



AppSight: AI-Powered SaaS Optimization

Intelligent subscription management for modern enterprises

The Challenge

The Problem

Companies waste millions on unused software subscriptions. Tools get purchased but never adopted. Teams migrate to new platforms but old contracts auto-renew. Without visibility, costs spiral.

The Solution

AppSight combines access logs, billing data, and usage patterns to identify wasted spend and recommend optimization actions with confidence scores.



Meet NovaTech Solutions

200

Employees

Across 5 departments

40

Subscriptions

Software tools in use

₹1.5L

Monthly Cost

Enterprise platforms

A mid-sized IT services company with migration challenges: recently switched from ZohoCRM to Salesforce, Trello to Jira, and purchased an LMS that's largely unused.



Five Data Sources



Access Logs

Okta/Azure AD records every login with timestamps, devices, and session duration



Helpdesk Tickets

ServiceNow/Freshservice data showing support requests and issue patterns



Billing Records

Monthly costs, licensed seats, renewal dates, and payment methods



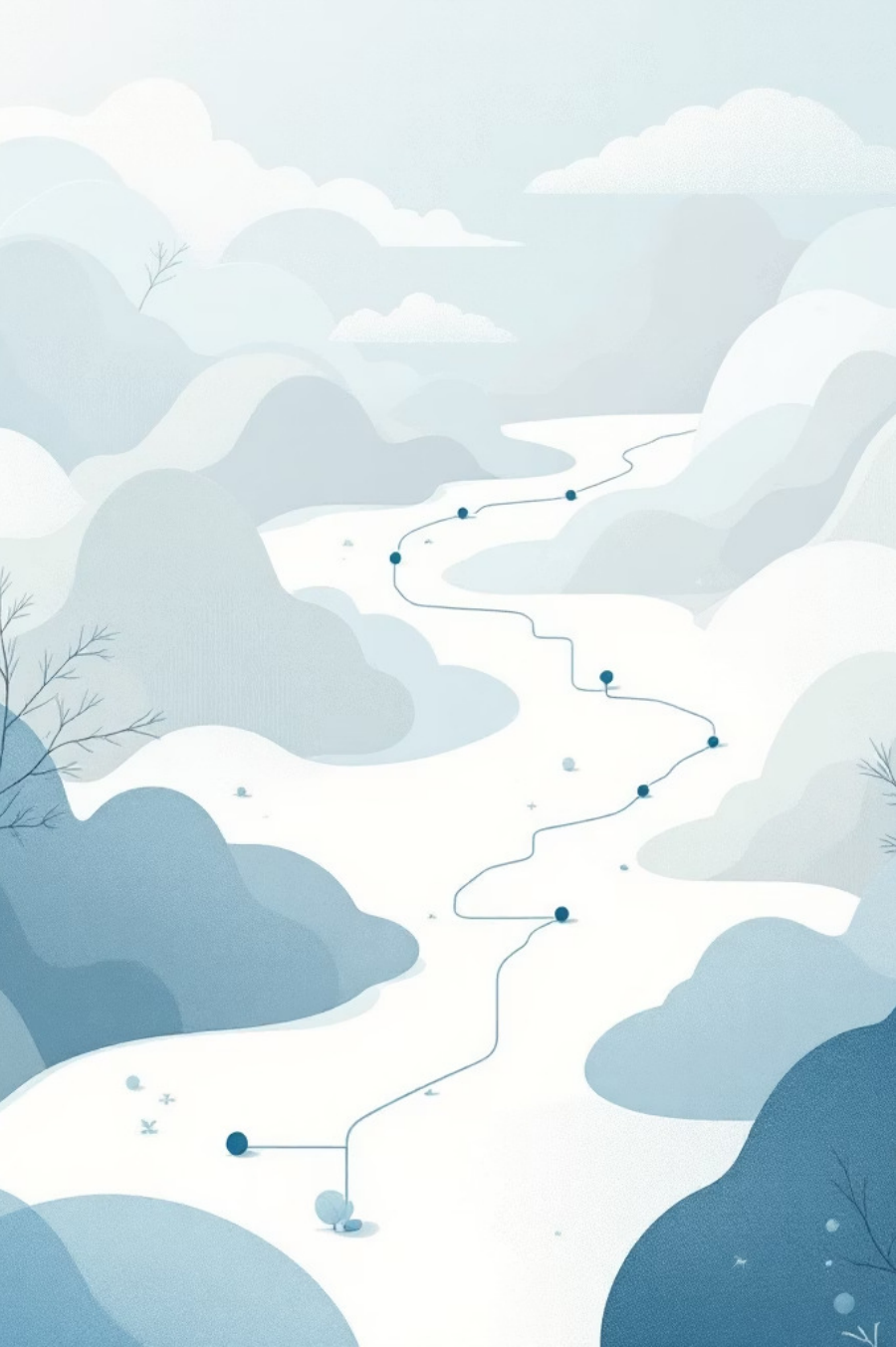
Project Metadata

Code repositories reveal which tools are actively referenced in development



Employee Surveys

Monthly feedback on actual usage versus access rights



How AppSight Works

1

Data Simulation

Generate realistic usage patterns with embedded scenarios

2

Ingestion & Cleaning

Validate, normalize, and unify data from all sources

3

Feature Engineering

Compute utilization rates, ticket volumes, and redundancy scores

4

Expert System

Apply rules to generate recommendations with confidence

Expert System Rules

Dead App Detection

60+ days inactive, zero tickets, low criticality → RETIRE (92% confidence)

Ghost Subscription

Under 15% utilization, high cost, near renewal → RETIRE URGENT (95% confidence)

Redundant Tool

High redundancy score, low usage, not critical → CONSOLIDATE (85% confidence)



60+ rules use forward chaining for recommendations and backward chaining for goal-directed optimization.



AI-Powered Advisory

01

Structured Analysis

Expert system identifies issues with evidence and confidence scores

02

GPT-4o Enhancement

Generates executive-level justifications and action timelines

03

Human-Readable Reports

Professional advisory notes that feel like consultant insights

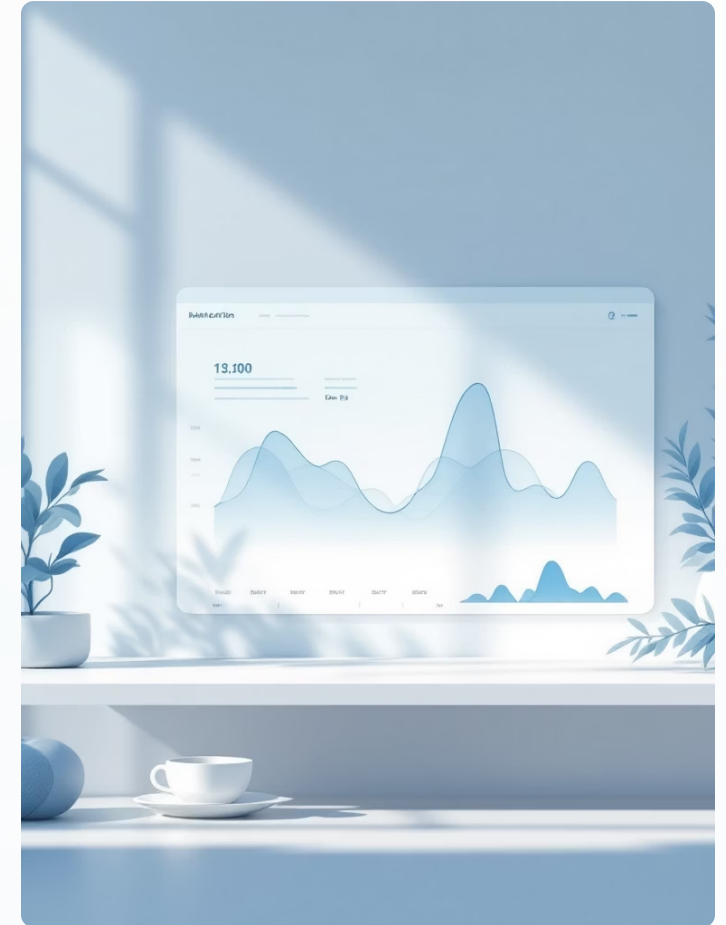
Real-Time Simulation

Timeline Engine

Compress time and watch recommendations evolve day by day. Set start and end dates, replay events, see utilization rates drop and thresholds cross.

Dashboard Interface

- Portfolio overview with color-coded status
- Full AppSight reports with rule details
- Goal optimizer for backward chaining
- Simulation controls with play/pause





Technology Stack



Python 3.x

Core language with Faker, NumPy, Pandas for data generation and manipulation



Experta

Expert system engine for forward and backward chaining rules



OpenAI GPT-4o

Generates advisory narratives and executive justifications



Streamlit

Interactive dashboard with charts, tables, and simulation controls



Key Benefits

Cost Savings

Identify ghost subscriptions and redundant tools to reduce SaaS spend significantly

Data-Driven Decisions

Combine quantitative metrics with qualitative feedback for accurate insights

Real-Time Visibility

Watch recommendations evolve as usage patterns change over time

Automated Analysis

Expert system plus AI advisory delivers consultant-level insights automatically