

THE
Humanization
of Search



A New Landscape for Search

We're in the midst of an era when personal technology has seemingly limitless capability.

Whenever we desire, we can draw on any number of devices to provide instant information or help us make a decision. Speed and efficiency are only part of the new paradigm—we have also grown to expect these informational pathways to be accessible everywhere we go. This combination of instant information, efficient delivery, and increased accessibility is leading to a human society that's "always on." This technological shift has had a particularly transformative effect on search. Namely, the consumer search experience is all the more fluid now that technology is woven so tightly into our everyday lives.

Search is becoming more organic and more intertwined with our daily activities. Search functionality is not only baked into the devices in our pockets, but also the cloud-connected game consoles and smart home devices scattered around our living rooms and kitchens. In fact, no matter what device we're using at the moment, we expect to be able to simply ask a question or give a command and get a result or an action in return without disruption to the experience. And as people's expectations of technology grow, the gap between the experiences they have with search and those they have with the real world continues to narrow.

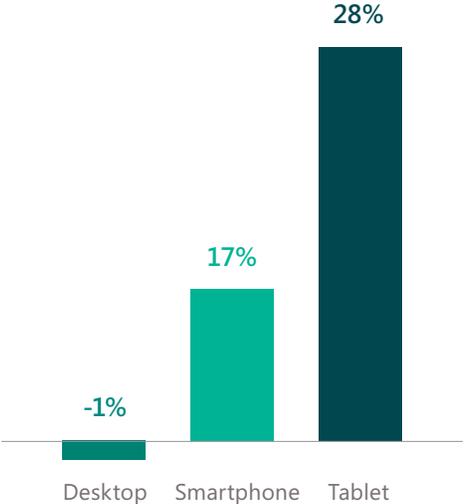




A consumer may begin the discovery phase of making a purchase by poking around inside a mobile app, move to the research phase by enlisting a digital assistant like Cortana, Google Now, or Alexa, then commit to a purchase in a browser experience. Consumer decision-making happens on small screens and big screens, on physical keyboards, and with spoken commands.

And wherever consumers are interacting, they expect a universal experience that goes beyond search and understands them in a personal, intimate way.

Year-over-year search growth, by device.



Year-over-year search growth, by device. From comScore's "2015 U.S. Digital Future in Focus" white paper, Q4 2014.

Humanizing the Search Experience

As consumers evolve the way they interact with technology, search is adapting to better understand user behavior.

This adaptation can be marked by three key trends that explain how search is becoming a more human experience.

- Search platforms are now allowing users to express themselves in more natural, intuitive ways, through voice-powered searches and a more natural-language approach to typed searches.
- Search is more accessible than ever, as it has become an integral part of a new ecosystem of connected devices. From the ubiquity of the smartphone to the proliferation of cloud-connected gadgets in the car and in the home, search can now deliver information to users wherever they happen to be. It's also more pervasive and entrenched in our daily lives, serving as a bridge between the digital world and our real-life human experiences.
- Search is better at understanding human intent powered by the myriad of data sources available today. This preponderance of data allows search platforms to deliver more actionable and personal information to users.

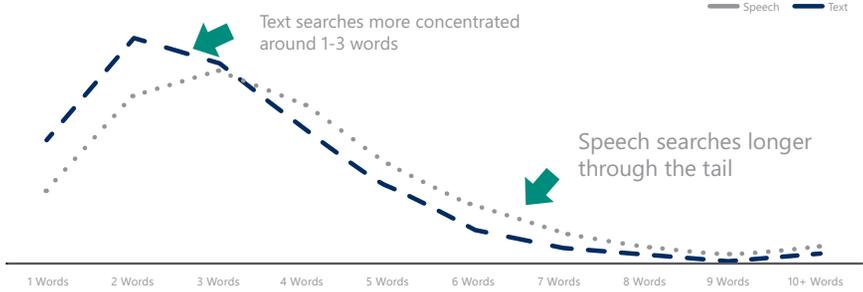




New user behaviors are shaping the language of search in significant ways.

Spoken searches are growing more common, and these searches use a more natural syntax—the phrasing and sentence-style construction is conversational and more closely matches the patterns of human speech. This is a departure from the terse, keyword-based searches of seemingly unconnected words that users have typically performed in desktop browsers. Query analysis at Microsoft shows that spoken searches are longer, whereas text searches are more concise. A text query is typically 1 to 3 words, but a spoken query is 3 to 4 words or longer, due to the more conversational nature of human speech.

Voice search queries are longer than text queries

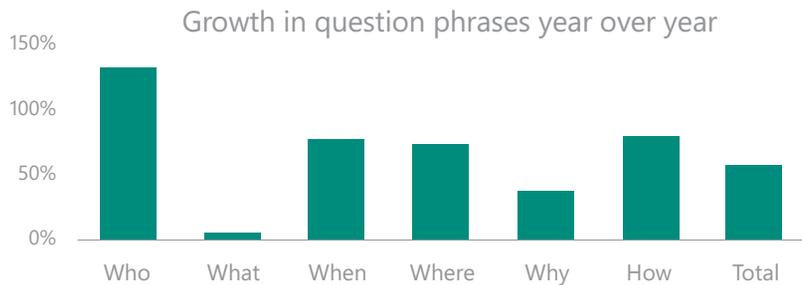


Internal Microsoft data, 2015

This is a direct result of the use of human speech patterns.

For example, consumers are now more inclined to ask a question (“Who is the best batter on the Yankees?”) or issue a clear command (“Show me prices for hotels in Honolulu”) when performing a spoken search. Although longer in words, spoken language connects people to what they’re searching for with an immediacy, convenience, and intimacy that text-only search historically couldn’t provide. With these new methods of participation, search is able to discern what information the user is seeking and what the intentions are with greater precision, making search better equipped to live up to the user’s expectations.

Question phrases are more likely to be voice search

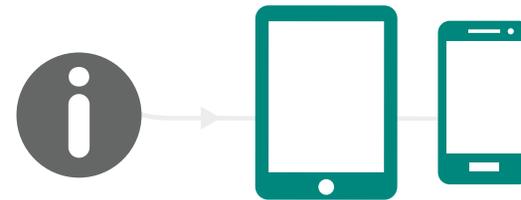


Search Engine Watch, Jason Tabeling, "How Will Voice Search Impact a Search Marketer's World?" December 2014.



Search is a constant—it's a factor in everything that we do, no matter which device we're using.

As recently as four years ago, many people owned only one or two devices that were connected to the internet. Now, that relationship has evolved into one between a human and an entire ecosystem of connected devices. With all these phones, tablets, and smart home gadgets at our beck and call, search becomes the intelligent fabric between the machines that deliver the most relevant information whenever and wherever we are. We may be researching a kitchen appliance on a laptop, and then continue our searches on our phones while we're in bed. A day later, standing in the kitchen, we may ask a digital assistant to run a few queries on the same topic.



Search is constant—it's a factor in everything that we do, no matter which device we're using. Internal Microsoft data shows us that consumers' search activity flows unabated all day and well into the night. This is influencing the way we experience the world around us, as we become further enriched by the wealth of knowledge available at our fingertips. Increasingly, information in the form of a search result doesn't show up as only a link on a search engine results page. It could be delivered via a synthetic-but-friendly voice through a speaker on your shelf, or presented in a short list within an app on your phone. This makes search a more involved part of the human experience, rather than a pause or disruption to seek information.

These knowledge gains help transition the search experience from one that is robotic in nature.

As search becomes more pervasive and integrated into our everyday lives, an unprecedented amount of information about the people who use those devices begins to accumulate.

The contextual knowledge that we gain around device owners helps search to transition from an experience that is robotic in nature—punch in a couple of keywords, get a list of results—to one that comes closer to mimicking human thinking, ultimately generating a greater value exchange between human and machine. The knowledge and action graphs that search engines are able to tap into become more expansive, allowing search to deliver a more personalized—and thus more impactful—experience to users. This intelligence allows search to transition from services that gather links and data points from the web to platforms that power the devices consumers rely on every day. However, data privacy becomes crucial as search continues to build up its intelligent muscle around users. The importance of establishing trust and security in the value exchange between consumers and an ever more relevant search experience will only increase moving forward.





This breadth of high-quality data, culled from a variety of sources, can be harnessed to enrich the search experience in a way that better matches human intent.

Not only do search platforms know more about users—location, past search activity, purchasing habits, likes and dislikes through interactions on social media—but they also have access to data sources that provide facts about people, places, and entities the user may be searching for. By tapping into this dense trove of information, these platforms can judge what types of things will help the user take action when performing a search.



Search can often present information the consumer may want without an explicit ask for it. This ability to better understand intent allows us to provide a more in-depth, higher-value experience that gets ahead of the user's expectation and gets the user closer to taking an action.

Implications for Marketers

The changes in the technology landscape, in the language of search, and in growing user expectation for content across multiple platforms has led to a new set of requirements for what makes a successful marketing campaign.

The search industry, with its billions of human interactions per day, is uniquely qualified to offer a personal, more human-centered experience to its users. The ability to instantly surmise what users may want as they move through all stages of decision making offers the chance to connect with individuals in a way we could never do before.





As user behavior shifts, Microsoft internal data shows that search queries themselves are evolving.

By harnessing the new language of search and by regularly evaluating strategies across the board—from targeting to content creation to investment allocation—marketers can create better opportunities for getting their brands in front of potential customers.

As user behavior shifts, Microsoft internal data shows that search queries themselves are evolving. For example, after the launch of Windows 10 and its newly integrated search box powered by Cortana, Microsoft saw a substantial boost in specific kinds of queries being generated—ranging from commerce-based queries (“search Amazon for...”) to task-oriented queries (“movies near me”).

82%
of new queries are from existing users



Internal Microsoft data, 2015

The volume of these queries was previously so small that they were considered almost irrelevant in the context of the greater search landscape. However, these queries begin to take the stage with the proliferation of conversational search. Marketers should be cognizant of this shift in language and update their strategy to avoid missing out on new keyword opportunities.

Marketers should consistently re-evaluate their digital content with an ear toward natural language construction.

Similarly, the steady rise in natural language interactions creates greater complexity in the search ecosystem because it ultimately delivers more granularity and understanding of user intent. Voice search delivers specialized queries that provide insights to user intent based on the words that comprise the query—and consumers expect the search results to provide a specific answer based on their intent. Strategies that rely on exact keyword matches are no longer sufficient. Furthermore, marketers need the content on their sites to mirror the conversational language of search today in order to address the consumer's specific questions and needs. Marketers should consistently re-evaluate their digital content with an ear toward natural language construction. It's helpful to think about how a user would ask a question, and then use that phrasing as a guide.

Question phrases = voice search degree of intent



For example, the question, “How much is it to go to Coachella?” addresses a different part in the consumer decision journey than a non-question-based, simpler query like “Coachella 2016.” The first question clearly has some commercial intent—at the very least, the person is considering going to the festival. The shorter query falls within a wider range of possibilities—maybe the person just wanted to see what the festival dates are, or which artists are playing. If marketers can adapt their content to human language the same way search is adapting, they can better discern the nuances between different types of queries and serve their audiences more efficiently.





As experiences across platforms become more prevalent, marketers need to familiarize themselves with emerging technology, as well as the massive growth opportunities that stem from search being more incorporated into everyday human life.

The connection a consumer has with a brand can become much stronger in these cross-channel experiences, making a more direct connection and a longer-lasting impression. There's no doubt that as consumers interact with search, and thus brands, throughout the day, cross-channel engagement and data collection will present more advanced marketing opportunities.

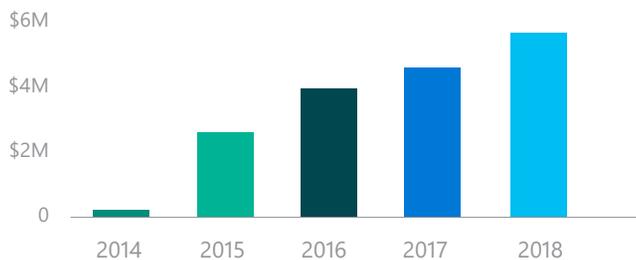
We've only scratched the surface on the number of search-powered devices available in the marketplace, and they continue to multiply not just across brands but also in form.

Imagine the possibilities for marketers to integrate their brands into this experience.

Let's take virtual reality as an example.

Some of the biggest tech giants (Microsoft, Google, Samsung, and Sony) are taking virtual reality to new levels. In fact, Microsoft recently announced a pilot project with Lowe's that will bring the HoloLens experience to a select number of Lowe's home improvement stores to reimagine home remodeling. If customers soon gain the ability to research products visually, navigating solely by voice and gesture and incorporating information through search, imagine the possibilities for marketers to integrate their brands into this experience.

Forecast revenue for virtual reality products worldwide from 2014 to 2018



KZero, Nunatak, August 2014.





How do marketers harness the potential of the massive amounts of data generated by this interconnected web of devices?

Intelligent technology has shown that there is potential to observe where users are interacting with offline messaging, which device they're using, and whether they're even in front of a traditional screen, and to be able to tie that information back to online user behavior.

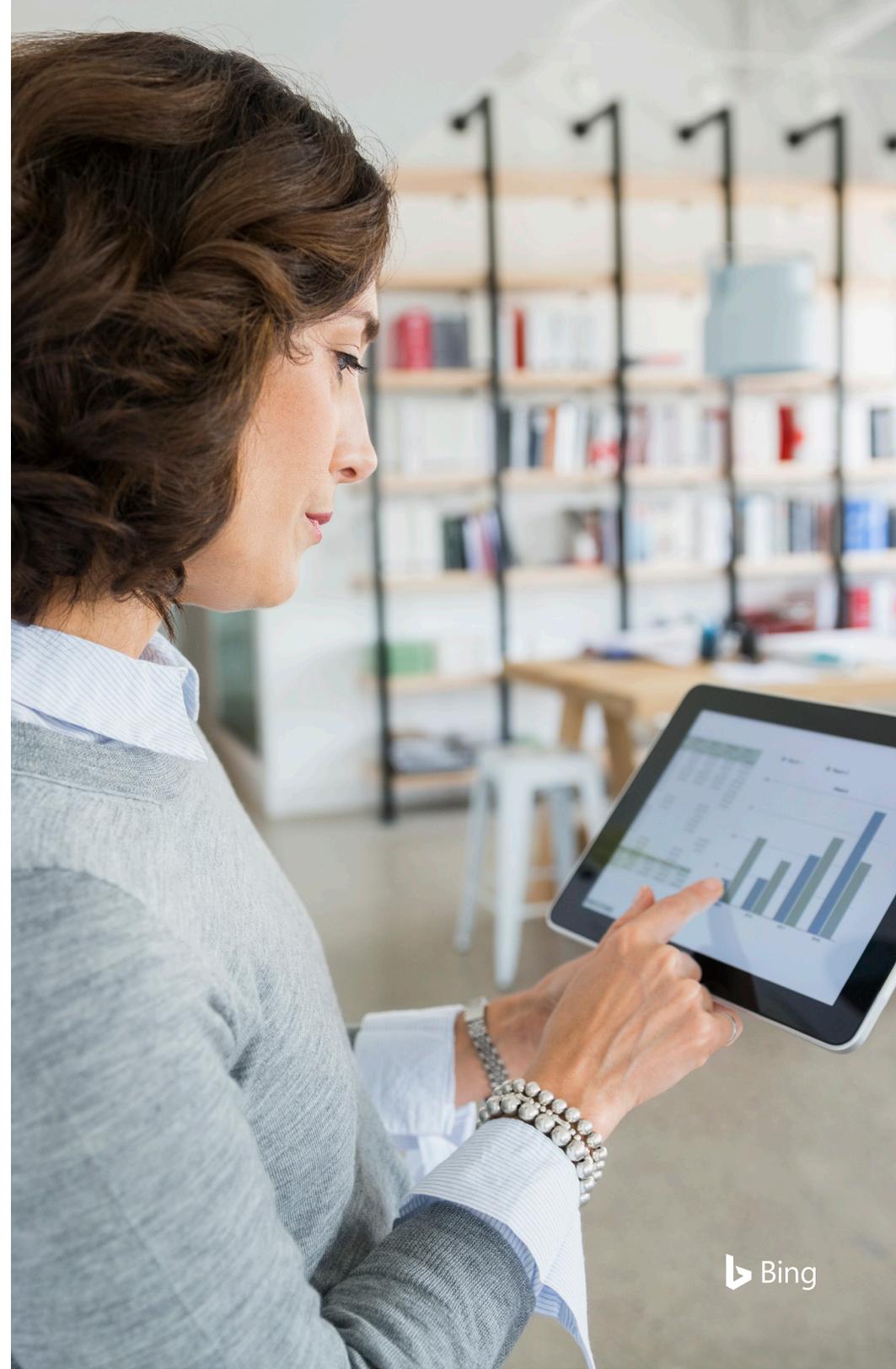
Another growing marketing opportunity is in beacon technology, which can send a mobile notification or promotional offer to nearby users as they pass within a beacon's range, or be used to create audience lists that can be leveraged across digital advertising. Beacon-driven notifications through user downloaded apps are immediate and intimate—especially for brick-and-mortar businesses—and they have the potential to generate on-the-fly interactions.

For example, fans at a basketball game can be alerted to seat upgrades, merchandise deals, or two-for-one promotions at a concessions booth. Beacons have the potential to expand knowledge and action graph that search engines tap into, creating an even richer link between the digital search experience and the real world. Technology like beacons bring great promise that marketers can start to develop audiences that can be used across marketing channels and platforms, including search. In the meantime, brands need to understand their customer touchpoints and think about how new technologies can add value to the experience.

Marketers must find ways to more effectively manage their data and investments so they can leverage search's growing understanding of human intent.

The collection and analysis of search data gives marketers greater precision in understanding user behavior along the winding road that is the customer decision journey. But the growing wealth of data can present a new challenge—there's so much of it and it's often so unorganized that marketers don't know what to do with it. Marketers need to consider investing in technology and skilled personnel to effectively manage and make use of the abundant data they have today. Plus, by investing today, they will find themselves well-equipped to harness the growing potential data flows of tomorrow.

By knowing more about consumers—their location, their likes and dislikes, the other things they've recently purchased—the marketer can more effectively deploy targeted messaging and calls to action. Furthermore, as search data becomes more organized and refined, there's a heightened sense of urgency for marketers to better scale and automate, helping them keep up with the competition.



Streamlining data feeds will ensure the most relevant products and services are shown to users at the critical stage in their decision journey.

Simultaneously, marketers need to think about how to help search engines better match relevant queries to products within their own data feeds.

Optimizing data feeds will ensure that the most relevant products and services are shown to users as they are looking to take action. By properly optimizing the data available to them, marketers can increase their discoverability on each channel. For retailers, investing in feed optimization technology for shopping campaigns allows marketers to maximize the value of their investments.

For example, take a clothing retailer selling a brick-colored dress. Optimizing the feed so that colors are standardized can help ensure that the product is matched to queries for “red dress,” so the retailer’s ad is eligible for more searches and gets in front of more potential customers. Marketers can see the biggest gains around optimizing product titles and descriptions. When supported by the right ad experience, properly optimized feeds will increasingly help advertisers organize, track, promote, and report on campaigns supporting large volumes of inventory.

More data sources and a better understanding of human intent ultimately leads to an unprecedented wealth of information and insight.

Harnessing that data and optimizing it to drive user actions becomes a challenge that marketers will increasingly face as the gap narrows between the digital and the real world.

The opportunities in search are greater than they've ever been, as the platforms served by the search industry have the capability to be more personal and achieve clearer human connections. Brand stakeholders can craft more-successful marketing campaigns by tapping into these insights to find the most efficient methods for bringing users closer to end actions. Flexing that capability doesn't just mean gaining more business or creating new audiences. It means harnessing the promise of the future.

Bing Network. Be there.