



What's In a Name? Why Wake-Up Words Matter

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What is the first piece of information we usually learn about a person we've just met? Their name. Even in today's increasingly virtual world where we're often "meeting" for the first time without actually seeing each other, a person's name can invoke initial associations and perceptions based on our knowledge of the world. In the world of voice assistants, names are just as important, as they often serve as the wake word that users must utter to start their interaction with the system.

As such, creating a name and persona for your voice assistant is somewhat of a work of art. It could be compared to working on a book or a movie character: their names tell us a lot, even before we get to know their stories. Then, we learn more about their character through dialogs and interactions with other characters. The words they choose, the way they start communication, whether they use more affirmative or interrogative phrases, how much they speak – all of it can help us get to know the personality of the character better and understand how their name perfectly encapsulates who they are. This process mirrors how the brain works: we strive to simplify new information based on our associations, past experiences, and common knowledge and apply that understanding to our interactions with the world. This is why companies spend months searching for the best wake-up word (WuW) for their voice assistant – it has to invoke associations that are in line with their brand identity.

The process of choosing and creating the WuW is influenced by two factors: brand vision and the personality of the brand's end users. Can the target audience be defined as young, tech-savvy, and dynamic? A short, international name and a chatty, friendly persona might be your choice. Does the company want to demonstrate their long history and company culture to their customers? A voice persona that acts as your loyal butler might fit better here. Various user experience practices – stakeholder interviews, end-user interviews, UX field studies, design thinking workshops, and more – bring clarity and real-world feedback to these decisions.

For example, names like Margaret and Alexander will create a completely different persona in our imagination than names like Leslie or Alex. The former will probably invoke a character of an older person that uses rather full sentences, acts more distantly, and expects us to speak more respectfully to him or her. While we might not expect short and snappy dialogs, we might feel she'll have our back on finding the shortest route home and set the right temperature in case we feel a little too cold while driving. On the other hand, the latter names and personas give us the impression that the assistant can find a vegan cafe with moderate prices when we are driving back from a grocery store and get a little hungry. She might even entertain us with a joke on the way. But, at the same time, we might unconsciously decide she has limits to her capabilities. Depending on the brand strategy and the image of the company, one can be a better option than another – Margaret will demonstrate a character of a loyal assistant that is always there for you to make your driving experience as comfortable as possible, while Leslie will be a chatty companion that will know what a third-wave coffee shop is.

Another challenging aspect for an OEM is to choose between defining the brand name as their WuW or finding a new, human name for it. While many brands go for the first option ("Hello Volkswagen," "Hey Audi," "Ok, Ford"), others choose a new name, such as "Hi Nomi." Opting for a brand name as a WuW might be considered a safe option, as end-customers know the history of the OEM and its brand values, which in turn define the voice assistant persona in a particular way and ensure it does not feel odd to refer to your car by its brand name. However, finding a new name for the voice system can help create an engaging, more personalized experience for the end-users.

In some cases, a WuW often comes with a particular greeting before the name: think "Hey Mercedes" or "Okay, Google." The greeting choice also transmits specific personality traits of the voice persona chosen by the brand and can be compared with how these phrases would be used in a human-to-human interaction. For example, "okay" pronounced before our name gives us a hint that there is a task coming afterwards.

Moreover, some OEMs offer a [customizable WuW](#) for their end-customers – users can define a WuW or a wake-up-phrase themselves (either completely new or picking up from pre-defined list), choosing maybe a funny phrase or a familiar name they like. While this can be an attractive added feature of an in-vehicle voice assistant, it does bring a number of constraints and questions: how free can users be when choosing a WuW? Should there be a list of words and phrases that will be considered off limits (offensive words, name of other car brands, etc.)? Should there be a limit on the length of the WuW or a phrase? How can the customizable WuW be trained enough to ensure a qualitative recognition in any situation? At Cerence, we help OEMs bring this feature to life in the best way, defining answers to these questions individually based on the brand, voice assistant persona, and technical specifications of the system.

Apart from designing WuWs, Cerence also offers expert advice and technical tools to determine whether a chosen word makes a good WuW. Cerence experts determine whether its length and phonetic richness makes it suitable as a WuW, or whether there's a risk of confusability with common words in a language.

Defining a WuW or a persona can seem complicated, but it is a very engaging process. To learn more about how we are using our UX expertise and creativity to help OEMs design their voice assistants, visit <https://cerence.com/cerence-products/professional-services>.