



CONTENTFUL

CUSTOMER ENGAGEMENT AT KÄRCHER

Using headless CMS and Alexa Skills

KÄRCHER DIGITAL INNOVATION HUB

Kärcher has manufactured functional, user-friendly, sophisticated cleaning products since 1935. Kärcher wanted to be the first in its field to give customers the ability to ask questions and control devices using voice control. Their commitment to digital transformation led them to develop Alexa Skills.

They enlisted the Kärcher Digital Innovation Hub and Zoi to tackle the challenge. Amazon provided the framework and hardware, and Kärcher had all the information ready to be embedded into the skills. However, the real challenge was how to handle the content storage, management and delivery.



CHALLENGE

- Make product related content smart through voice assistants and chatbots
- Content storage separated from distribution with easy access for editors
- Ability to update live content in several languages within a published voice skills



SOLUTION

- Develop an Alexa Skill Content Skill
- Develop an Alexa IoT Skill
- Integrate Contentful in the background for content delivery
- Scalable and end-point independent solution



SOLUTION

- Unique user experience for customers powered by Contentful and Amazon Alexa
- Ability to scale and a lot of flexibility to deliver new experiences
- Customers can access up to date information and interact with Kärcher products via voice control
- Scalable and end-point independent solution

BUILDING ALEXA SKILLS WITH CONTENTFUL

Content models need to meet the standards of the voice provider and remain accessible to editors. If the models are not built correctly, Alexa cannot process prompts nor return the requested information. Editors need to publish content in several languages and have long-term, easy access to it, especially if updates are needed.



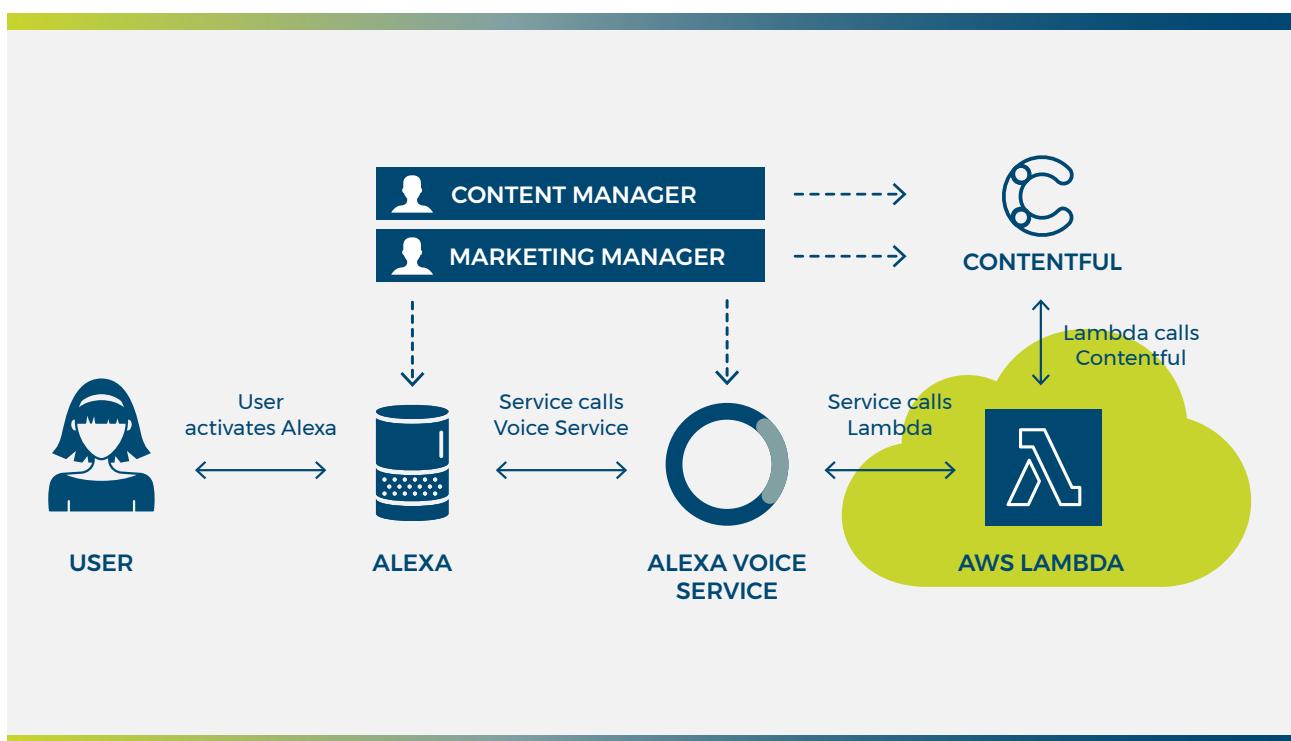
The integration of Contentful reduced the complexity of our architecture due to the excellent API and technical documentation in combination with the convenient backend for data modeling.

— Jens Hildenbrand - Program Portfolio Manager
E-Commerce & Customer Journey at Kärcher

Zoi handled the market research with a cross-functional team. After a series of reviews, they chose Contentful for its flexibility, security and user-friendly interface to solve the content challenge. The team began by building a proof of concept before moving on to creating a content model for the full-scale project. After building the content model, Zoi developers were able to work simultaneously with Kärcher editors. The developers connected the GraphQL Content API and the Alexa API, which let editors manage voice content in the custom content model through the Contentful web app. Editors began rewriting and condensing content. For voice assistance, brief statements are preferable (it's far easier to read long sentences than listen to them). With their content stored in Contentful, iterating was painless. The team ran through three additional iterations of the content model with user testing.

Working this way enabled them to continually make any necessary adjustments. They learned helpful, unexpected information this way. For example, slot values can only be used once. Using the same word multiple times caused the Alexa to stall.

SOLUTION ARCHITECTURE



ASK ALEXA FOR KÄRCHER CLEANING TIPS AND CONTROL DEVICES VIA VOICE

With Contentful, Kärcher developed and released two Alexa Skills. Want to control the irrigation in your garden or find the right high-pressure washer? It's simple. The first Kärcher Alexa Skill allows you to control the Watering System Duo Smart Kit with Alexa. And, discovering the perfect Kärcher product or cleaning advice has never been easier with the Kärcher Info Skill.

Ease of localization in Contentful makes scaling across markets and languages simple. The Control Device Skill is now available in four markets and three languages: German, English and French. The Content Skill is also available in several markets and in two languages: German and English. Their content can now be reused chatbots and the Kärcher IoT-enabled machines.

KEY LEARNINGS

Test repetitively with real people. Include feedback from users testing the product from the beginning of development. This process ensures your product remains user friendly and solves actual challenges.

Voice systems are built on different content structures than traditional apps and websites. They can also be used in chatbots and help pages. Limiting the content length is critical.

Minimize complexity in your content structure to reduce barriers between editors and content.



ABOUT ZOI

We are Zoi - an IT consulting company for digital innovation with a holistic approach and a true start-up spirit. We develop complex IT projects without building castles in the air. We start from zero, because every new project is an empty page which we fill with our know-how. We find solutions for »change« - and offer our customers enormous scaling potential. Hands-on, at eye level, not always conventional - but always implementable.

CONTENTFUL IS KING!

Content creators and content administrators are faced with the challenge that more and more content is to be utilized on different channels. We have been working with the headless content management system Contentful for several years. Location independence, personalization and flexibility play just as important a role here as user-friendliness - because content is only really fun when its administration and processing is as easy as giving away likes.

ZOI AS INTERFACE BETWEEN CONTENT AND DELIVERY

Fragmented IT landscapes with grown structures cannot always completely answer the challenges around digital customer experiences. Often new powerful tools and abstractions are required to intelligently realize digital and analog customer experiences as hybrid models. Digital stacks that integrate smart platforms with services can accelerate implementation without losing flexibility and agility. Contentful is a complete cloud-native solution and delivers an app framework based on building blocks. The ability to reuse the same content in multiple locations is just one of the many benefits of this headless CMS. With Contentful you can create and manage content and integrate it perfectly into digital solutions.

[More about Zoi](#)



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