



Bespoken

THE
MARS
AGENCY®

CASE STUDY

The Mars Agency

"The Mars Agency improved the speech recognition by cutting down more than 80.8% of errors before launch, tuning it with the help of Bespoken against a comprehensive set of utterances and accents"

THE CHALLENGE

The Mars Agency specializes in marketing to shoppers, consumers, and retailers across the ever-expanding omni-commerce environment.

The Mars agency created SmartAisle™, a voice solution in-store to consumers who want to improve their skin care. The app was created to provide detailed information on skin care, allowing users to find and purchase the product that best suits their needs via a simple conversation.

The user experience needed to be consistently delightful. To accomplish this, the Mars agency faced the complex challenge of anticipating how customers would interact with their app, which includes accommodating various accents, colloquial expressions, phonetic variations, and background sounds.

With this in mind, the Mars team formulated a plan with their client to test the application before it launched. This plan was difficult, limited by budget and time constraints:

Step 1: Find a representative group of English-speaking users with common accents to test the app.

Step 2: Have each person interact several times with the app, repeating a list of utterances.

Step 3: Collect, analyze the results. Identify code, interaction model improvements. Assign backend changes to the development team.

Step 4: Development team applies the changes from Step 3.

Step 5: Start over with Step 2 to verify the detected errors were corrected and no new errors were generated.



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THE SOLUTION

Keith Porter, Senior Product Manager for The Mars Agency, asked himself: Is there another way? And indeed, there is.

Keith contacted us and shared both the success story of SmartAisle™ for the sale of whiskey and his need to test the voice app they were constructing for the aforementioned cosmetics brand:

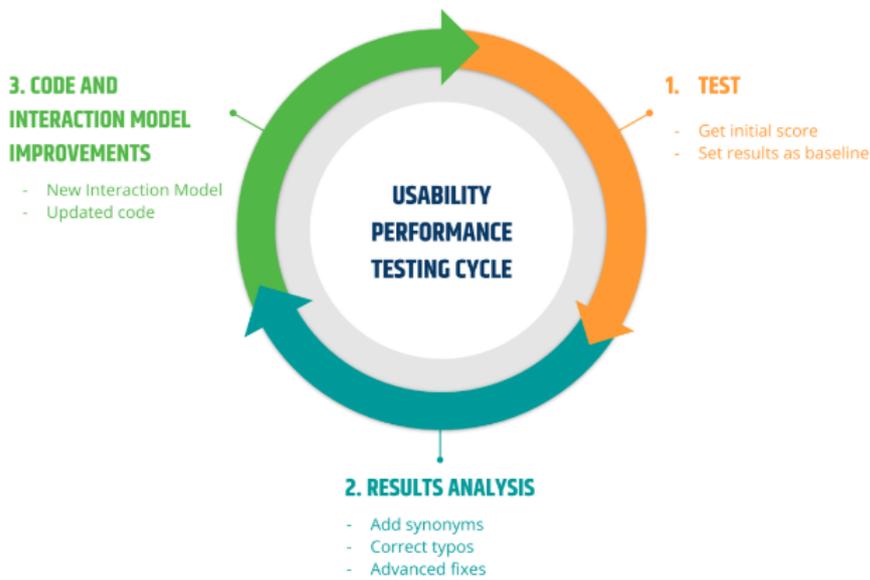
“*We’ve been building skills for a while now and are looking to take our development process to the next level by integrating automated testing. Bespoken seems to be the obvious choice*”



With our Usability Performance Testing, this is the scope and work plan for the Mars Agency:

- 1 Time scope:** 3 weeks for the entire testing project.
- 2 Define the intents and slot values to test.** For example, the Mars Agency wanted to verify the skin care product names were correctly recognized. For this reason, the product names were heavily tested.
- 3 Define the utterances and phrase variations to use.**
- 4 Perform three rounds of tests.**
- 5 Use two types of audio interactions:**
 - Generated audio:** More than 1500 interactions per test round were sent to the voice app.
 - Recorded audio:** 900 real-life interactions per test round were sent to the voice app.The tests with generated audio were done using **AWS Polly** and **Google Wavenet voices** with Chinese and Spanish accents.

THE RESULTS



Additional Improvements made to the intend model:

- ▶ Adding synonyms/sounds-alike phrases
- ▶ Correcting typos and alternative spellings
- ▶ Disambiguation of utterances defined for different intents
- ▶ Achieving 96% of success rate for recognition in such a short time was greatly appreciated by The Mars Agency!

Our Usability Performance Testing allowed Mars to:

- ▶ Execute an extensive and comprehensive set of tests in an automated fashion, quickly and repeatably, saving time and money.
- ▶ Problematic verbiage was detected easily, reducing the time needed to improve the interaction model, which yielded in better speech recognition and happier/more engaged users.
- ▶ Decreased the chances of getting bad reviews.

Success Rate progression after Test runs

3rd Run

96%

813 Success Utterances
898 Executed Utterances



2nd Run

83%

753 Success Utterances
898 Executed Utterances



1st Run

76%

715 Success Utterances.
898 Executed Utterances

GET STARTED NOW!



“ 96% is pretty awesome news. I cannot reiterate enough how helpful this has been. Our confidence going into this launch is significantly higher because of this testing. ”



Launch your voice app with confidence!

Like The Mars Agency, you can detect ASR/NLU-related errors in advance, creating amazing Voice Experiences that your Customers will love!

To get started just follow these 3 simple steps:

- 1 Tell us what you want to test:
Sequence (one-shot, in-session, etc.)
Intent and/or slot value to test
Scenarios – types of speakers, phrases, etc.
- 2 Send us the interaction model
- 3 Get the results

Email us at: sales@bespoken.io and get a FREE DEMO!