Alexa Skill Builder's Guide

Tried-and-Tested Skill-Building Tips from Top Alexa Developers

How Top Alexa Developers Build Highly Engaging Skills

Alexa enables customers to interact with technology in the most natural and intuitive way—with their voice. Today, developers can build voice-driven Alexa capabilities, called skills, to engage and delight their customers.

When we look at some of the most engaging Alexa skills, we see a variety of voice experiences that stand out from the rest. Some focus on entertainment with voice-first games or interactive experiences. Others address a specific customer need or challenge. These skills also stand out because they are habit-forming—in a good way—enticing the customer to come back, again and again, as if by magic.

We also see that these skills have one critical attribute in common—they're all focused on the customer experience. By focusing on the customer and what they need, you can build something that's unforgettably engaging.

This level of customer focus has helped many Alexa developers attract and delight customers time and time again. For some, this approach has enabled them to earn money through the Alexa Developer Rewards, which is a program that pays developers for eligible skills that drive some of the highest customer engagement. Others have added in-skill purchasing to sell premium content to enrich the skill experience. Some have even built thriving voice businesses.

In this guide, we share top tips from the developers with some of the most engaging skills available in the Alexa Skills Store today. Read on to discover their tried-and-tested voice design tips and use them to create Alexa skills customers will find irresistible. We also provide additional resources to help you enhance and optimize your skill to make it the best it can be.

Meet the Featured Alexa Developers

Adva Levin – Founder and CEO of Pretzel Labs

As a writer and game designer, Levin started the Pretzel Labs voice design agency to create voice experiences for kids and families. Levin's first Alexa skill called Kids Court won the Grand Prize in the Alexa Skills Challenge: Kids.

Andy and Laura Huntwork – Co-founders of The Magic Door, LLC

A former engineer at Amazon, Andy Huntwork and his wife Laura started with a simple idea: to create interactive, voice-based stories. Today, The Magic Door skill is a sophisticated adventure framework, hosting multiple storylines and voices, 30,000 spoken words, and hundreds of sounds effects.

David Karich – Managing Director of FlipZoom Media Inc.

Karich, creator of numerous skills available in the German Alexa Skills Store, has managed his software agency for 12 years. Skills like Lügenbaron have such high customer engagement that most of them earn Alexa Developer Rewards, which he reinvests in marketing and further enhancing the user experience of his skills.

David Markey – Former Brown University Student

Markey is the builder of popular game skills like Word of the Day Quiz and Price It Right. Markey's ability to surprise and delight keeps customers coming back for more.

Gal Shenar – Founder of Stoked Skills

Shenar's first Alexa skill, Good Night, is one of the most used lifestyle skills in the Alexa Skills Store, earning him more than $25,000 in Alexa Developer Rewards in its first six months. The success of later skills, including Escape the Room and Word Play, are proof Shenar knows what makes highly engaging skills.

Jess Williams – Co-founder and CEO of Opearlo

At only 27, Williams became co-founder and CEO of Opearlo, one of the first voice design agencies in the United Kingdom. Among the engaging skills she has designed is Panda Rescue, which won

the $7,500 cash prize for Best Skill Designed for Echo Show in the Alexa Skills Challenge: Kids.

Jürgen Carstensen – Owner of NordicSkills
One of Germany's first skill developers, Castensen has built more than 15 popular skills, including fantasy adventure Mein Spaziergang and role-playing detective game Mein Auftrag. With tens of thousands of customers and Alexa Developer Rewards, Castensen has built his voice business on engaging his customers.

Max Child – Founder of Volley Inc.
Originally a mobile app developer, Child pivoted to become a voice games publisher. In less than 12 months, Volley's games for Alexa amassed over 500,000 active monthly users, and Child quickly becoming a top earner in the Alexa Developer Rewards program. He also sells premium content as in-skill purchases for the popular Yes Sire role-playing adventure game.

Oscar Merry – Co-founder and CTO of Opearlo
Merry co-founded Opearlo with Jess Williams. His Inspire Me skill earned $30,000 from Alexa Developer Rewards, and the earnings from growing list of highly engaging personal and gaming skills are allowing the agency to build a thriving voice business.

Paul Wehner – Director of Platforms for Stop, Breathe & Think
Wehner wanted to bring the power of meditation to the masses with voice technology. With tens of thousands of daily customers for his meditation skills, Alexa Developer Rewards money let him double down on building even more engaging skills.

Tom Hewitson – Founder of labworks.io
Hewitson never expected to be making money from building Alexa skills, but his income from Alex Developer Rewards shows his approach to design really pays off. In only six month, he was able to expand labworks.io into a six-person voice design studio.

Always Design with the Customer in Mind

Before you start designing or coding your voice experience, you have to identify your target customer. One way to do that is by putting yourself in their shoes.

Create a customer persona. You can even give your customer a name to make it more personal. Now, imagine how he or she will interact with your skill. Is the goal of your skill to help? To educate or entertain? What type of emotion do you want to evoke for this person? And why should they want to come back?

Once you answer these questions, you can begin to map out possible interactions. Anticipate and handle their likely reactions. Build options into your scenarios, so you let the customer call the shots.

Jess Williams and Oscar Merry Do User Testing to Refine the Voice Design Before Development

When developing Panda Rescue, Jess Williams and Oscar Merry started with their end customer in mind. Moms and dads may be the ones initiating the skill, but it's likely kids who are playing the game. The duo set out from the beginning to incorporate what their target audience wanted in an experience.

To do this, they imagined a conversation between Alexa and a child—a child who becomes emotionally invested in raising an orphaned panda. Then they tested their assumptions before proceeding with development.

> *"We prototyped and tested the first couple of levels extensively with actual customers before building out the rest of the game," says Merry.*

This dedication to detail helped Panda Rescue become an engaging Alexa skill for kids and win Best Skill Designed for Echo Show.

Customers Drive Their Own Adventure Narrative in The Magic Door

Another highly interactive, narrative skill is The Magic Door, developed by Andy and Laura Huntwork. Users walk through a virtual Magic Door and into a world of imagination and interactive adventure, where each experience has the potential to be different than the last. Each customer is greeted with an option to choose one of three destinations or to see what's hiding in the virtual mailbox. With each choice, the customers build their very own Magic Door adventure.

Although The Magic Door has 10 story lines, 30,000 spoken words, 200 scenes, multiple character voices, and hundreds of sound effects, the Huntworks insist on frequently updating the content, not only to keep it fresh but to give their customers what they're asking for.

No matter how many story lines, characters or items the Huntworks add to The Magic Door, what's important is to build with the customer in mind, to let them plot their own course through the stories. That way, the adventure can unfold on their terms, not on terms that seem forced or contrived.

More tips for designing with the customer in mind:

Things Every Alexa Skill Should Do: Do One Thing Really Well

Confirm What Customers Want with Dialog Management

How to Set Expectations for What Your Skill Can Do

Be Open: Designing for Voice is Different

Before you write a single line of code, close your eyes and listen because designing with voice is different. A great voice experience starts with immersive dialog and sound that surrounds you—not elements to tap or click on a screen.

Really listen to the conversation you're creating between Alexa and your customer. Is it relaxed? Is it intuitive? Is the conversation a natural flow of words, without unnecessary or awkward pauses? If not, take note. These are signs your skill may be less engaging—and therefore less effective—than it could be.

You may have already created a successful mobile app and are tinkering with the idea of uploading it to the Alexa Skills Store. Push pause on that thought for a second. Translating a mobile experience to voice requires a different mindset. It requires re-imagining the entire experience, but this time from a voice-first perspective.

Paul Wehner Opts for Simplicity in Mobile-to-Voice Transition

One example of a skillful transition from a mobile application experience to a voice-first Alexa skill is developer Paul Wehner and his guided meditation mobile app. Wehner quickly realized that mobile wasn't a direct conversion to voice. Mobile experiences are based on visual and tactile user interfaces, but Alexa skills are based on voice and sound, which requires a fundamentally different design process.

Wehner simplified his skill by opting for an easy-to-navigate, voice-first experience that allows customers to access content faster with basic word commands versus navigating text menus.

Tom Hewitson Uses a Scientific Approach to Voice Design

A journalist turned developer, Tom Hewitson prefers the scientific approach to voice design, meaning he generates and tests hypotheses about the types of interactions folks are looking for. Before anyone on Hewitson's team writes a line of code, they spend hours reviewing skill usage data to gain a better understanding of user engagement and customer expectations.

"With hundreds of thousands of users each month, we have a lot of data about what people do and don't like, which helps us make better decisions about what we should build next," says Hewitson.

More tips on designing for voice:

Why Voice Design Matters: We Don't Speak the Way We Write

Amazon Alexa Voice Design Guide

Situational Design: How to Shift from Screen-First to Voice-First Design

Create a Simple, Yet Intuitive Voice User Interface

When creating a new skill, keep it simple and straightforward. Don't make your customer remember a 10-word command, when three or four will work. Design your voice user interface with intuitive words and obvious invocations—like the easy-to-remember phrases of "Alexa, find my phone" or "Alexa, inspire me."

Jess Williams Recognizes When Less Is More

Sometimes doing one thing well is better than trying to cram a dozen unrelated actions into one interface. Jess Williams initially created the LifeBot skill as a productivity "super skill" to help customers better manage their calendars, their reminders, and find their lost phones, as well as provide an outlet for relaxation with daily guided meditation and yoga.

She soon discovered that LifeBot presented customers with too many choices and that it was time to revisit the design process.

> *"Simpler is better," says Williams. "We had to take a step back and re-factor LifeBot into separate skills."*

Dividing a complex skill into separate skills makes it easier for customers to remember which skill does what, not to mention simplifying interaction with each skill. And this simplicity benefits both the customer and the developer. For example, "Alexa, find my phone" is so easy to remember that Find My Phone remains one of the top skills in the Alexa Skills Store.

Oscar Merry Insists on Voice-First Simplicity, Even for Screen-Based Devices

Oscar Merry, Jess Williams' business partner, insists on keeping the user interface simple and

voice-first, even when the customer is using a device with a screen. After the reinvention of LifeBot, Merry and Williams ventured into developing multimodal skills for Echo devices with screens, with Panda Rescue as the first. Panda Rescue is an adventure story game for kids with an engaging plot and custom audio sound effects.

While the skill contains compelling imagery to enhance the story, Merry resisted making the visuals overly complicated or distracting, ensuring users got an immersive voice-first experience.

The approach worked, too. Merry and Williams scored a $12,500 cash prize for Best Skill Designed for Echo Show with Panda Rescue.

More tips on designing for simplicity:

Things Every Alexa Skill Should Do: Simplify Choices

Focus on Quality from the Beginning

When imagining the problem that your skill will solve, remember to address the emotional element. If you can solve someone's problem and make them *feel* something—joy, relief, gratitude, whatever they need—you create compelling interactions where people become so invested that they can't wait to use your skill every day.

David Markey Adds Whimsy to Educational Skills

Word of the Day was the first flash briefing skill that former Brown University student David Markey created. His chose a simple-to-remember invocation name, wrote entertaining vocal scripts, and delivered a continuous stream of new content that gets customers hooked. Everyday customers return to the skill to strengthen their vocabulary as part of their daily routine.

Anticipating that customers would want more, Markey then built Word of the Day Quiz, a companion skill to Word of the Day to give his customers an entertaining, interactive way to practice using their new vocabulary. This quiz had personality and surprises of witty rewards and bonus content for right answers and repetitive play.

Markey could have played it safe with standard audio, but instead invested in professional-quality recordings of his punchy, sometimes silly dialog, even adding custom music and the whimsy of an epic movie-like announcement congratulating users for consecutive play.

David Karich Insists Quality Interactions Are Key to User Engagement

David Karich has managed software agency FlipZoom for 12 years and knows high user engagement comes from delivering natural, high-quality interactions. To do that, he advises developers to invest time up front designing a quality voice interaction model.

Take Lügenbaron (Baron of Lies), Karich's most successful skill with tens of thousands of customers. Unlike his very first skills, Karich learned that it pays to think through the voice design of the skill before coding. He tested that the voice design concept on friends and family to make sure the interactions felt natural, and then used them to beta test the Lügenbaron skill after development. As a result, he built a highly engaging game that enables customers to have a natural conversation as they play, not talking to a machine.

More tips for delivering a quality voice experience:

4 Principles of Conversational Voice Design

Amazon Alexa Voice Design Guide

Provide the Right Amount of Help at the Right Time

Don't leave your customer wondering what to do next—but also don't make them listen to "helpful" content they don't need.

Raise your hand if you always read the instructions before starting a project or playing a new game. Some of us will toss the instructions and dive right in, while others may take a tutorial approach—read a little, engage a little, read a little more, and so on. And then there are some of us that will read every word before starting anything.

As the developer, your skill should speak to each of these groups by giving the right amount of instruction at the right time. You might use verbose dialogs only the first time a customer invokes a skill, then only on demand afterwards. You might detect when a customer hesitates, then let Alexa offer contextual help. And, of course, you'll need to allow the customer to ask for general or specific help at any time.

Andy Huntwork Offers Insight on Analytics to Improve Skill Instructions

One way to detect if you're offering the right amount of instruction at the right time is by reviewing your analytics. Is the data showing multiple failed commands? If so, that may indicate your customer doesn't understand how to interact with your skill at a particular point.

One developer who faithfully reviews the analytics of failed commands is Andy Huntwork, co-creator of The Magic Door. He added analytics to tell him where players are getting stuck on their adventure.

> *"This lets us know if a riddle is too difficult, or if a scene doesn't handle what users are asking for,"* says Huntwork. *"We know right where the bad scenes are, so we can dive in and fix them."*

As customers become more involved and interact with your skill on a regular basis, they will become more familiar with the rules. Time spent using the skill successfully should be noted and instructions adjusted, so that you do not annoy a seasoned customer.

Gal Shenar Offers Additional Tips as In-Skill Purchases

Gal Shenar has over 30 skills in the Alexa Skills Store and he has plenty to share when it comes to increasing customer engagement. That includes providing just the right amount of help when it is most needed. In fact, he says offering contextual help is probably the most useful and impactful way to improve the user experience in your skill.

In his popular Escape the Room skill, for example, Shenar provides a customer the "long" version of instructions the first time, then a shorter version the next time they are at the same point in the game. He also detects if they get "stuck" or don't seem to know what to do next, providing the instructions again.

> *"Your goal is to make sure everyone can understand how to interact with your skill the way you intend, without boring the customers that don't need additional help,"* says Shenar.

But Shenar takes the idea of "just the right amount of help at the right time" to another level. Escape the Room also offers a hints package as an in-skill purchase. This way, Shenar can offer premium content to fulfill a customers' desire for additional help with some of the more challenging puzzles.

To combat this, give the "long" version of your instructions once, and try something a little shorter the next time the user is in that decision state. If they get stuck or require a reprompt, give them those instructions again until the user proves they understand the voice model well enough to not require the extra guidance. Adding this sort of logic into Escape the Room was extremely effective in increasing the time customers spent playing, as well as the skill rating in the Alexa Skills Store.

More tips about adding contextual help:

Things Every Alexa Skill Should Do: Provide Contextual Help to Guide Customers

Best Practices for the Welcome Experience and Prompting in Alexa Skills

Provide Fresh Content to Keep Customers Coming Back

Customers who love your skill can't wait for the next chance to invoke it. But what happens when they start hearing the same responses, the same stories, or the same results again and again?

Don't let the customer experience go from delightful to predictable. Give your customers a reason to keep engaging. Your goal should be to consistently deliver customers fresh, interesting content on a regular basis. Depending on your skill, you may be able to tie in seasonal content or trendy tidbits of news.

Here are a few examples of how top developers use fresh content to keep customers coming back:

- The Huntworks surprise The Magic Door customers with updated storylines that include elements for various seasonal holidays, not to mention adding all-new ones.

- David Markey constantly expands the vocabulary for Word of the Day, but also provides customers with surprise content for reaching milestones, touting an epic movie-like announcer voice and custom song recordings.

- Oscar Merry adds new inspirational content to Inspire Me all the time, so customers don't hear the same content repeated.

- Adva Levin incorporates feedback from parents and kids into the verdicts and "punishments" pronounced by Judge Lexy, the dispute moderator in Kids Court.

Volley's Max Child Adds Premium Content to Deliver Engaging Experiences Worth Paying For

Premium content is another way to keep your voice experience fresh. Max Child, CEO and co-founder of voice games publisher Volley, leverages premium content to deepen customer

engagement and increase revenue from Volley's skills.

Volley's top-rated skill, Yes Sire, is a medieval role-playing game that offers premium content in the form of an expansion pack. Customers can purchase the expansion pack to get additional scenarios and questions in the adventure story, as well as lengthen daily game play.

"Our customers' reaction to the expansion pack has been extremely positive," says Child. "The people who love playing Yes Sire have always wanted to play more, and it's really exciting to be able to provide them the expanded, narrative experience they want."

More tips for keeping skill content fresh:

Things Every Alexa Skill Should Do: Include a Variety of Responses

Add Dynamic Content to Your Skill to Keep Users Engaged Over Time

Trust. Listen. Improve. Repeat.

One of the best ways to find out what your target audience really wants is to ask or observe them interacting with a voice-first experience. Whether it's an informal focus group or a formal test lab, this is the perfect type setting for inspirational ideas to emerge.

Adva Levin Relies on Focus Groups to Perfect Her Voice Design

When content writer and designer Adva Levin needed inspiration, she brought an Echo device into a roomful of kids who had never engaged with Alexa before to observe their interactions. Focus groups like this allow Levin to test and refine her ideas before building a skill.

> *"It was so amazing to watch how naturally kids interact with voice," shares Levin. "They are so imaginative and natural with it."*

Levin's approach works. The first Alexa skill she developed herself, Kids Court, won the $20,000 Grand Prize plus a $5,000 Finalist Prize in the Alexa Skills Challenge: Kids.

Gal Shenar Insists on Testing and Listening to Enhance His Skills

Gal Shenar is another successful developer who builds multiple test phases and user feedback into his design process. Shenar is adamant that thorough testing and then listening to customer feedback is key to the success of his most popular skills, including Escape the Room.

By monitoring the skill ratings and reading customer comments, he was able to improve his Escape the Room skill from three stars to the current rating of 4.6 stars. Shenar also provides his email address in the skill description so customers can share their direct feedback with him.

These days, Shenar uses the Alexa skill beta test option in the Alexa Developer Console to share his pre-release skills with friends, family, and colleagues. This allows him to get valuable feedback on the user experience before he submits it for certification.

Jürgen Carstensen Applies Customer Input to Refine Winning Skills—And Create New Ones

Storytelling is a major element of Jürgen Carstensen's most successful skills. In his opinion, voice is perfectly suited for exciting a customer's fantasy and engaging their imagination. His storytelling is why tens of thousands of customers continuously return to play Mein Auftrage, a role-playing game where the customer plays the role of a detective to find clues and solve the riddles.

But Carstensen is adamant that what really makes his skills so successful is keeping open the lines of communications with the customers. He encourages customers to leave comments when they try his skills, and he always tries to respond directly to each comment. This valuable input has enabled him to refine the skill, fix problems, and add features Mein Auftrage customers really care about.

More skill testing tips:

Things Every Alexa Skill Should Do: Use Analytics to Make Enhancements

Building Engaging Alexa Skills: Why Testing and Automation Matter

Unit Testing: Creating Functional Alexa Skills

Reach and Delight Customers with Engaging Alexa Skills

The opportunities for Alexa developers are endless. But the success with which you build, grow, and scale your Alexa skills hinges on one thing: customer engagement. Start with the end in mind and design a voice-first experience that evokes emotion. Honor simplicity. Test your ideas. And listen to your customer. Do these things well, and you'll be on your way to creating Alexa skills that customers can't wait to use every day.

Get Started with Voice

Voice Design Guide

Alexa Skills Kit: Quick Start Guide

Skills Templates and Tutorials

Build Engaging Skills with Dialog Management

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