

Shifting Your Marketing Strategy

IN A VOICE-FIRST WORLD



RED DOOR INTERACTIVE



Voice technology has been rapidly changing, shifting the way users search, interact, and consume. And because voice is becoming more and more integrated into our lives, it's important for marketers to understand how it works, and how it might affect their brand and digital presence. In this whitepaper, we'll discuss where voice technology came from, where it is now, and how you can prepare for the next few years as it continues to evolve. We'll then share the longer-term future projections regarding voice and artificial intelligence, touching on the social and psychological implications for the next generation of consumers.

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**VOICE IS
THE WORD**



Voice search and virtual assistants have both become buzz words over the past year, and are already starting to transform the digital ecosystem. However, while these two evolving technologies are related, they are not the same thing.

A BRIEF GLOSSARY ▶

Voice Technology: The technology that allows a computer to recognize human speech. This includes the recognition of phonetic sounds as different words and natural language processing, or the interpretation of the sounds as speech.

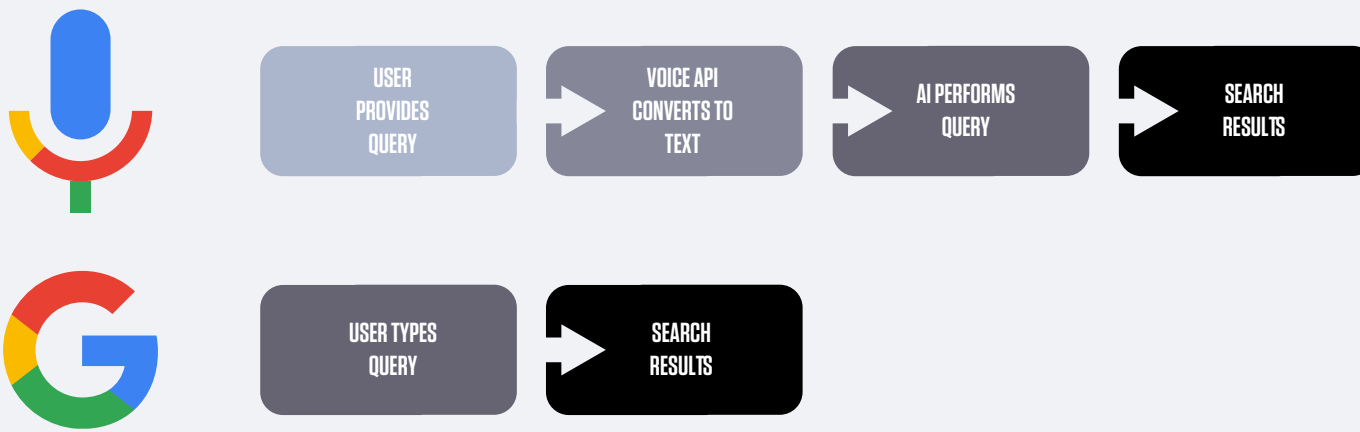
Voice Search: An application of voice technology that allows people to search by saying queries out loud instead of typing them.

Voice Assistants: An application of voice technology that helps users by combining voice recognition, natural language processing, and speech synthesis. Voice assistants are built on artificial intelligence and machine learning, and include Siri, Alexa, Google Assistant, and Microsoft's Cortana.

VOICE IS THE WORD

In short, voice search is an application of voice technology that can be accessed through a voice assistant. You can ask Siri or a Google Home to perform a search for you with a verbal command. Or, you can navigate to a search engine site like Google on your desktop computer or mobile device, and click the microphone to say your query rather than type it on a keyboard.

Note that search engines make up just one of the databases that voice assistants can connect to. The extent of information accessible by this technology, both public and personal, is still evolving, and until voice search becomes completely absorbed by voice assistants, we won't understand the full impact on our lives. In that future, a user might no longer consciously "do a Google search," but rather have a conversation with a virtual assistant, which in turn will determine the right resource for the sought-after information.



CURRENT LANDSCAPE

Over time, users have adapted to the way search engines interpret information, learning how to input queries in a way that will return the most relevant results. But, as humans, this isn't how we naturally speak.

In 2002, Google released their Voice Search/Search by Voice product, allowing users to search on their mobile and desktop devices by speaking instead of typing. Now, there is an array of devices and tools that help users speak to search, and over the past several years, queries have become more conversational in nature. We've seen a growing focus on the importance of topic relevance, in place of isolated, specific keywords. These long-tail search terms not only provide more context for engines to work with, but also help content creators and marketers understand the deeper, more specific needs that searchers have.



VOICE IS THE WORD

One way the digital world is shifting to accommodate these more conversational queries is the development of apps for voice devices. For instance, Google's voice assistant technology is based on a keyword invocation to start or connect a user to a specific application, without the need to install it. Amazon voice devices also allow apps to be used on their hardware, however they do require installation of the app prior to using it. Both technologies are working to accommodate the conversational relationship users are building with their devices, and making the transference of information more seamless.

To learn more about creating software for voice assistants, here are some resources for developers:

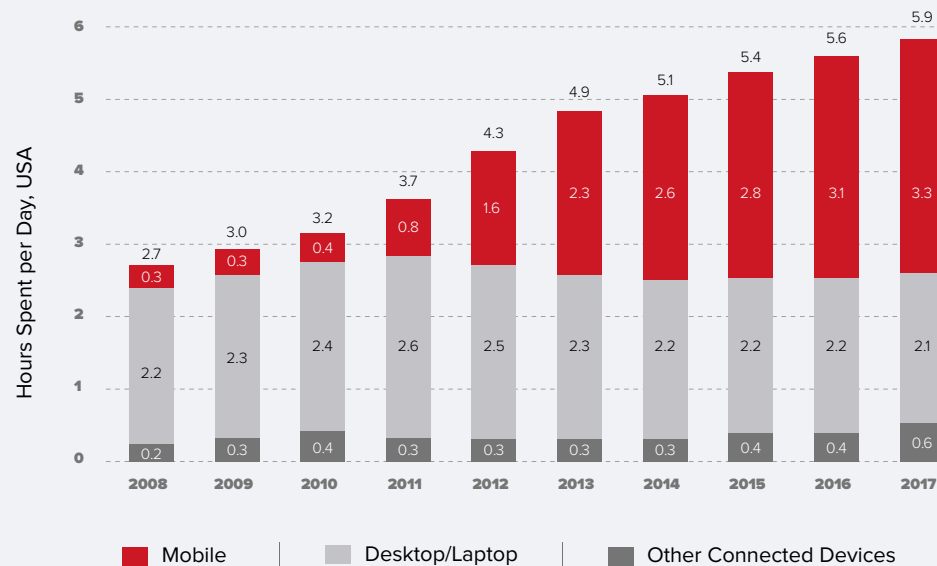
- <https://developers.google.com/actions/>
- <https://developers.google.com/actions/extending-the-assistant>

AMAZON AND GOOGLE ARE SLUGGING IT OUT WITH ADVANCES IN TECHNOLOGY AND DEEP INVESTMENTS, WHILE APPLE AND MICROSOFT ARE FALLING BEHIND IN THIS RACE FOR DOMINANCE IN THE VOICE-FIRST WORLD.

VOICE IS THE WORD

What will become of this current landscape? In 2016, Google announced that 20 percent of mobile queries were voice searches¹, and it is estimated that by 2020, 50 percent of browsing sessions will be voice-conducted². When we consider the future impact of voice, we think back to when mobile search first arrived. It was initially assumed that the rise of mobile searches would reduce the amount of traditional desktop searches, but instead, it gave users more opportunities to search in ways they couldn't before.

Daily Hours Spent with Digital Media per Adult User



While the number of desktop searches has remained generally the same, the overall amount of time spent with digital media has more than doubled since 2008. All signs point to voice search having a similar effect. Rather than taking away searches from desktop and mobile, voice introduces entirely new opportunities for how searches can be conducted, and we expect that the amount of time users spend with digital media will only continue to climb as they continue to seek out these voice-optimal experiences.

1. <https://searchengineland.com/google-reveals-20-percent-queries-voice-queries-249917>

2. <https://www.gartner.com/smarterwithgartner/gartner-predicts-a-virtual-world-of-exponential-change/>

The Impact of Voice Technology:

NEAR-TERM PREDICTIONS

THE IMPACT OF VOICE TECHNOLOGY: NEAR-TERM PREDICTIONS

Although we are still in its early-adoption phase, we are already anticipating a big shift in the digital landscape as voice technology rapidly evolves and unfolds. What will be the overall impact on the digital world? The offline world? Let's start by discussing the changes in the foreseeable future, and what actions brands should take to prepare themselves accordingly.

WILL VOICE TECHNOLOGY KILL THE WEBSITE?

On the whole, web browsing and web-based search aren't going away. But some businesses will find that for some of their users, information that was once accessed by screen will instead be accessed by voice. Voice technology won't kill the website, but rather play two roles in its future: first, as an integrator, offering another communication channel that will tie together consumers' experiences across screens.

Secondly, voice will be an augments, increasing overall digital engagement as it picks up the "in-between" searches—those that consumers would conduct, if they weren't considered too unimportant to be worth the hassle of typing in.

THE IMPACT OF VOICE TECHNOLOGY: NEAR-TERM PREDICTIONS

Voice technology and SEO

As mentioned earlier, the rise of mobile search did not drastically reduce desktop searches as first expected, but simply gave users more opportunities to search. And the impact on SEO was noticeable. The popularity of the phrase “near me” exploded as users began performing searches while running errands and going out, changing local SEO dramatically. Marketers became interested in optimizing for mobile search, and SEO tools evolved to provide comparisons between mobile and desktop search rankings.

This is likely an accurate model for the future impact of voice on SEO. Optimization tactics won't abandon desktop or mobile in lieu of voice search. Instead, they will adapt to accommodate the innovations uncovered by voice searchers who are discovering new ways to utilize search engines for their own needs. With voice search query formats, SEO must develop new approaches to keyword research, on-page optimization, and technical SEO, and those evolutions must continue as voice search grows.



THE IMPACT OF VOICE TECHNOLOGY: NEAR-TERM PREDICTIONS

As we begin to adapt to the voice-first mentality, brands need to start by putting themselves in their consumer's shoes. Would it be useful to get the information that your website offers via a voice command instead? For consumers, voice technology's near-term future will be about reducing pain points. Some questions, like, "Is there a coffee shop near me that's open right now?" or, "What time does the library close?" are natural fits for voice search's current and near-term capabilities. Local search queries will be prominent, so local businesses should prepare by looking at current keyword rankings and volume, seeing what is driving traffic to their site, and determining if those queries are more easily served through voice-search rather than browser-based search.

If you find that you do have content that is a good fit for voice-based search, you then have to optimize for voice. Voice assistants are built on artificial intelligence (AI), designed to interpret a verbal query then predict what information from what data source will provide the best response. This prediction element highlights a key pillar of SEO: search intent. Thus, you will want to make sure that your website is best optimized for voice assistants to reference as a data source. It is still SEO, but with a voice-based approach.

MAKE THE CONSUMER'S LIFE LESS ANNOYING.
SAVE THEM TIME AND EFFORT, EVEN FOR
SOMETHING AS SMALL AS PULLING THEIR
PHONE OUT OF THEIR POCKET AND TYPING
INTO A SEARCH BAR.

THE IMPACT OF VOICE TECHNOLOGY: NEAR-TERM PREDICTIONS

Voice technology and website content development

Brands that are considering a new website development project, or want to update their site, should take into consideration that the voice-first world is coming at us faster than the mobile-first world did. Instead of thinking about building a website, brands should plan to build a digital marketing hub. A digital marketing hub allows for the entry of content in a single place, providing the controls and workflow for frictionless publishing by content creators. And, because content is at the heart of this hub, both Content Strategy and Content Engineering will play a vital role in deciding:

- What content goes into the hub
- How the content is entered or pulled into the hub
- How the content is structured for consumption across all channels

Today, content on your website is consumed by both humans and robots—and these robots are not just search engines. In this voice-first world, you must provide content in multiple formats: not just in web page format, not just with the right H1 tags, but available via feeds, available in microformats, available for import, and discoverable to voice engines. The more available our content, the more value we will get from it.

THE IMPACT OF VOICE TECHNOLOGY: NEAR-TERM PREDICTIONS

Content may still be king, but context is queen, and voice is just another context that needs to be planned for. Putting voice at the top of the list for consideration when planning a digital marketing hub ensures compatibility and access. However, keep in mind that planning for conversations is more than just headlines and body copy. Providing long-form, structured responses to questions allows robots to find the answers the consumer is seeking. It's not just keywords. It's alerting the voice services that your content answers specific questions, using techniques such as schema, microdata, and targeting featured snippets.

VOICE REGULATION

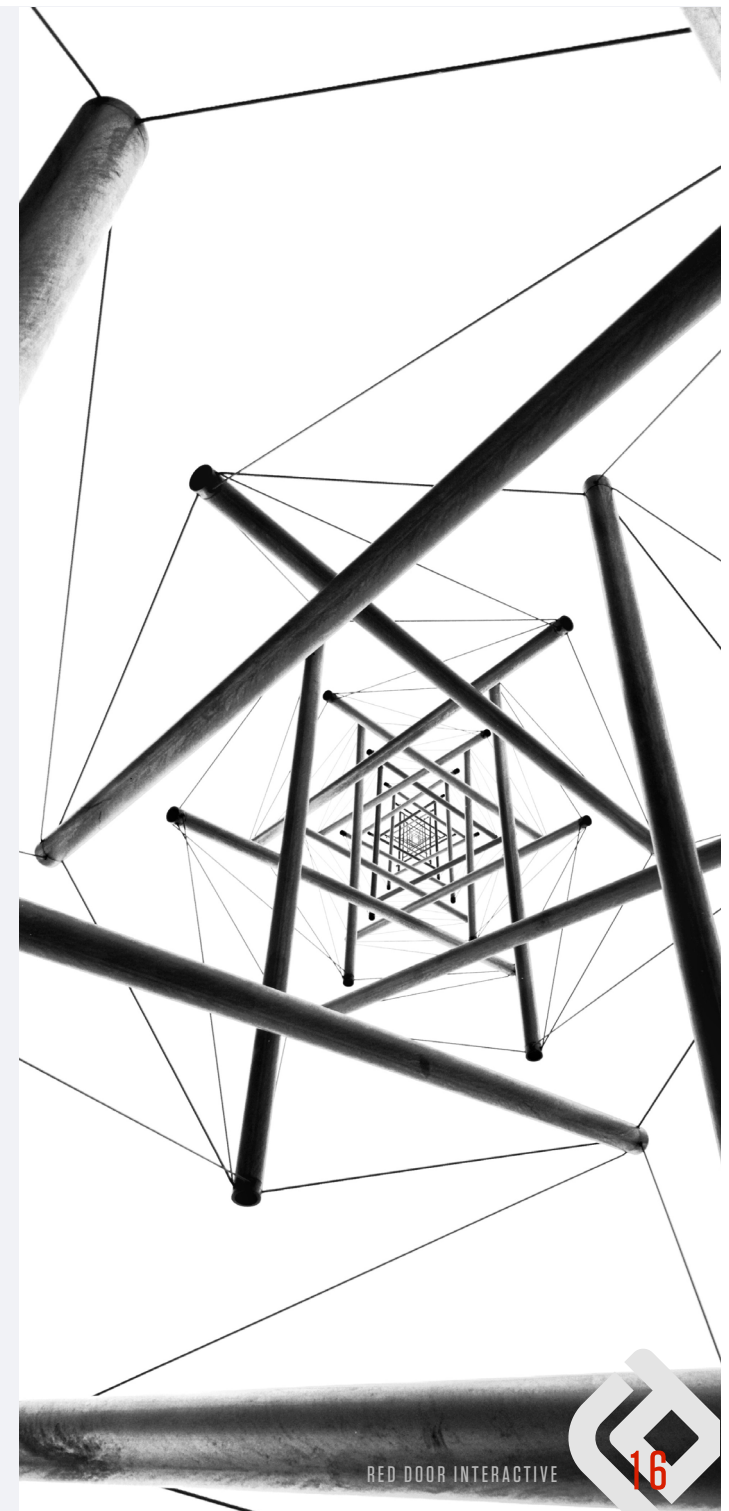
What can we expect regarding regulation? It will likely exist, at least. That is notable, as law has struggled to keep up with privacy concerns and tech titans vying for power until very recently. We'll focus our attention first on privacy and data collection, followed by a discussion of voice and commerce.

THE IMPACT OF VOICE TECHNOLOGY: NEAR-TERM PREDICTIONS

Voice, data, and privacy

Voice technology, in learning to better predict what users say and want, requires voice data. Voice devices are always listening, essentially waiting at the ready to be prompted. Prompts are then collected in the cloud to be crunched and sifted through in the machine learning process as the AI improves. In short, voice needs to listen to, record, and transmit user data. This naturally raises concerns about data security, what data can be recorded, and who controls it.

Regulators are concerned about what parameters can be set to safeguard consumers (potentially from themselves). Are voice assistants, as extensions of the companies that created them, protected under the First Amendment? Can users expect privacy in their communication with voice assistants, as protected under the Fourth Amendment? These are questions currently being debated and argued in courts of law. We will see how the dust settles, but these are significant debates as we figure out how voice fits into our lives.



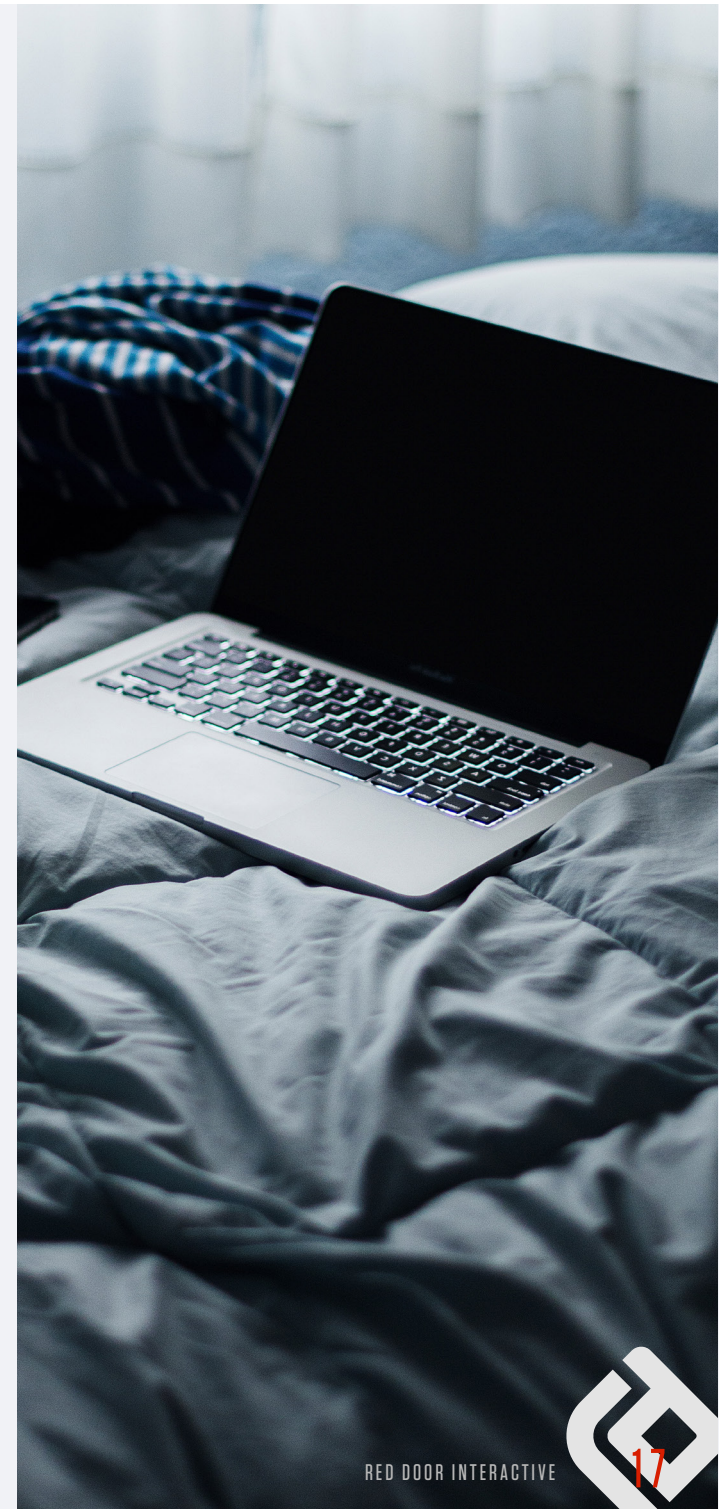
THE IMPACT OF VOICE TECHNOLOGY: NEAR-TERM PREDICTIONS

Voice and commerce

It's clear that Google and Amazon each want to serve as the gatekeeper between brands and consumers. If they can own access, they can own consumers' buying habits, restricting which entities and brands reach consumers via voice.

The potential for a select few online retailers to truly dominate raises questions about the ongoing effectiveness of antitrust rules. In China, Alibaba's competitors have more or less teamed up in order to compete with the retail giant. We see similar actions from some of Amazon's competitors, like Walmart offering products through Google Home. But is that enough? Amazon controls both a significant amount of the retail market and consumer data, which is a powerful combination. Regulators will need to keep pace with technological advances to protect both market competition and consumer privacy.

It's an open secret that Amazon patented "anticipatory shipping" in 2013. The right cocktail of consumers' wallet share and data would make this both possible and worthwhile for the brand. Alexa is a step toward making it possible—but is that desirable? Time will tell.



THE IMPACT OF VOICE TECHNOLOGY: NEAR-TERM PREDICTIONS

WILL VOICE TECHNOLOGY KILL DIGITAL ADVERTISING?

Truthfully, marketers will be hard pressed to use voice as an effective advertising medium. In many ways, voice technology and advertising are opposed. As noted previously, AI is about prediction: taking information we have now, and using it to fill in gaps where we don't have information. The ideal, end goal is to anticipate consumers' wants and needs to the point that they provide accurate suggestions and products before the consumer even knows they want them.

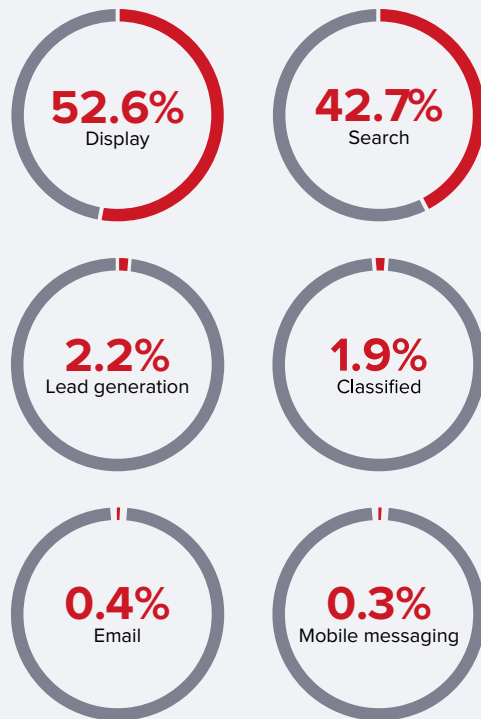
The “interruptive advertising model” as we know it—TV ads, radio commercials, pop ups, screen takeovers, display advertising—does not translate well to voice technology. By its current pattern, advertising would add friction to a voice experience premised on removing friction. If a user wanted to know the capital of Alaska, but then had to endure an Alaska Airlines voice-based advertisement to access that information, it would not be well received. When we talk to our devices, we do not want to be addressed by an advertisement as the cost of entry.

This matters a lot, because voice technology will divert attention away from screens, and subsequently affect search and display advertising, which together garner the large majority of digital ad spend. Fewer eyeballs mean fewer impressions, which means less engagement.

THE IMPACT OF VOICE TECHNOLOGY: NEAR-TERM PREDICTIONS

Digital Ad Spending Share, by Format

US, 2018, % of total



Source: eMarketer, March 2018

So, what should marketers do? By and large, our perspective is that voice will not be as useful as a viable advertising medium, but there are a few scenarios that may make sense.

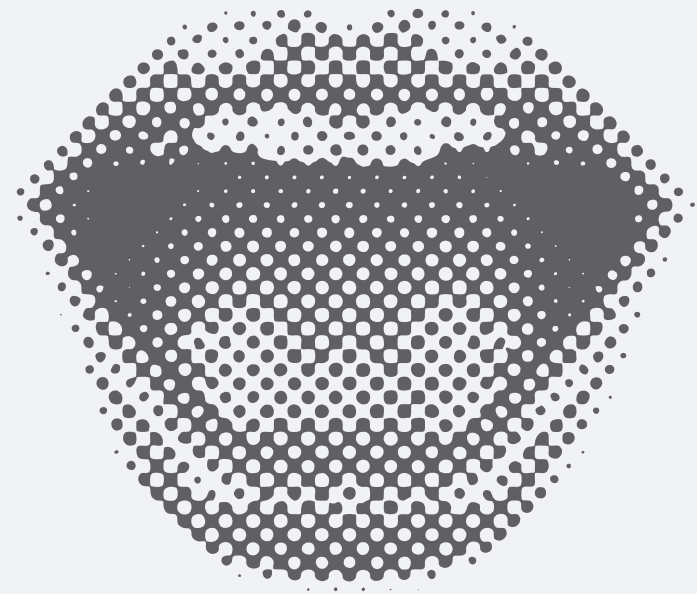
The most straightforward case hones in on voice assistants, and melds prediction with paid recommendations. If a consumer tells Alexa to order more paper towels, a brand can pay to be the suggested paper towel brand of choice. This could work, but maybe not for the long term: if one brand does it, other brands will, and the tactic will quickly become grating with the higher and higher volume of suggestions.

Consumers buy based on habit, and if they're continually receiving suggestions for brands they don't really want, they're getting a subpar experience.

THE IMPACT OF VOICE TECHNOLOGY: NEAR-TERM PREDICTIONS

With that said, however, this paid recommendations tactic has potential in categories with less overt loyalty, where consumers just don't care as much about brands, and it may be worth the risk for challenger CPG brands looking to break through consumer habit.

More likely, though, is that voice as advertising won't hold up, making it a touchpoint that is difficult to monetize. What remains to be seen is how voice will affect high-quality, content-based websites—news, finance, sports—as people adopt it, and as the technology improves. We may well say, “Google, read me today's stories from my favorite news sites about Donald Trump.” Will that response be accompanied by an audio ad? It's unlikely that people will stand for that. If features like this take off and they can't garner ad support, those websites that are more visually based in content or that can retain traffic will have more expensive advertising, as more brands will be vying for limited visual ad space.



THE IMPACT OF VOICE TECHNOLOGY: NEAR-TERM PREDICTIONS

Maybe voice isn't naturally viable as an advertising medium. But consider how voice interaction could genuinely augment the touchpoints on your consumer journey, adding value to an experience or removing friction along the path to purchase. Voice will not kill advertising. Instead, it will change the value of different messaging touchpoints. We'll have to watch closely as consumers adopt voice technology to see who adopts it and how. Some brands will find that voice siphons off engagement with their display advertising—making other digital and traditional touchpoints more valuable to them.

And this opens up more opportunities. Brands might suddenly find themselves with direct access to their voice-loving consumers. What could you provide them via voice that's truly useful and worthwhile? What could you do to save them time and effort in their purchases now and after?

Ultimately, the goal is to make it so easy to buy what you offer that you become their habitual choice. In the near term, this might manifest itself in the form of chatbots and Skills & Conversation Actions that could cut down ordering and reordering to one step. The dark truth: people don't have to care about your brand to be loyal. Be easier to buy than the competition, and you stand a greater chance of retaining consumers.

The Ramifications of Voice Technology:

LONG-TERM PROJECTIONS

THE RAMIFICATIONS OF VOICE TECHNOLOGY: LONG-TERM PROJECTIONS

We've provided a view into the next few years of voice technology, digging into its implications for your digital presence, and advertising as a whole. But what about beyond that near-term horizon? Where are we going? Voice technology and AI will continue to improve, and rapidly. So, in this next section, we venture a bit into futurist speculation, to consider what is to come.

HOW HUMAN IS TOO HUMAN?

By now, you've likely seen Google's [demo](#) of its voice assistant making calls on its user's behalf. Emotive voice AI is still in its infancy, but Google displayed the potential for its products to replace humans in daily interactions. However, the demo also revealed that there is still a significant gap in voice AI's mimicry of humanity.

While Google Assistant successfully maneuvered an attempt to book a reservation at a restaurant, it does so in a fairly non-human manner. It perceived nuances and misunderstandings in the conversation, but couldn't fully emote to recover from them, or get flustered as a real human would.



THE RAMIFICATIONS OF VOICE TECHNOLOGY: LONG-TERM PROJECTIONS

In short—it's not awkward enough to be a person. It's simply seeking a satisfying end to the encounter for its representative user.

For now, Google Assistant is distinctly artificial. But, will that always be the case? Will there be a day when technology is indistinguishable from a human? Google CEO, Sundar Pichai suggests that indeed, this is Google's intention: "Our vision for the perfect assistant is that it's naturally conversational; it's there when you need it so that you can get things done in the real world. And we're working to make it even better."

Google recently announced that its voice assistant will include a disclaimer when it makes calls, stating that it is, in fact, not human. This opens a line of questions that has a tremendous impact on how we interact with technology. How human is enough for voice AIs and personified emoting technology? What are the design and cultural ramifications of maintaining a distinction between AI and human, or on developing emotive expression to the point that AI and humans become verbally indistinguishable? Most importantly: what are the human consequences?

THE RAMIFICATIONS OF VOICE TECHNOLOGY: LONG-TERM PROJECTIONS

If we assume that this technology is achieved and adopted in the relatively near future, then there is the potential for people, for one reason or another, to opt out of an entire suite of situations where they would normally need to interact with others. In the earlier example of a voice assistant booking a reservation at a restaurant, not only is the person on whose behalf the reservation is being made removing themselves from the interaction, but the person on the other end is subjected to working with a computer instead of a human. What are the ramifications of that? How dehumanizing is it to take interactions with people and swapping them out for interactions with AI?

And that even assumes that AIs and humans are still distinguishable. What happens when we advance artificial cognition and emotive expression to the point that AIs do, in fact, become awkward enough to be a person? If we're asking how human is enough for the future of AI, perhaps we also have to ask: how human is too human?

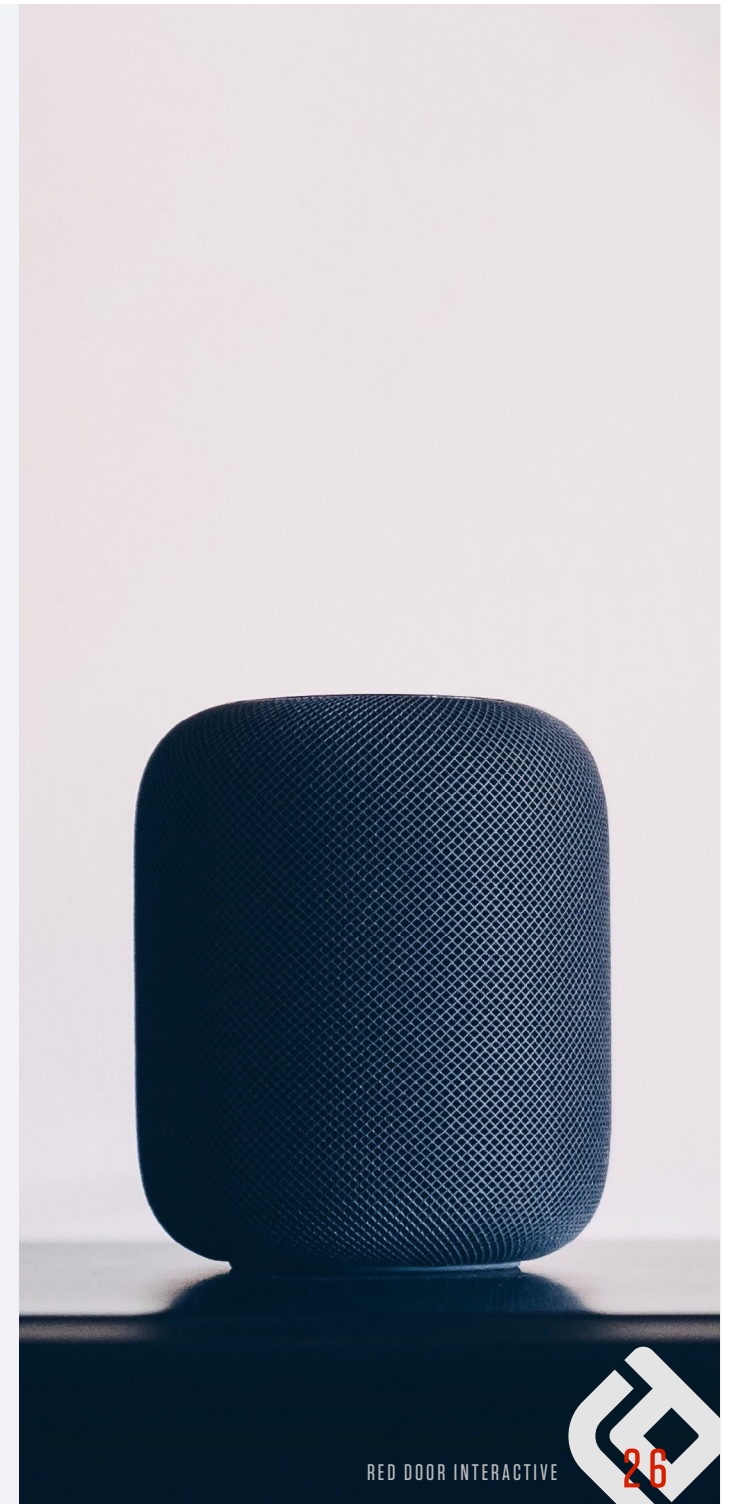


THE RAMIFICATIONS OF VOICE TECHNOLOGY: LONG-TERM PROJECTIONS

THE GENERATION OF VOICE NATIVES

Much has been made about digital natives over the last decade: those younger Millennials and Gen-Zers who grew up never having not known technology at their fingertips. Rapid advances in voice technology will soon usher in the next iteration of this phenomenon: voice natives, or children who will grow up never having not asked voice assistants and personified AIs for the answers to their questions.

This orientation toward technology is key. Even digital natives imagine themselves in control of technology: it's a tool, it's subordinate to us as the user. Technology makes our lives better, easier. But voice assistants and AI alter that dynamic. Instead of being required to use a computer as a tool to find the answer, we will verbally ask a personified technology for an answer it automatically "knows." The technology is dominant in that position, which has an interesting effect on perception of power and intelligence.



THE RAMIFICATIONS OF VOICE TECHNOLOGY: LONG-TERM PROJECTIONS

Early research on kids and personified technologies point to what's to come. MIT's "[Hey Google, is it okay if I eat you?](#)" study of children's interactions with these AIs belies the already murky relationship and understanding that children have with voice assistants. One key piece of the research focuses on children's perceptions of intelligence: they see AIs as being smarter than them, mostly based off their access to information.

That feels like a dangerous notion to imprint onto young minds. To children, these personal assistants are a sort of in-between humanity, but one that may soon always have the right answer and "know" more than they do. However, further in the study, children began testing the limits of AI, with one young girl asking, "is it okay if I eat you?" The child sensed that this Google voice entity was not human, yet not classically inanimate, and subjected it to a six-year-old's Turing test to probe its capacity for being.

THE RAMIFICATIONS OF VOICE TECHNOLOGY: LONG-TERM PROJECTIONS

Google isn't unaware of the implications that come with children's interactions with this new mode of intelligence.

A concern was raised that kids are becoming too demanding, learning how to get what they want just by saying, "Hey, Google." But more of an issue than children learning to be bossy—are kids learning to be subordinate to technology? Depending on it too much to give them what they need?

We will have to deliberately educate our children about what AI and voice technology are, and actively instill self-confidence into the next generation of voice natives as they learn how to interact with the world.





CONCLUSION

The immediate impact of voice is already upon us. While SEO, websites, and advertising as a whole won't go away, priorities will necessarily shift, and marketing strategies will have to adjust accordingly. But while this change in the digital landscape brings new opportunities to meet consumers in new ways, there are still a lot of questions regarding the future of voice, and how it impacts the future of humankind.

Stay in the dialogue—[reach out](#) to us if you'd like more information on any of the points covered in this whitepaper, or would like to chat about the continued and growing impact of voice technology on our lives.