



SceneGenie

Transform ideas into advertisements.
Quickly.



**SGK is a global
packaging and
brand experience
company.**













SGK is Everywhere!



SGK: Powering Brands Globally

2023 Sales:
\$548M

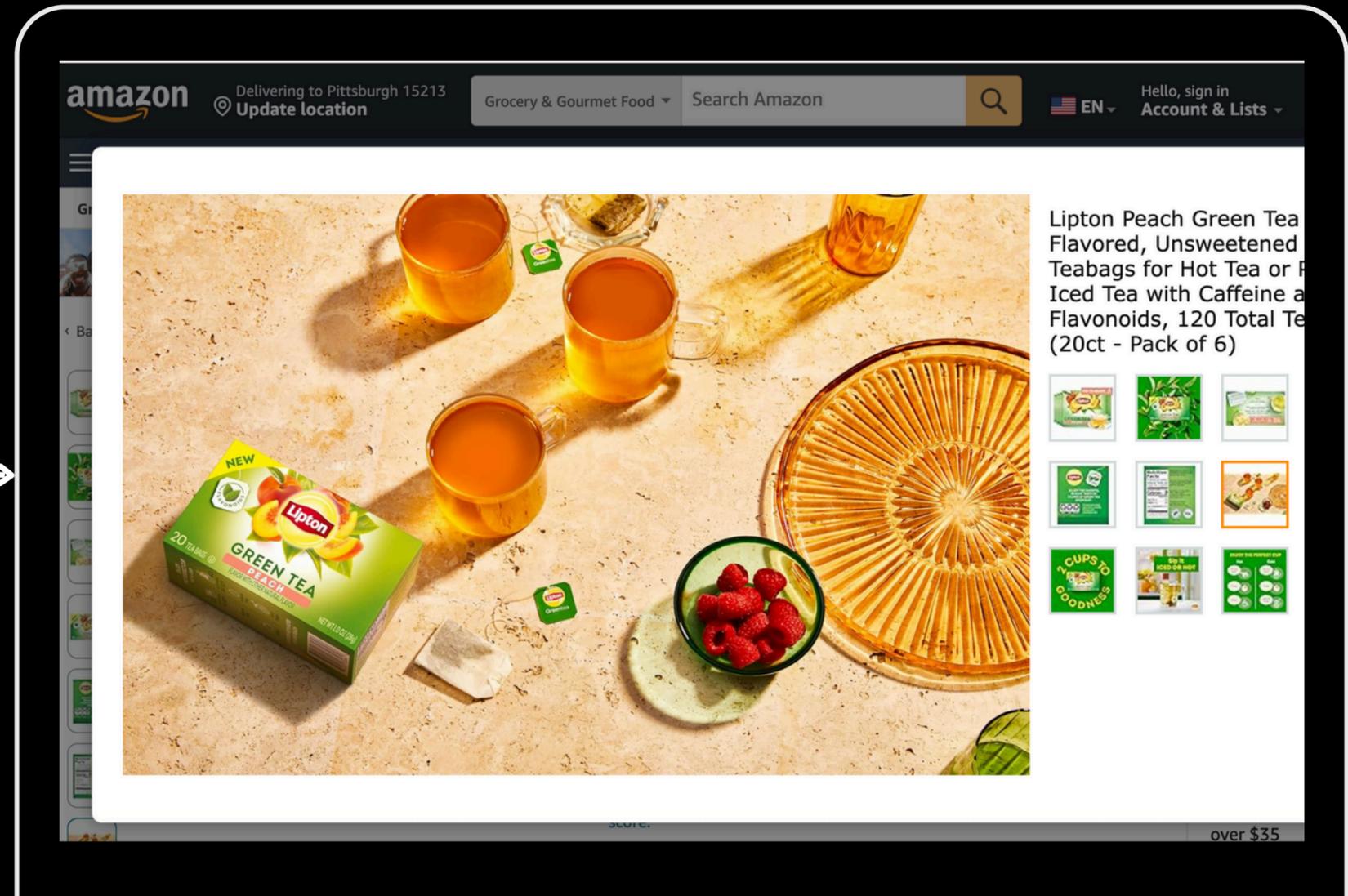
Clients Worldwide:
1500+

Years advising top
global brands: 75+



Some of SGK's Customers

From Packaging

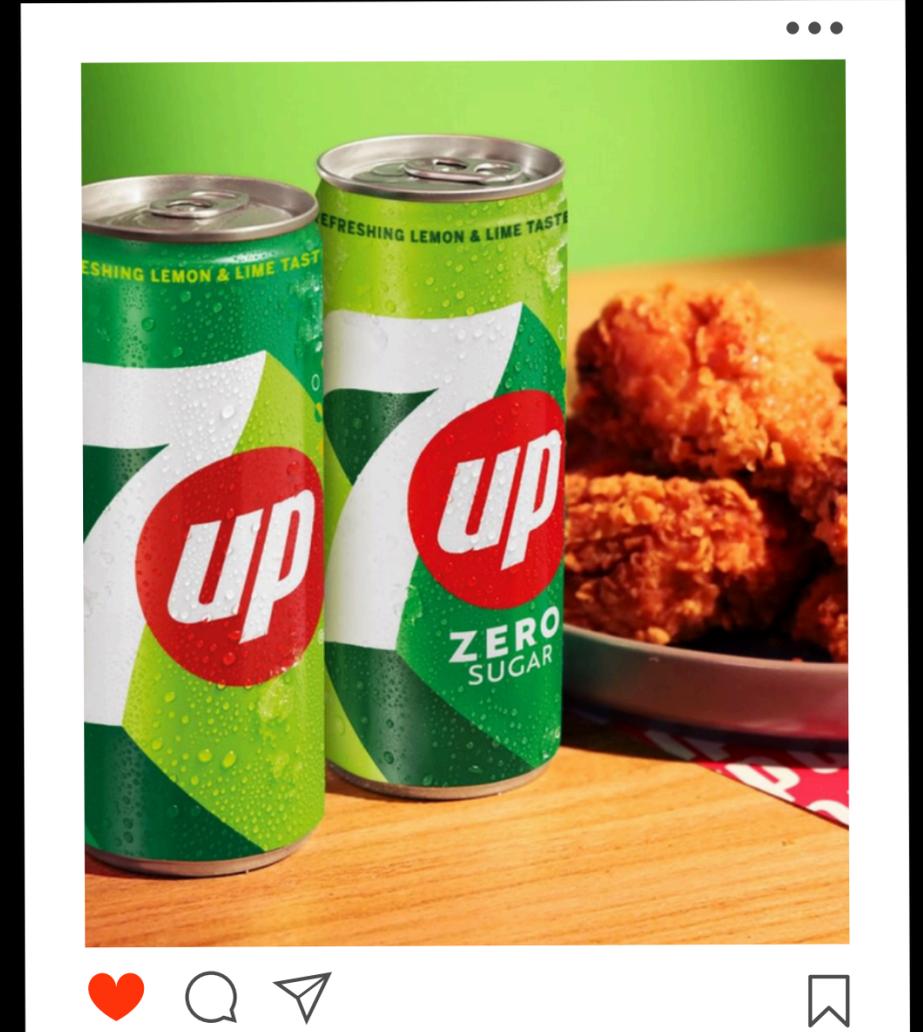
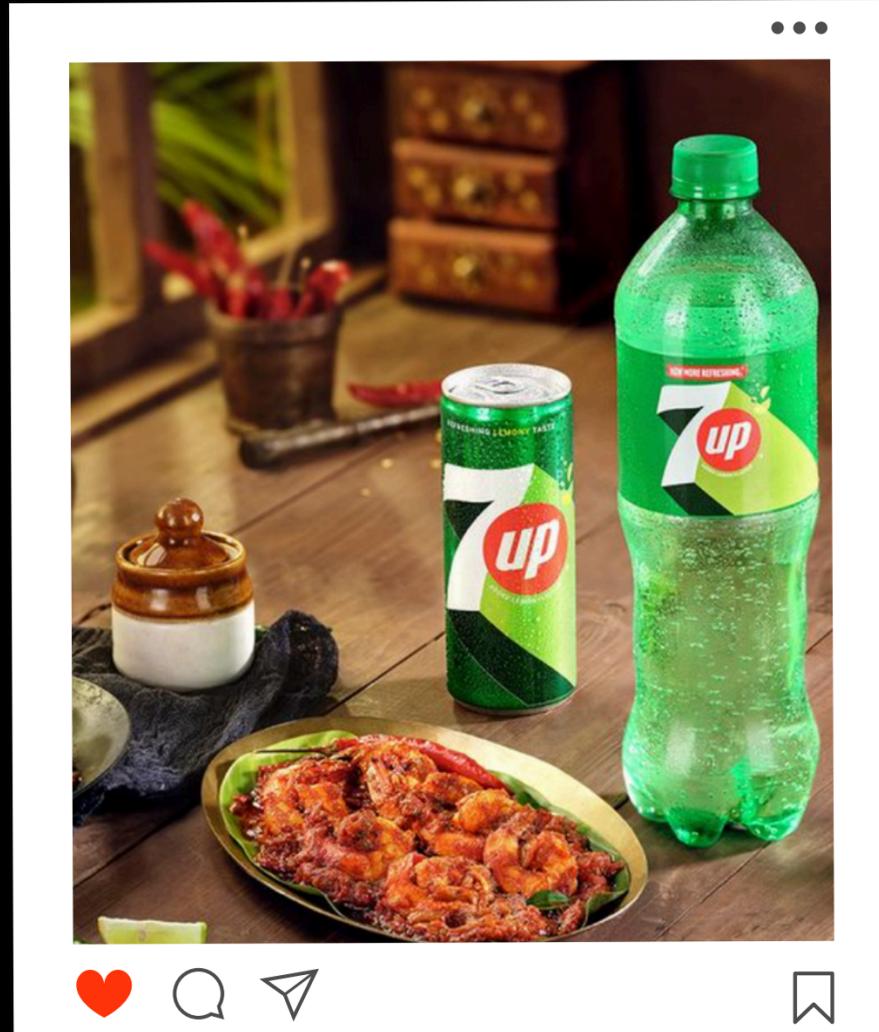
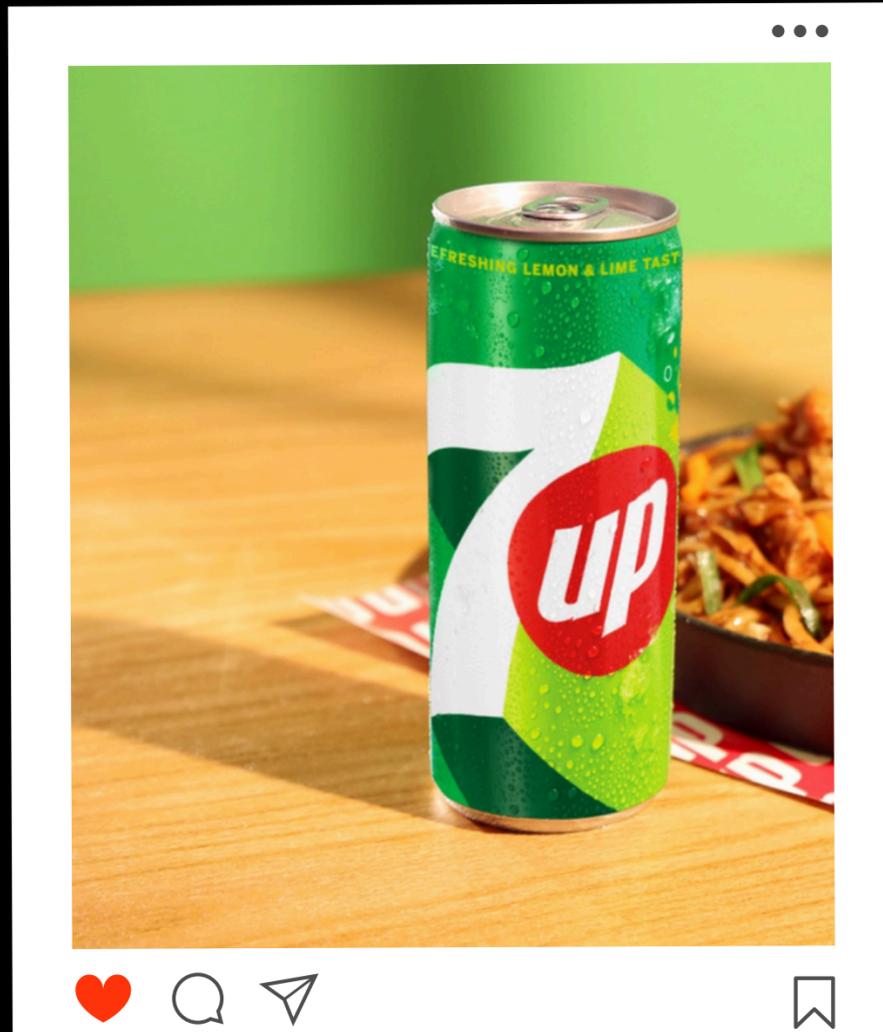


To Consumers

Cans: A Cornerstone of SGK's Business

Revenue Share:
15%





Meet Emma
Creative Director, 7Up

✓ Wooden table

✓ Food item next to can

✓ Green background

✓ Can in focus

Emma

Creative Director, 7Up



Rob

Designer, SGK



- Create Engaging Ads
- Explore diverse ideas
- Manage costs and timelines

- Align and converge on ideas with Emma
- Rapidly experiment with formats
- Deliver on time and within budget

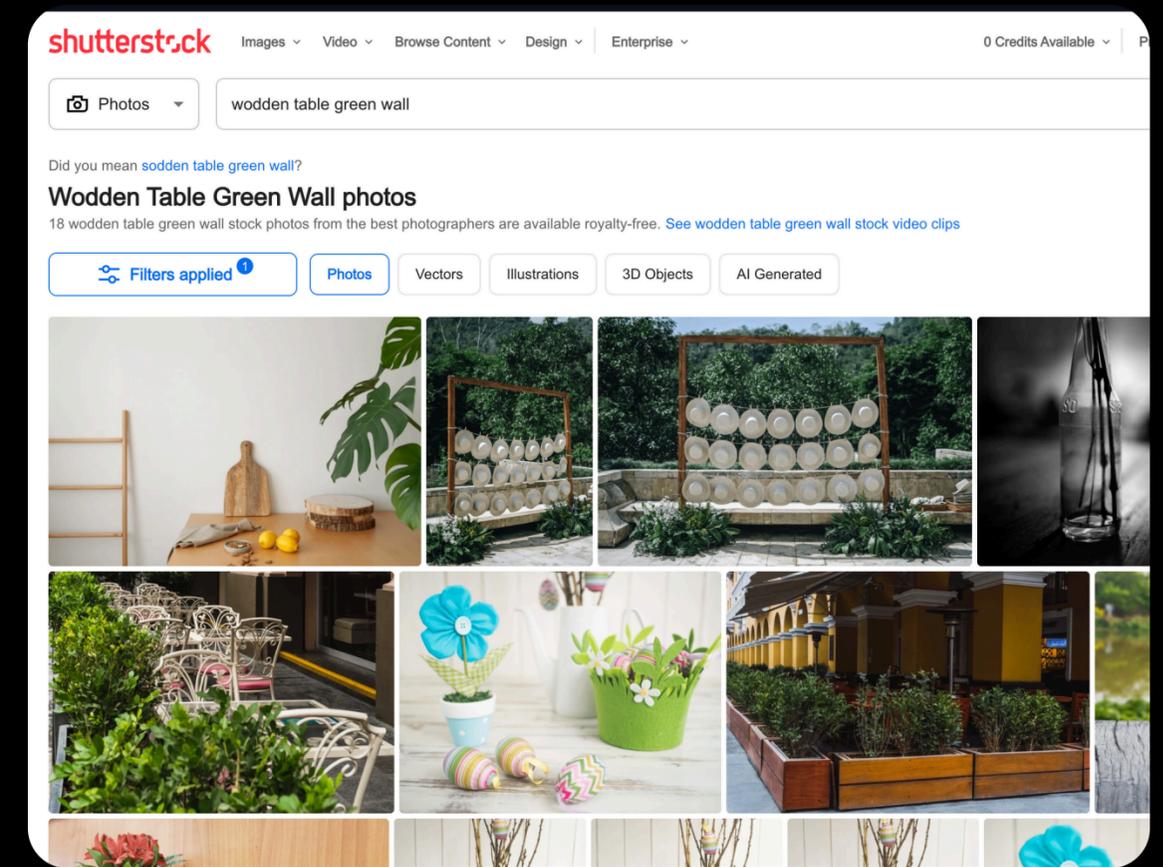
Gathering Photo Assets is a Critical Step



Product
Photo



Stock Images



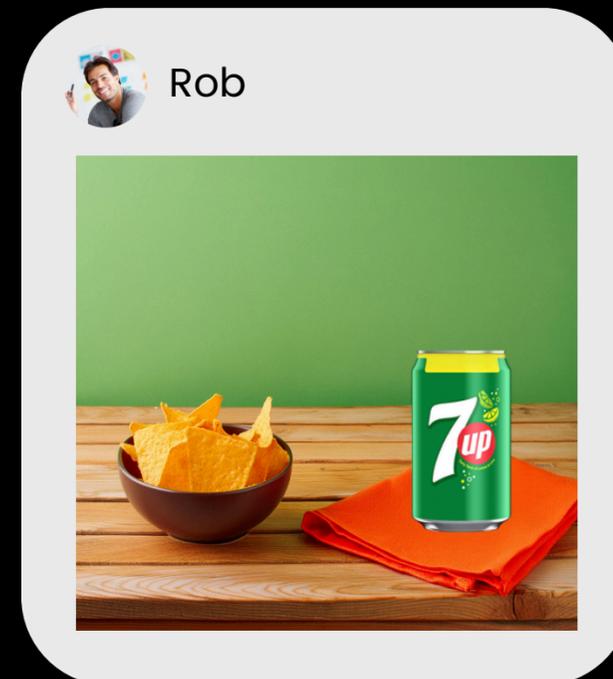
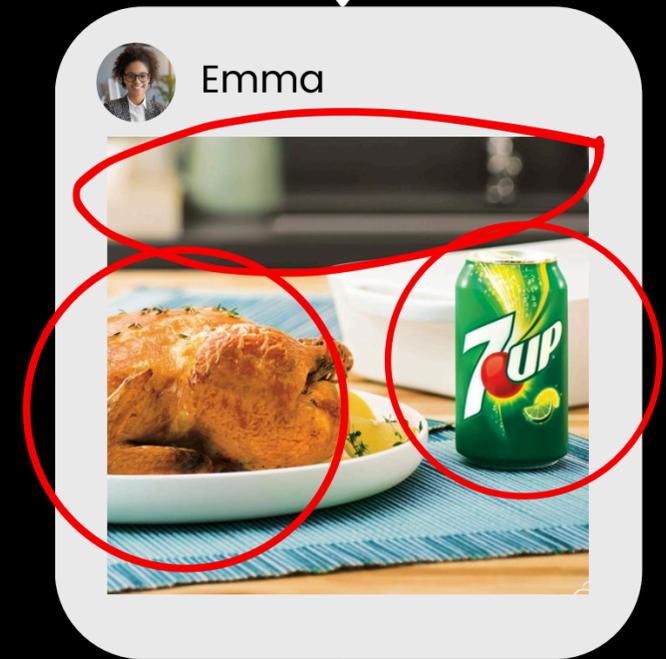
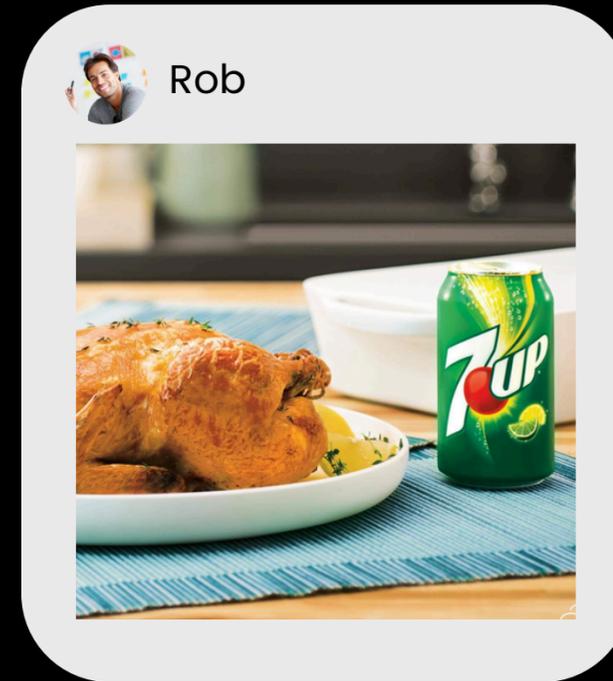


This is going to take a while...

Rob
Client Relations,
Designing Team, SGK



Converging on ideas involves long feedback loops and added costs



Every Iteration
++ Designer \$2500
++ Stock Images(5) \$50

Generating creatives is hard



Slow Creative Reviews

31,000 hours spent on scene creation per annum



High Costs

\$1M of labor costs per annum

2 days per iteration



Lengthy Alignment

Existing AI Generates Unrealistic Images



A 7up can placed on a wooden table with a green wall and a bowl of cheesy nachos in the background



Unable to capture brand



Incorrect placement



Salsa on top of the can

Not following brand colours

- Adobe Green
- 7Up Green

Other issues involve poor scaling, shadows, and limited creative control

Problem Statement

Develop an AI tool for SGK's clients to quickly draft brand-tailored advertisements by placing product renders on scenes generated from text prompts.



Emma
Green table with a pink wall. The table is empty aside from a refreshing drink garnished with a lemon slice, accompanied by limes, a lemon squeezer, and a whisk on the side.



 Can Render



Generated Scene



Combined Image



Step 3:
Add Shadow



Final Image



SceneGenie Solution

Step 1:
Generate
Scene

Scene Generation Process

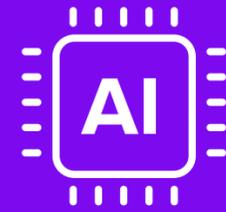


Emma

High shot of wooden table with a light green shaded wall in the background. The table is empty aside from a small bowl of queso and an iron frying pan with meat and jalapeño, with a red napkin below

Text Prompt

Input



Scene
Generation
Model



Scene

Output

Brand Dataset Preparation



Official Brand Advertisement

1



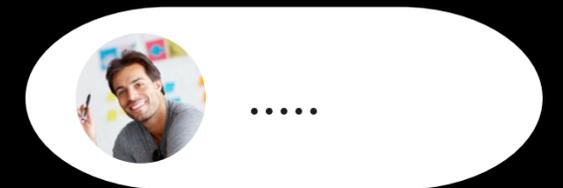
Remove Can

2



Fill Scene

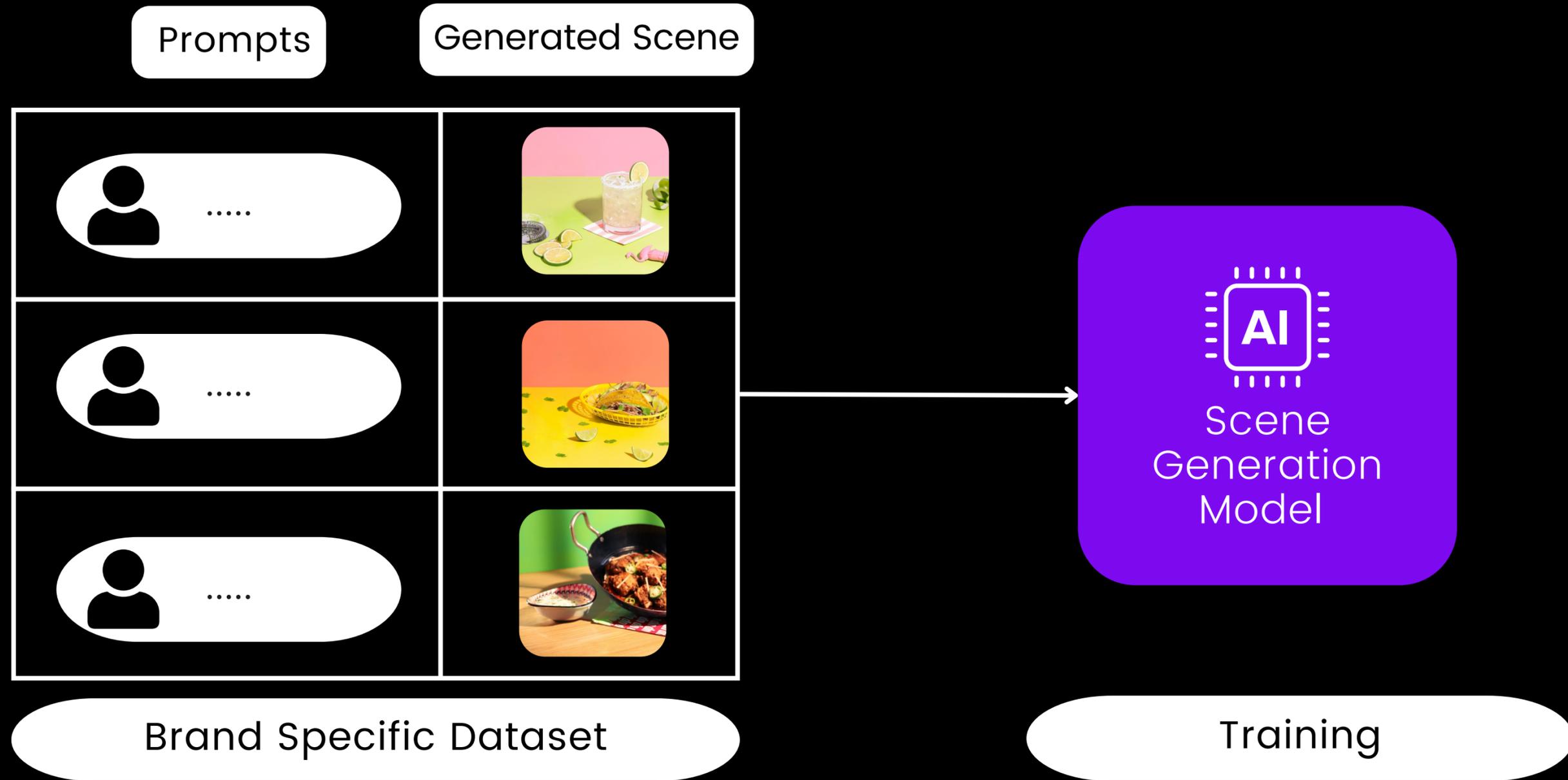
3



Text Prompt

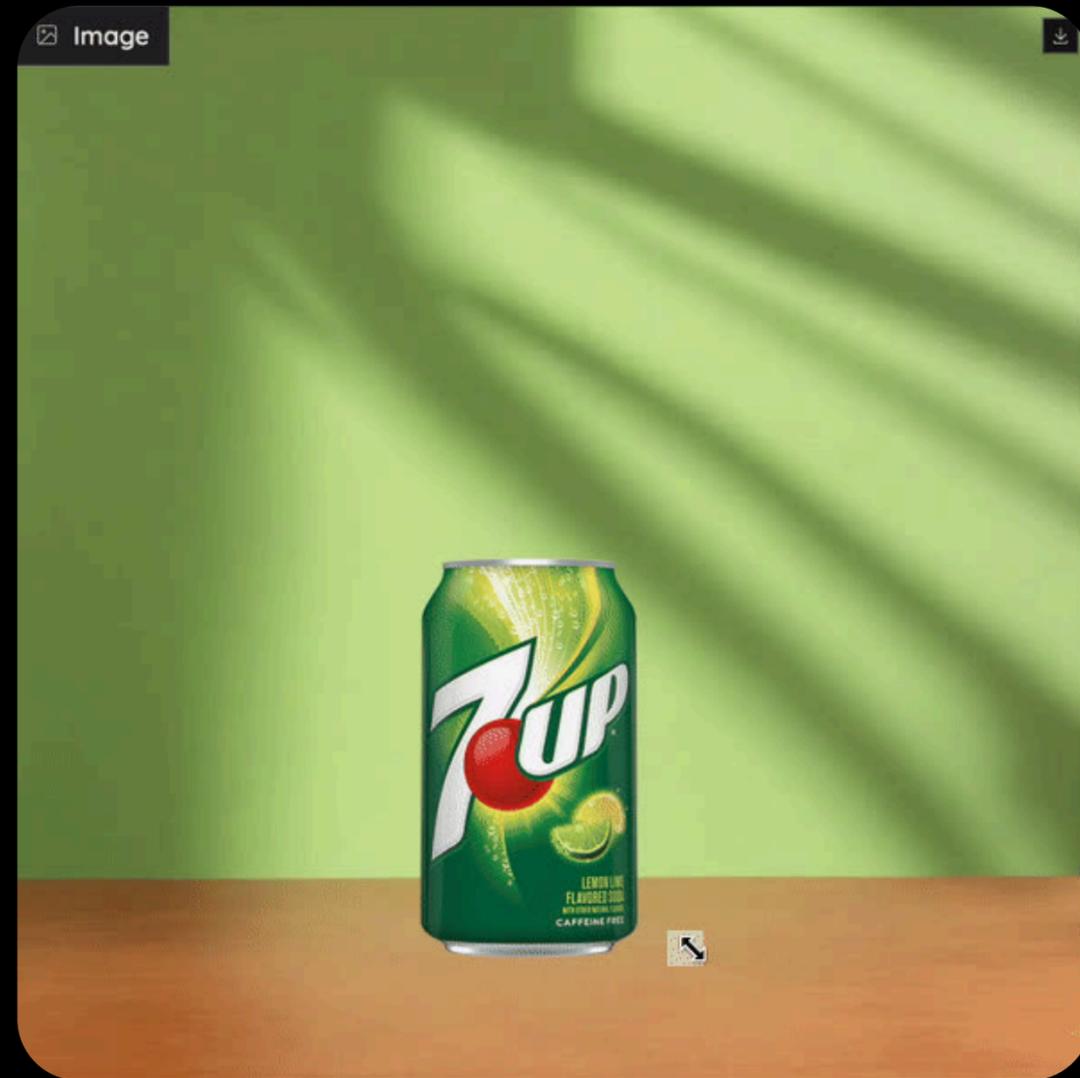
4

Training Brand Tailored Model



Step 2: **Place Product**

We offer control!



- ✓ Realistic Proportions
- ✓ Control Over Scale
- ✓ Interactive and Quick Adjustments



Emma places the 7Up
can through SceneGenie

Step 3:

Add Shadow

Shadow Addition Process



Naively Overlaid
Product

Input



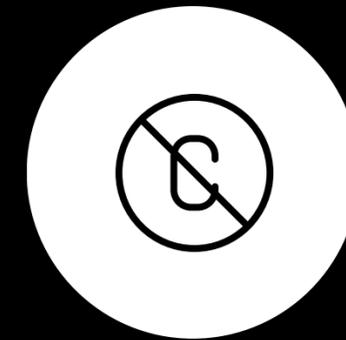
Refined Image

Output

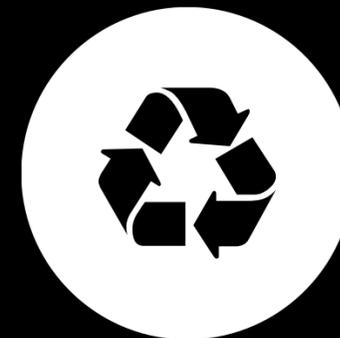
SceneGenie will drive client growth for SGK



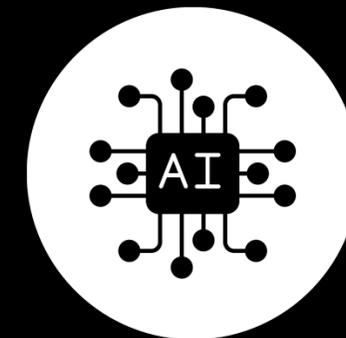
Brand Specific
Scene Creation



No Copyright Issues



Product-Agnostic
Tool



In-House AI Solution

**SGK is now a global
packaging, brand
experience, and an AI
technology company.**



Appendix

Scene Genie is Product Agnostic

The scenes we generate can be trained on any brand supporting any product

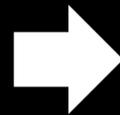
Small dataset requirements ensure easy adaptation to new domains



Why not just “prompt better”

- Efficiency – Our tuned models greatly reduce the time required to create high-quality drafts, aligning with Scene Genie’s core mission & values.
- Consistency in Quality and Style – Our tuned models help ensure higher quality from every generation, reducing variance of responses to subtle changes in the prompt
- Aligning with industry language– By formulating our data to conform to brand guidelines and standard industry language, the learning curve and understandability are greatly increased

Shadow Generation Results



Tall Can Generation



Short Can Generation

Projected Impact

SGK's Current Investment



31,000 Hours
of scene creation



1 Million USD
of labor costs

Potential With SceneGenie



10,850 Hours
of scene creation



480,000 USD
of labor costs

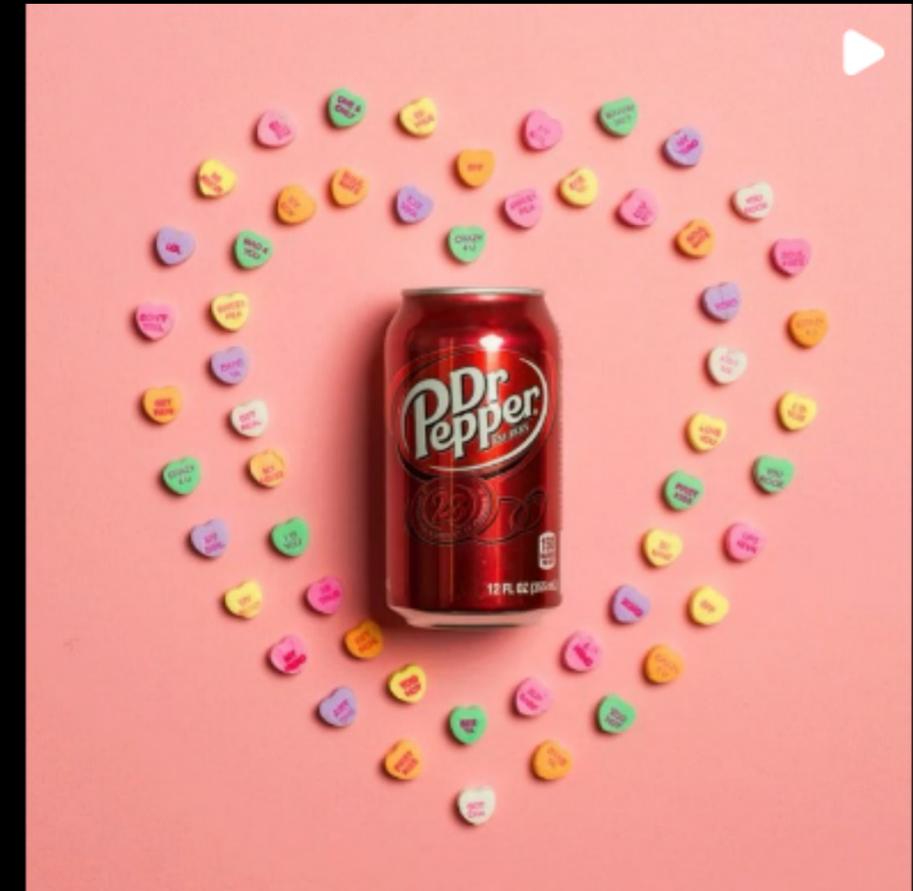
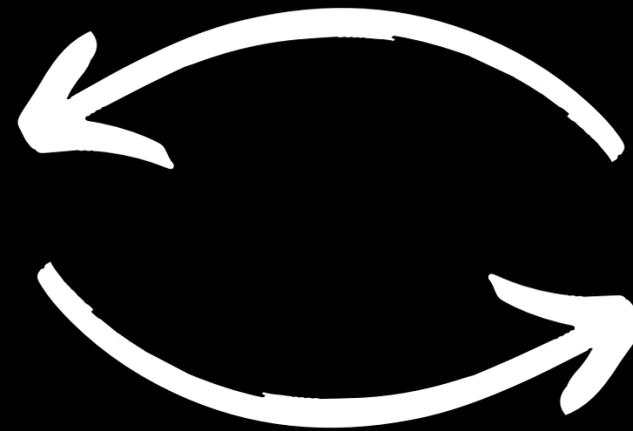
65%
DECREASE

in time and costs

Scene Genie can bootstrap new campaigns

New Ad campaigns will often take inspiration from previous works

Scene Genie can support cross-product and cross-brand alignment



Celsius themed Dr. Pepper ad or Dr. Pepper themed celsius ad 🤔

Challenges

- Lack of “High Quality Advertisement Data”
- Tried out multiple things for refinement and touch ups – reflection, shadow addition– difficult to get models to perform consistently on our data as these advertisements do not mimic real world conditions like natural sunlight and their quality and volume is low as well
- Designer – Model Alignment

How will SGK take the product forward?

- AI Council at SGK will take over the project
- Set up centralized infrastructure to store image data
- Engineers will work on creating prompting templates
- SGK is hiring AI Research interns to continue working on exploring similar concepts

Where do the captions come from?

- Human examines brand images – the style, colors, placement of image assets
- Then for the filtered high quality images human writes down prompts that best describe the generated scene
- GPT4v then learns how to recreate these for rest of the dataset

Who picks out the "highly curated" images? How much manual labor is this?

- We do!
- We spend about 5-10 seconds on an image deciding if it is useful for our model
- We annotated about 4k images across multiple brands in just 5-6 hours through an open source labelling software called LabelStudio
- Process is easy and intuitive.. and almost addicting

Who uses this application?

- SGK's creative team and clients who want to visualize their ideas quickly

How do you justify cost savings?

- Significant reduction in labor costs and operating expenses through automation of routine, labor-intensive tasks. This maintains healthy margins even with lower per-project billing rates.
- Increased capacity and scalability allow designers to work on a much higher volume of projects concurrently, driving revenue
- An affordable solution opens up opportunities with smaller brands and businesses that previously could not afford traditional design services
- Improved customer experience results in lower churn rates and more growth