A close-up, shallow depth-of-field photograph of a cosmetics display. In the foreground, a black tray holds several small, clear jars of cream or powder. Behind it, a row of lipstick tubes with gold caps and various shades of red and pink is visible. The background is blurred, showing more of the store's interior.

# Finding Winning Skin Care Concepts with Synthetic Concept Testing

## CLIENT

**A leading global US-based beauty brand**

## INDUSTRY

**Cosmetics Manufacturing**



## OBJECTIVE

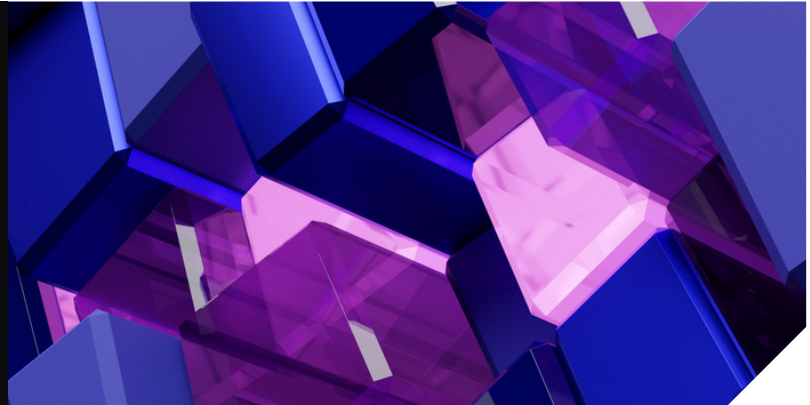
The client wanted to tap the power of generative AI (GenAI) to build a customized platform to test textual early innovation concepts across various skin care categories in a way that was more cost-effective and faster than the traditional testing process.



## METHODOLOGY

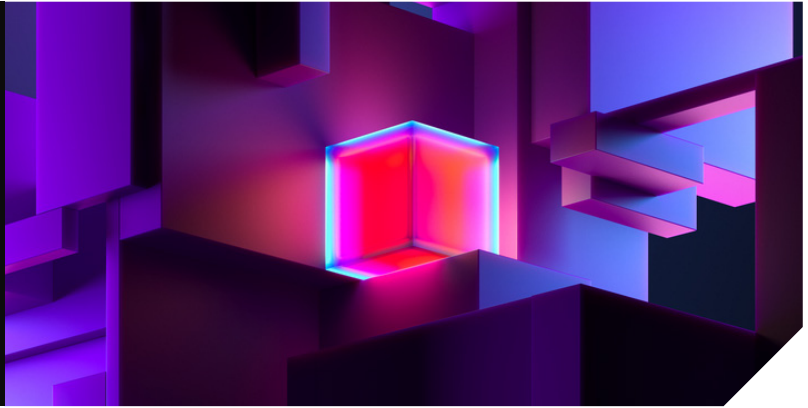
C5i's Synthetic Concept Testing Solution, which is a large language model (LLM)-based solution, was used to test the textual concepts using synthetic responses and report insights on which concepts were likely to perform best in the market.

## RESEARCH PROCESS



- Research parameters such as categories, audience details, questionnaire, sample size, and key performing indicators (KPIs) were finalized after discussions with the client.
- The key market was US.
- The client shared past concept test results across categories to be tested.
- C5i integrated standardized diverse datasets to create a unified and standardized data source.
- Preprocessed the data to create the input for the model configuration.
- Configured baseline synthetic concept test model by enhancing the existing LLM using the preprocessed data.
- Optimized the baseline model by tuning both model parameters and prompts (contextual information) to achieve the desired scores in evaluation metrics.
- Around 20 concepts across SPF, Fermented Skincare, Moisturizer, and Luxe categories were analyzed through this model using synthetic responses.
- Data was analyzed using frequency runs, significance testing, etc. to compare the results within each category; reporting was done using the standard/traditional concept testing parameters and style.
- Results were further validated using a Toluna concept test study for one of the categories.

# KEY INSIGHTS



Examples of insights:


- Prioritize 'Glow and Shield' as the lead idea for the next phase of product development.
- 'New Dawn Renewal Cream' has potential with higher Purchase Intent (PI) and credibility; consider introducing pricing and retest for appeal check.
- Consider 'Micro-Magic Ferment Facial Oil' as a potential lead for product development from the Fermented Skincare mix, given its consistent performance across all groups.
- Leverage the elevated appeal of 'Radiance Reboot Cellular Eye Cream' among multi-ethnic groups and move forward the idea as the lead idea from Luxe Ideas.

## OUTCOME

- The results from C5i's Synthetic Concept testing platform tied closely with the actual responses tested through Toluna across most of the parameters.
- The client was aligned with C5i's recommendations given across all categories in terms of winning concepts, gaps, and other recommendations on audiences, etc.
- C5i is now expanding the customized platform for the brand to include all major categories and more markets.

# SNAPSHOTS FROM THE STUDY

### SPF Ideas: Key Learnings and Actions



#### Key Learnings

'Glow and Shield' and 'Mineral Matrix' are the two ideas that carries similar performance across all ethnic groups

However, between the two, Glow and Shield has an elevated PI (45% vs 33%) and credibility scores (53% vs. 42%)


'Radiant Defence' and 'Sun & Surf' ideas are more appealing to White females; while 'AquaPrism' appeals to more Asians who find it credible

Ideal price perception of most concepts are at the range \$50-99

#### Recommended Actions

Prioritize 'Glow and Shield' as the lead idea for next phase of product development, treating 'Mineral Matrix' a potential alternative

If 'Radiant Defence', 'Sun & Surf' and 'AquaPrism' are to be taken forward, consider them as targeted offerings, with the former targeted at White female and the latter at Asian female



### Summary of Key metrics – Synthetic Data

Glow and Shield scores in Likeability and PI, while Sun & Surf Skinfusion SPF perceived to be slightly more relevant and believable at TB. Slightly higher scores for Glow and Shield across KPIs at T2B

Key Measures (Top Box)	Glow and Shield (A)	Radiant Defence SPF Matte-UniFilm Cream (B)	AquaPrism Intense Defence Water Spray (C)	Mineral Matrix Soothing SPF 50+ (D)	Sun & Surf Skinfusion SPF (E)
BASE	250	250	250	250	246
Purchase Intent	45% D	40%	38%	33%	38%
Likeability	42%	36%	38%	35%	40%
Relevance	36%	34%	33%	34%	38%
Distinctiveness	51%	48%	49%	47%	52%
Believability	53% D	47%	44%	42%	54%

Key Measures (Top 2 Box)	Glow and Shield (A)	Radiant Defence SPF Matte-UniFilm Cream (B)	AquaPrism Intense Defence Water Spray (C)	Mineral Matrix Soothing SPF 50+ (D)	Sun & Surf Skinfusion SPF (E)
BASE	250	250	250	250	246
Purchase Intent	76%	74%	73%	75%	70%
Likeability	86%	82%	79%	78%	79%
Relevance	81%	80%	78%	74%	75%
Distinctiveness	87%	81%	80%	80%	77%
Believability	88%	84%	82%	82%	84%

### Glow and Shield: Fares at parity across KPIs among all groups at TB level; however has a better PI among Blacks at T2B level who are also convinced to pay a premium

#### Glow and Shield - Ethnicity Sub-groups

Key Measures – Top Box	Total (A)	Whites (B)	Blacks (C)	Asian (D)	Key Measures – Top 2 Box	Total (A)	Whites (B)	Blacks (C)	Asian (D)
BASE	250	91	85	70	BASE	250	91	85	70
Purchase Intent	45%	48%	44%	41%	Purchase Intent	76%	68%	81% B	80%
Likeability	42%	44%	42%	39%	Likeability	86%	86%	87%	87%
Relevance	36%	41%	33%	33%	Relevance	81%	84%	81%	79%
Distinctiveness	51%	53%	47%	53%	Distinctiveness	87%	86%	87%	89%
Believability	53%	57%	47%	54%	Believability	88%	87%	87%	90%

Ideal price point for most and especially Whites is \$50-99

Price willing to pay (USD \$)	Total (A)	Whites (B)	Blacks (C)	Asian (D)
BASE	250	91	85	70
Under 25	20%	18%	20%	21%
25-49	31%	33%	22%	40%
50-99	38%	46%	37%	30%
100-249	9%	3%	17% BD	9%
250 & Above	2%	0%	5%	0%

ABCDE – Significantly higher than other ethnic groups at 90% confidence interval



# ABOUT US

C5i is a pure-play AI & Analytics provider that combines the power of human perspective with AI technology to deliver trustworthy intelligence. The company drives value through a comprehensive solution set, integrating multifunctional teams that have technical and business domain expertise with a robust suite of products, solutions, and accelerators tailored for various horizontal and industry-specific use cases. At the core, C5i's focus is to deliver business impact at speed and scale by driving adoption of AI-assisted decision-making.

C5i caters to some of the world's largest enterprises, including many Fortune 500 companies. The company's clients span Technology, Media, and Telecom (TMT), Pharma & Lifesciences, CPG, Retail, Banking, and other sectors. C5i has been recognized by leading industry analysts like Gartner and Forrester for its Analytics and AI capabilities and proprietary AI-based platforms.



[www.c5i.ai](http://www.c5i.ai)

