

# Pencil

A Brandtech Company

Case study on how KeyValue helped build Pencil

**Pencil**

- New project
- Pencil Develop...
- AI magic tools
- Projects
- Creatives
- Results
- Insights
- Benchmarks
- Brand library
- Asset library
- Template library

Let's make some ads

Tell us what kind of ad you want to make! | EN |

- Instagram video showcasing a new language learning app with immersive techniques.
- TikTok ad highlighting the benefits of a subscription-based book club service.
- TikTok ad featuring a creative way to use an online design tool for personal projects.

**Get started with AI**  
Generate text, images, videos, creatives and more View all tools >

Make me an ad for a cosmetic brand

Generate creatives  
Chat with Pencil to go from insight to storyboard to assets to finished creatives ready for any channel.

Get started

Perfume bottle on a rock surrounded by trees

Generate images  
Shoot product or lifestyle images instantly using text prompts, sketches and style references.

Get started

Generating text ideas for you

Write me 5 smart social media captions

Generate text  
Chat with Pencil to discover insights, brainstorm ideas and write copy - from headlines to entire blog posts.

Get started

**Start with a template**  
Generate ads using channel-specific templates

All templates | Filter

- Facebook ads
- Instagram ads
- Instagram reels
- Google Display
- Google PMax
- YouTube ads
- YouTube Shorts
- TikTok ads
- LinkedIn ads
- Amazon supplementary
- Amazon A Plus
- Amazon ads

Elegance Redefined: Musa



World's **#1 Gen AI marketing platform** for asset creation and performance.  
Selected as the most innovative company in Advertising and Marketing vertical.

Domain:  
AdTech

Headquarters:  
 UK

Region:  
Global SaaS

URL:  
[trypencil.com](https://trypencil.com)

“ KeyValue with their exceptional **talent**, an **ownership mindset**, and a **product culture** innovates together with us to create the best product. ”

- Sumukh Avadhani CTO and Co-founder, Pencil



# Partnership

We engaged with Pencil immediately after their seed round with three engineers, which has now grown to a 50+ member team

AI/ML

FrontEnd

BackEnd

Data

UI/UX Strategist

DevOps

QA



## Time to market

Streamlined & AI-first development ensuring rapid delivery, keeping Pencil ahead of the competition at the same time keeping the product cost under control.



## Scalability

Our flexible and scalable team enabled the rapid, high-quality development of Pencil, ensuring smooth operation at every stage.



## Ownership

An ownership mentality to drive the mission forward with dedicated, proactive development and support.



## AI/ML Skills

Our unparalleled AI/ML skills favored Pencil in transforming challenges into opportunities and delivering innovative solutions



# Business Impact

**79%**

better ROAS



**\$40M**

ARR

**Guaranteed  
100% safe Ads**



**1.5M+**

Ad creatives generated

**2X**

effective ads

**\$1.5B**

in Ad spend used to  
train predictions

**48%** CPA



# Empowered Brands

Trusted by **5,000+ brands** and agencies including many **Fortune 100 Companies**

*Ballantine's*

*Miller*  
**Lite**



Simple

**Persil**

**BRAVO** ●  
**SIERRA** **USA**



**durex**

**ANGELA CAGLIA**

*Ballantine's*

**TRESemmé**  
profesional y a tu alcance



**SPLENDID SPOON**

**roman**

**UNDEROUTFIT**



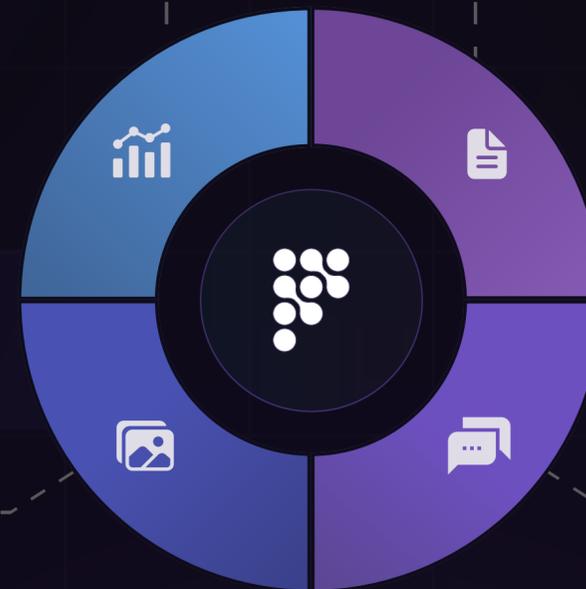
# Features

## Prediction System

A system streamlining data processing and monitoring real-time ad performance. It delivers actionable insights for faster decision-making, enhanced ad effectiveness, and improved ROI.

## Image Generation

Simplifies product positioning and boosts visual appeal. Automating image creation and ensuring brand consistency, saves time and increases engagement.



## Text generation

Creates customized ad copy by pulling in relevant information and aligning it with market trends, with flexible design templates to maximize engagement.

## Chat-to-Ad Creation

Accelerates ad development and aligns content with marketing goals. Using conversational inputs and context-based descriptions enhances targeting and improves conversion rates.

# Tech Highlights

- Flexible & pluggable multi-agent platform for Ad generation that can fully add or swap any new LLMs to quickly adapt to any innovation in the generative or predictive space.
- A smart and intelligent predictive multi-model platform that can predict the effectiveness of the ad generated with very high accuracy.
- Data Platform for retraining the predictive model for new domains and regions.

 Winner 76% confidence



**SCOTCH PORTER**  
BRAND

Time to elevate your beard game  
Self-care starts with Scotch Porter Beard Collection

ADD TO CART

Beard game • 6s • 

Idea 1 

 Loser 76% confidence



Say goodbye to breakouts,  
hello clear skin!

Impeccable taste? Of course!

**SCOTCH PORTER**  
BRAND

ADD TO CART

Breakouts • Static

Idea 2 

 M



Nur  
with  
Hair

H

Idea 3 



# Technology Stack

## Infrastructure

 ArgoCD

 Kubernetes

 RabbitMQ

 MLFlow

 Google Cloud

 Cloudflare

## Frontend

 React

 Jotai

 Recoil

 Context

## Application Layer

 NodeJS

 React

 Python

 FastAPI

## Artificial Intelligence

 Google Vertex AI

 OpenAI

 Gemini

 Stable Diffusion

 Imagen

 Adobe FireFly

## Databases

 MySQL

 Qdrant

