



PRESENTS



VIT CODE APEX

CODE VERSE HACKATHON 2025

Problem Statement Title:

Lack of Real-Time KPI Visibility: Campaign performance insights were scattered across multiple tools, resulting in fragmented reporting and delays indecision-making due to the absence of a centralized dashboard.

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💡 Centralized Real-Time KPI Dashboard

We propose a smart, unified platform that collects campaign performance data from multiple tools and displays it on a centralized dashboard.

Integrates data from ad platforms, analytics tools, and CRM systems.

Provides visualization of KPIs with automated reports.

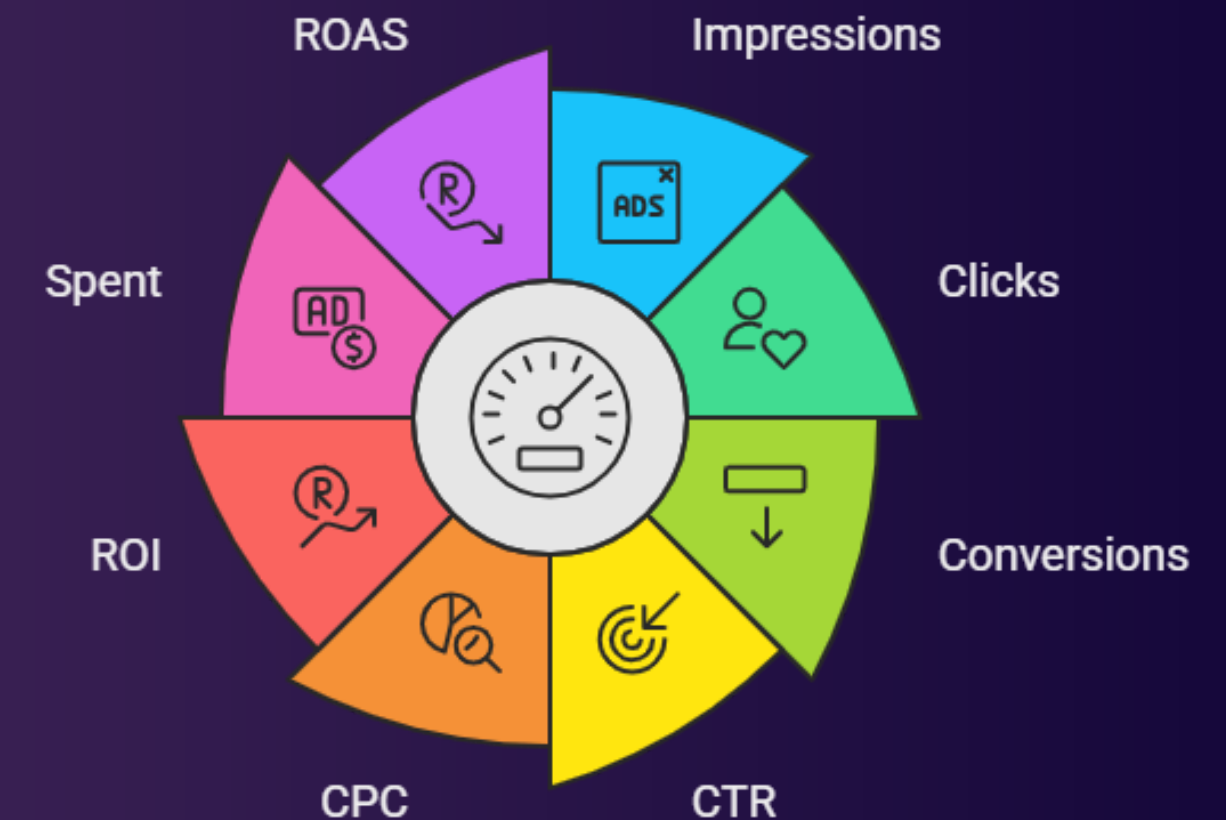
Enables stakeholders to view campaign performance in one place and take faster actions.

🔧 How the Solution Helps

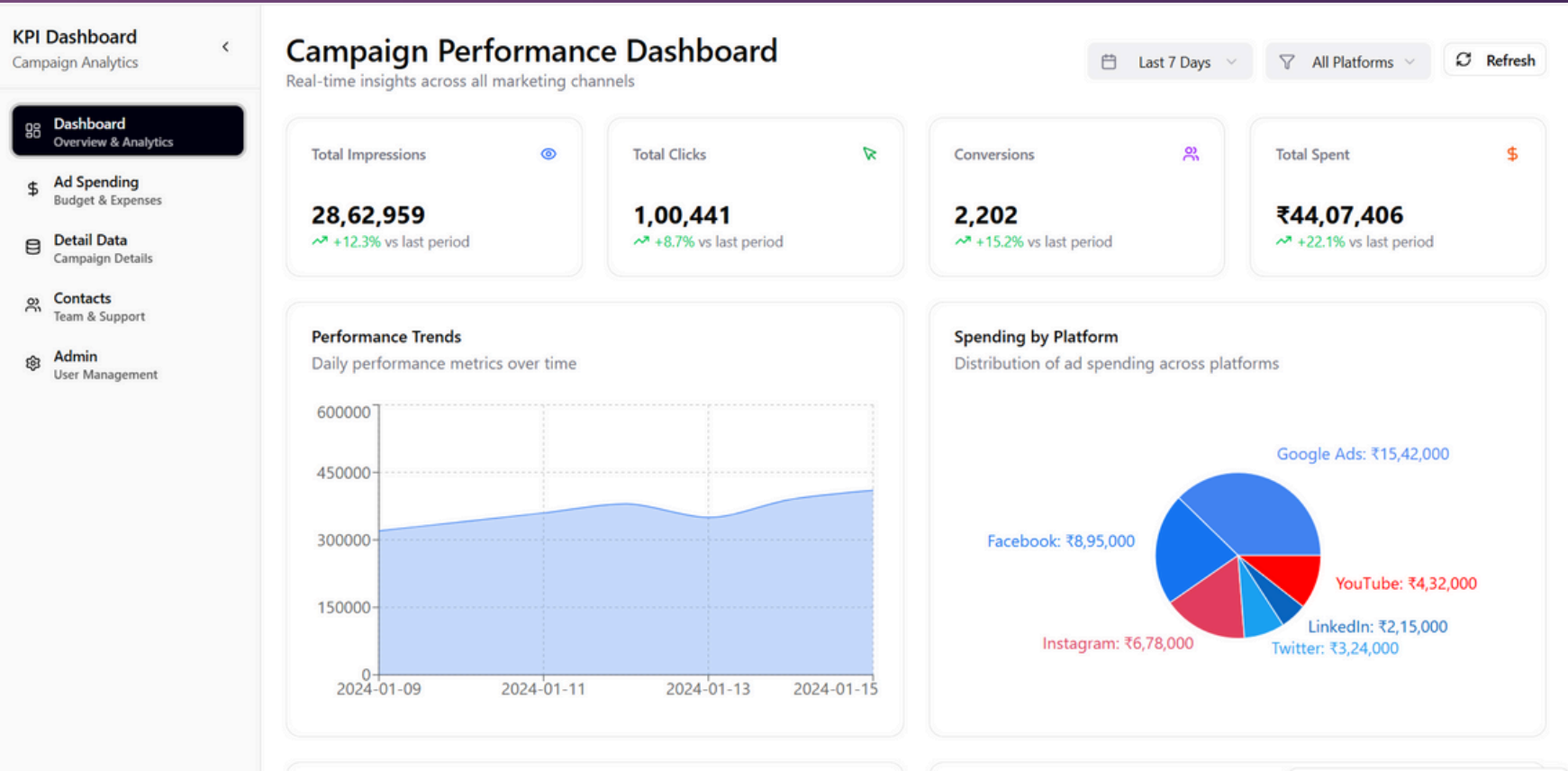
Eliminates the need for manually switching between multiple tools and reports.

Allows campaign managers to make faster, data-driven decisions.

KPI OVERVIEW



KPI (Key Performance Indicators) are the measurable metrics that help track how well marketing campaigns are performing. In your centralized dashboard, KPIs are automatically calculated from Google Ads, Facebook Ads, and LinkedIn Ads data, then displayed to managers, finance teams, and clients.



KPI Dashboard

Campaign Analytics

Dashboard

Overview & Analytics

Ad Spending

Budget & Expenses

Detail Data

Campaign Details

Contacts

Team & Support

Admin

User Management

Detailed Campaign Data

Comprehensive view of all campaign metrics and performance data

Export Data

Filters & Search

Filter and search through your campaign data

Search campaigns...

All Platforms

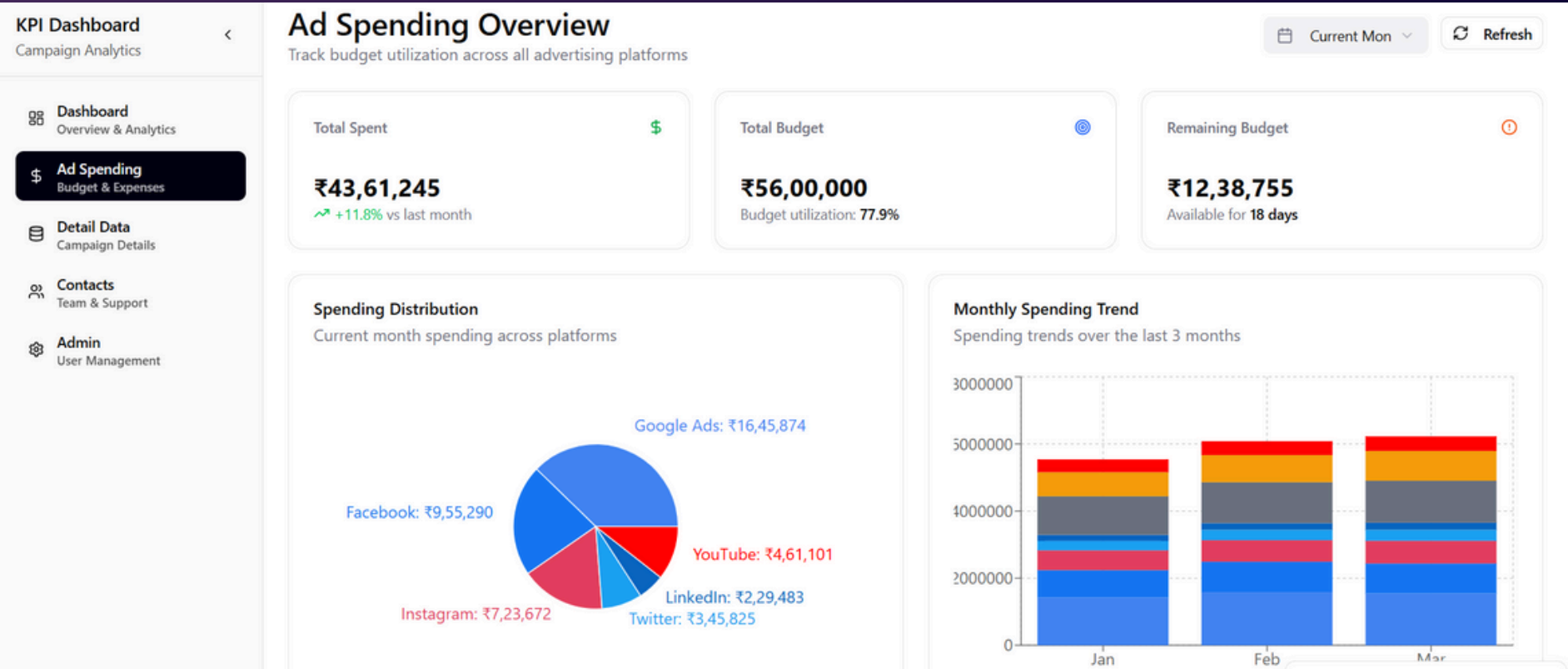
All Statuses

Showing 5 of 5 campaigns

Campaign Performance Data

Detailed metrics for all campaigns

Campaign ID	Campaign Name	Platform	Status	Budget (₹)	Spent (₹)	Impressions	Clicks	Conversions	CTR %	CPC (₹)	ROAS
CMP-002	Brand Awareness Q1 1/1/2024 - 3/31/2024	Facebook	Active	₹3,00,000	₹2,85,000	89,000	2,140	94	2.4%	₹133.18	3.8x
CMP-003	Instagram Stories Promo 2/1/2024 - 2/29/2024	Instagram	Active	₹2,50,000	₹2,50,000	67,000	2,750	138	4.1%	₹90.91	5.1x
CMP-005	LinkedIn Lead Gen 1/10/2024 - 4/10/2024	LinkedIn	Active	₹4,00,000	₹2,15,000	28,000	580	87	2.1%	₹370.69	6.2x
CMP-004	Product Launch Twitter 1/20/2024 - 2/29/2024	Twitter	Paused	₹1,50,000	₹1,24,500	45,000	1,035	43	2.3%	₹120.29	3.2x
CMP-001	Summer Sale Campaign 1/15/2024 - 3/15/2024	Google Ads	Active	₹5,00,000	₹3,75,000	1,25,000	3,250	162	2.6%	₹115.38	4.2x



KPI Dashboard

Campaign Analytics

Dashboard

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Admin

User Management

Admin Management

Manage admin users, roles, and permissions

Add Admin

Total Admins

5

Active Admins

4

80.0% of total

Total Logins

3,566

Recent Activity

3

Logged in today

Search admins...

All Status

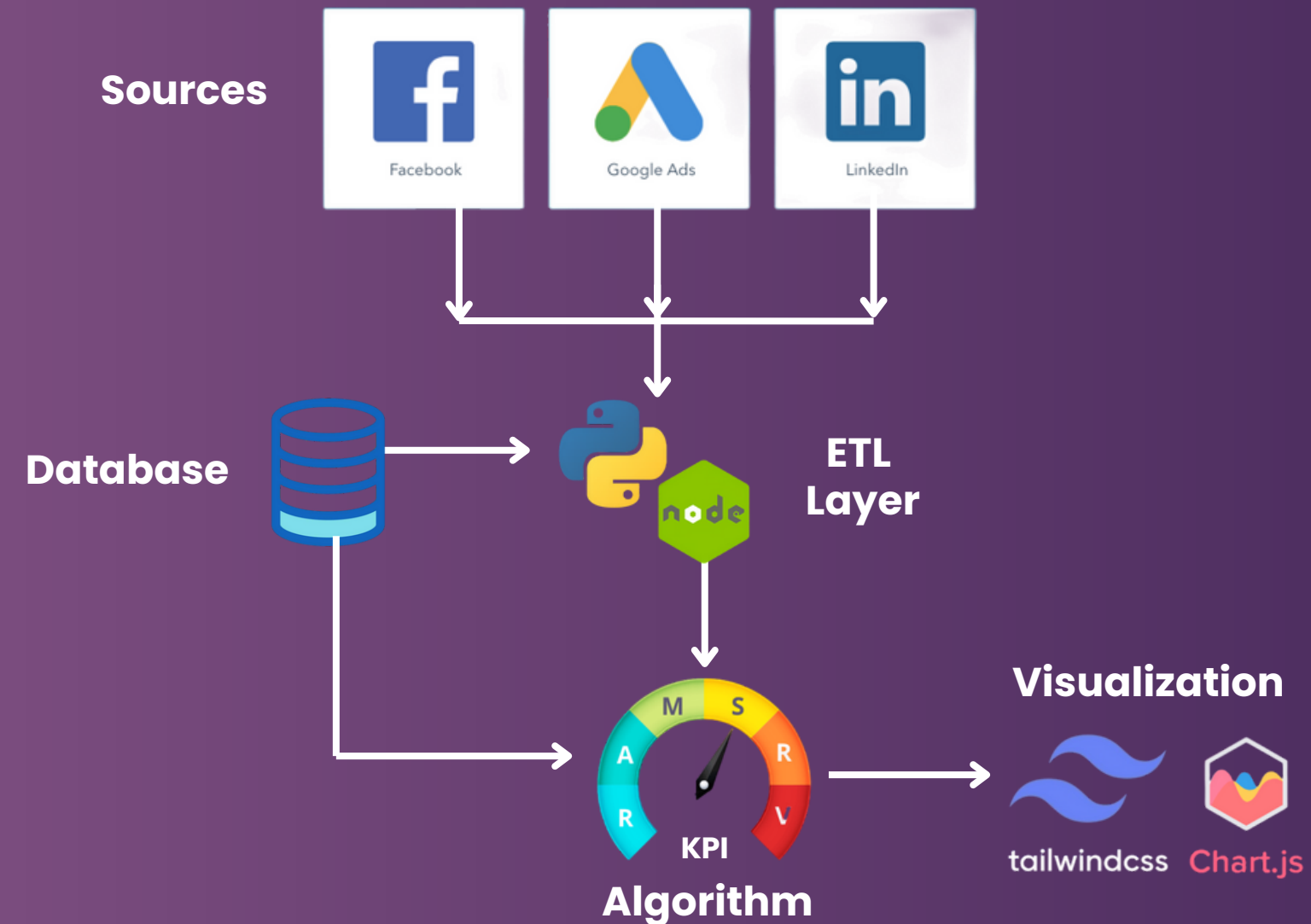
All Roles

Admin Users

Manage admin users and their permissions

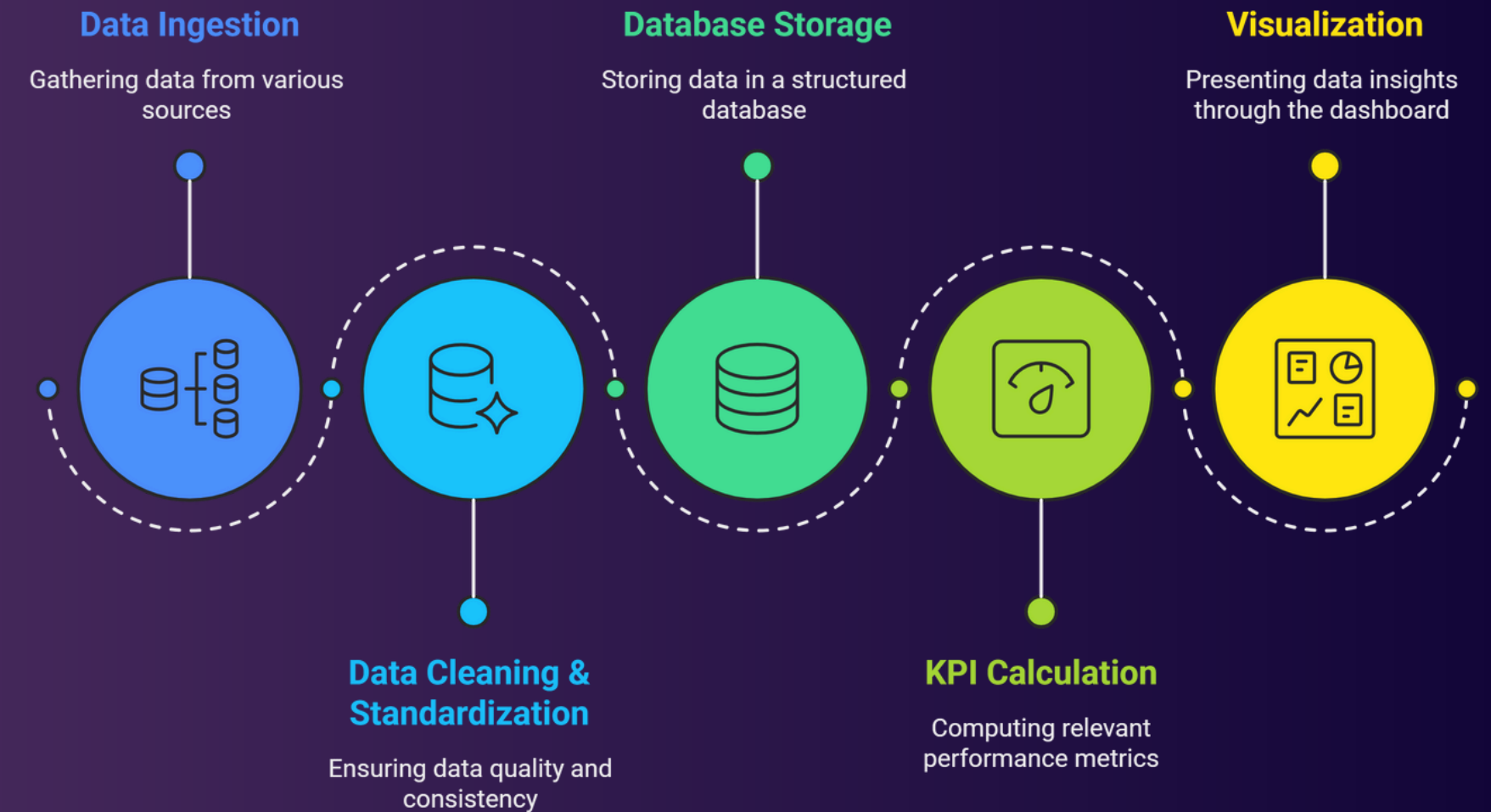
User	Role	Department	Status	Last Login	Login Count	Actions
JA John Anderson john.admin@company.com	Super Admin	IT	Active	15/1/2024 3:00:00 pm	1,247	View Profile Edit Profile Delete
SW Sarah Wilson sarah.marketing@company.com	Marketing Admin	Marketing	Active	15/1/2024 2:15:00 pm	892	View Profile Edit Profile Delete

TechStack



- Data is collected from multiple sources like Facebook, Google Ads, and LinkedIn.
- This data is stored in a centralized database for easy access.
- An ETL layer (Python + Node.js) processes and cleans the data.
- A KPI algorithm analyzes the data to generate meaningful insights.
- Insights are displayed through visualization tools (TailwindCSS + Chart.js) in a user-friendly dashboard.
- Used Figma for UI/UX design and VS code as coding tool.

SYSTEM ARCHITECTURE



Data Ingestion (ETL Layer) : Backend scripts pull campaign data from Google Ads API.

Data Cleaning & Standardization : Align Google, Facebook, and LinkedIn metrics into a common format.

Database Storage : Store cleaned data in structured tables for campaigns, performance, and finance.

Processing & KPI Engine : Backend queries calculate KPIs like CTR, CPC, ROI, and conversions.

Visualization : React.js dashboard displays real-time KPIs and reports for managers, Finance, and clients.

✓ Analysis of the Feasibility of the Idea

Financial:

Built with api and flexible cloud hosting , keeps costs low.

Long-term savings by automating tasks and cutting down on too many tools.

Market:

High demand across industries struggling with scattered marketing insights.

Provides competitive advantage by enabling real time visibility of performance.

Operational:

Everything sits in one place, making it easier to track campaigns and work together as a team.

Say goodbye to juggling spreadsheets and scattered reports. The system keeps it clean and simple.

🔍 Potential Challenges and Risks

Different platforms data:

Google Ads, Facebook, and LinkedIn sometimes calculate things differently (like clicks, conversions, or ROI).

This can confuse users when comparing campaigns side by side.

Too much data:

If we throw every single KPI onto the dashboard, it could feel messy and hard to read. We need to highlight the most important metrics first, let users drill down if they want more.

🔧 Strategies for Overcoming These Challenges

- Keep data feeling fresh
- Use smart refresh timings and caching so numbers look almost live without delays.
- One definition for everyone.
- Standardize KPI rules so Google, Facebook, and LinkedIn all speak the same language.

Potential Impact

As team get faster result, Teams can act fast and get stronger ROI.

Marketing, sales, and management all see the same data. That means fewer mix-ups and smoother teamwork.

Reliable numbers give confidence. It's easier to convince clients or managers and make bold, smart decisions.

Faster Results Strengthen ROI



Benefits

Social :

Smarter targeting means customers see ads that actually matter to them, creating a smoother and more positive experience.

Economic :

Less time and money wasted on manual reporting, more efficiency, and better returns from every campaign.

