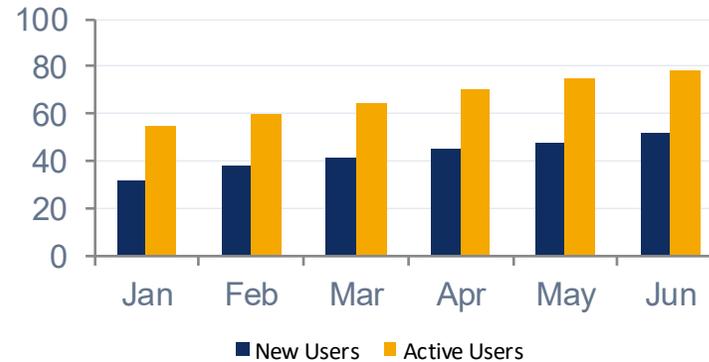
Answers: Where are leads dropping in the qualification pipeline?



### Top Channels (Donut)



### Audience Growth (Grouped Bar)



## ACCESSIBILITY & COLOR

- All palettes validated against WCAG 2.1 AA contrast
- Red/green indicators supplemented with ↑ ↓ arrow symbols
- Non-color encoding for color vision deficiency support
- EY navy + gold base extended with data visualization palette

# Cross-Functional Collaboration

Nine specialized disciplines working in structured parallel workstreams



## UX Strategy & Research

Directed research plan, facilitated stakeholder interviews, synthesized journey maps, led design reviews.



## UX / Interaction Designers

Low-fi wireframes through hi-fi screens. Interaction patterns, component states, design system compliance.



## Data Visualization Specialist

Chart type selection, data encoding system, accessibility-compliant color palette, heatmap design.



## Product Manager

Business requirements, feature scope, stakeholder communication, roadmap alignment with journey maps.



## Marketing Domain Experts

Campaign workflow subject matter expertise, KPI definitions, terminology validation, functional accuracy review.



## Data Engineering & Backend

API data contracts for visualizations, data refresh cadences, latency constraints influencing display decisions.



## Frontend Engineering

Component feasibility assessment, design system tokenization, data visualization palette co-creation.



## AI / ML Engineering

Copilot recommendation model, confidence thresholds, task-framing interaction pattern co-design.



## EY Brand & Communications

Brand standards review, extended visualization palette approval, typography hierarchy within EY system.

# Key Design Decisions

Three high-impact decisions validated through user research and cross-functional collaboration

## 01 Progressive Disclosure Architecture

### CHALLENGE

Original design surfaced all data on one screen — overwhelming test participants.

### SOLUTION

Three-layer hierarchy: Executive KPI tiles → Operational charts → AI Copilot tasks. Each layer triggers only on user intent.

### OUTCOME

Consistently reduced reported cognitive load across all user archetypes in usability testing.

## 02 AI Copilot Integration

### CHALLENGE

ML team proposed modal alerts for AI recommendations — created significant workflow friction.

### SOLUTION

Inline task-panel approach: contextually present but non-interruptive. Framed as tasks ('Boost Ad Spend') not insights.

### OUTCOME

Task-framed AI content substantially increased intended action rates vs. insight-only framing in concept testing.

## 03 Mobile-First Responsive Strategy

### CHALLENGE

One-size-fits-all layout forced compromise on both mobile campaign management and desktop analytics.

### SOLUTION

Home Dashboard: mobile-first single-column (high mobile usage).  
Analytics Dashboard: desktop multi-column (exclusive desktop usage).

### OUTCOME

Each screen optimized for its primary use context — eliminating the responsive compromise.



# Reflections & Strategic Learnings



## Journey Perspective at Scale

Journey maps served as anchors preventing screen-level optimization from eroding the holistic experience. Updated continuously as live documents throughout execution.



## Early AI/UX Collaboration = Better Outcomes

Integrating ML engineering into early UX design produced more grounded, feasible decisions than post-technical handoffs. Shared language around capability and constraint is essential.



## Visualization Intent Before Design

Mapping every chart to a documented user information need before designing produced a more coherent analytics experience than data-availability or technology-driven approaches.



## Bi-Weekly Cross-Functional Critique

Engineering, PM, and domain experts participating in design critiques reduced late-stage revisions significantly. Feasibility and accuracy assessed in parallel with usability.