A.I. ASSISTED SEARCH
MOBILE FIRST ALGORITHMS
VOICE & IMAGE SEARCH
PPC & SEO
VERTICAL SEARCH

A SEARCH PROBLEM CONSISTS OF:
A STATE SPACE
A SUCCESSOR FUNCTION
A START STATE
A GOAL TEST

HUMANS CAN'T KEEP UP WITH CONTENT PROLIFERATION

The Future of Search is a trends and insight report carried out by Mindshare Futures that explores how search will develop over the next three to five years and its implications for brands. Our research comprised several methodologies covering the period from January 2019 to April 2019.
Our search behaviours are becoming increasingly sophisticated. The sites we visit, the devices we use, the language we select to create a query are all changing, transforming the search landscape and the ways in which brands can best navigate it.

Rising levels of smart speaker adoption are facilitating the growth of voice searches to the extent where we expect it to become a mainstream activity in the near future.

Visual search whilst currently niche, is unlikely to remain that way for long. Once introduced to the concept, people find it a natural and familiar behaviour to adopt, disrupting their traditional habits, and opening up new searching opportunities around inspiration and discovery.

Longer term, we can expect to move towards a world where the search engine becomes increasingly assistive and proactive, meeting people’s needs before they are even expressed as a keyword search.

We need to start thinking outside the search box.

*Future of Search* is a Mindshare Futures study exploring user behaviours in this area, identifying the key trends shaping this world, and discussing the implications of these developments for brands.

As ever, if you want to discuss what the future of search means for your brand please get in touch. Enjoy!

**Sophie Harding**
Futures & Trends Director, Mindshare UK
sophie.harding@mindshareworld.com

May 2019
Contents //

page 04 > Search today
page 08 > Beyond Google: Increasing diversity in the traditional search landscape
page 14 > The rise of sensory search: Moving beyond the search bar
page 22 > Assistive search: AI driving a deeper understanding of intent
page 28 > Thank yous
page 28 > About us
**Future of Search** by Mindshare Futures explores how search will develop over the next three to five years and its implications for brands. Our research comprised several methodologies, covering the period from January to April 2019.

**NEUROSCIENCE EXPERIMENT**
In partnership with Neuro-Insight, we used Steady-State Topography brain-imaging technology to measure how the brain responds to different ‘search’ modes (voice, visual, text) across a series of ‘search moments’: from making an online purchase, to looking up film times at your local cinema. Over 150 smartphone users aged between 18 and 65 took part.

**QUALITATIVE**
Forty UK smartphone users took part in a two-week online self-ethnography project capturing their own behaviours and attitudes in a series of search experiences and tasks. We then ran a co-creation workshop with fifteen of these participants to further explore current search behaviours and how technological developments in this space can address consumer needs.

**EXPERT INTERVIEWS**
We conducted in-depth interviews with experts in the search industry across sectors and around the globe, including developers, marketers, and evangelists.

**QUANTITATIVE**
We carried out an online quantitative study, surveying over 1,800 UK smartphone owners aged 18+.

**SECONDARY RESEARCH**
We carried out extensive desk research that synthesised international cross-category case studies.

We partnered with Captify (the global leader in search intelligence) to observe changes and search behaviour across their network.
In many ways, search has become an unconscious behaviour. For a long time now the address bar in our browsers has been integrated with a search box, making it irrelevant whether or not we know the URL of the website we are after – this ‘shortcut’ is not something many people would even think of as a search. And with personal data utilised by search engines to qualify and personalise search results, the process has become so quick and frictionless that it’s no surprise that people have a hard time recalling how many and what searches they have carried out over the period of a single day.

People have become increasingly reliant on their devices to provide them with information whenever and wherever they need it; searching for answers to specific questions is the most popular type of online search according to our study (see Fig. 01 & 02). We estimate over two-thirds of people carry out searches using their mobile, and with the shift from offline to online shopping, search is undoubtedly playing a much bigger part in product-based decision-making. Two-thirds of people we surveyed admit they do more searches before making decisions than they used to, rising to three-quarters of 18–34s. Product-specific searches now account for a fifth of all search activity (see Fig. 01), and from our proprietary decision-making research tool DX, we know that these behaviours can be seen across multiple sectors and products, not just the big ticket decisions. Increasing levels of exposure to technology have reset people’s expectations, impacting on every choice, every decision they make. Among tech-confident users in particular, search is more important than ever, as they seek out the results that will enable them to compare more, find out more information, and explore more reviews and recommendations before they commit.

It’s worth noting that the way people think about search in the ‘real world’ is very different from how it’s discussed in the industry. Rather than considering a single search as a single query, they talk about what we have defined as a ‘search moment’ – one, or a number of searches all relating to the same end goal (e.g. finding a product they want to buy). This makes the task of assessing the number of searches taking place a complicated one, but through our research we were able to estimate that people perform an average of 22.2 searches per day – bringing the volume of daily searches in the UK to just over 1 billion.

**Fig. 01**
Share of search types (last 24 hours)

<table>
<thead>
<tr>
<th>Search Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructions</td>
<td>7%</td>
</tr>
<tr>
<td>Directions</td>
<td>9%</td>
</tr>
<tr>
<td>News</td>
<td>10%</td>
</tr>
<tr>
<td>Product / Service Want to Buy</td>
<td>11%</td>
</tr>
<tr>
<td>Specific Question</td>
<td>13%</td>
</tr>
<tr>
<td>Entertainment</td>
<td>7%</td>
</tr>
<tr>
<td>Opening Hours / Location</td>
<td>9%</td>
</tr>
<tr>
<td>Personal Interest</td>
<td>9%</td>
</tr>
<tr>
<td>Event Info</td>
<td>6%</td>
</tr>
<tr>
<td>Product / Service Info</td>
<td>9%</td>
</tr>
<tr>
<td>Work / Study Topic</td>
<td>5%</td>
</tr>
<tr>
<td>Inspiration / Ideas</td>
<td>5%</td>
</tr>
</tbody>
</table>

**1 BILLION TOTAL SEARCHES**

**22.2 SEARCHES PER PERSON PER DAY** (Average)
**Fig. 02**
Volume of ‘search moments’ by frequency and effort

**Fig. 03**
The search landscape

**HIGH ENERGY**
**LOW FREQUENCY**

**WORK / STUDY TOPIC**
**ENTERTAINMENT**
**INSPIRATION IDEAS**

**HIGH ENERGY**
**HIGH FREQUENCY**

**PERSONAL INTEREST**
**NEWS**
**PRODUCT / SERVICE INFO**
**PRODUCT / SERVICE WANT TO BUY**

**LOW ENERGY**
**LOW FREQUENCY**

**EVENT INFO**
**INSTRUCTIONS**
**DIRECTIONS**
**OPENING HOURS / LOCATION**

**LOW ENERGY**
**HIGH FREQUENCY**

**HIGH ENERGY**
**LOW FREQUENCY**

**ESTABLISHED**
Traditional search channels

**VERTICAL**
*Google*  
*bing*  
*DuckDuckGo*  
*amazon*  
*skyscanner*  
*NETFLIX*  
*Spotify*  
*facebook*  
*John Lewis*

**HORIZONTAL**

**SENSORY**

**VOICE**
*Commands*  
*Questions / true searches*

**VISUAL**
*Image search (photo)*  
*Image search (scan)*  
*Reverse image search*  
*AR search*  
*Image recognition*  
*Face recognition*  
*Video search*

**KEY PLAYERS**
Traditional search engines  
Voice assistants: Siri, Alexa, Google Assistant, Cortana, Bixby  
Brand assistants: Enki, Dom

**ASSISTIVE**
Text, Voice and Visual

**EMERGING FEATURES**
*Google Duplex*  
*Google Discover*  
*Google Activity Cards*  
*Alexa Hunches*

**KEY PLAYERS**
*Google Assistant*  
*Bixby*  
*Siri*  
*amazon alexa*  
*Cortana*
How people search is also more sophisticated than it’s ever been – they are searching deeper, wider and in new ways, which is transforming the search landscape, making it more varied and fragmented (see Fig. 03). While over three-quarters of search activity is still done via text, the rise in smart speaker adoption has facilitated a growth in voice searches, which we can see becoming more mainstream in the near future. Visual search, on the other hand, remains quite niche, accounting for only a fraction of all searches. Most people are still unaware of the technology, and from our research we have found that there is a level of confusion around the concept of visual search – people who claim to have used it often talk about simply searching for images online. But as speech and image recognition become more accurate over time, and these new technologies are integrated into the devices we carry around with us every day, we expect these new ways of searching to disrupt our traditional habits, moving us further away from the search bar.

“I’m trying to give as much information now as I can, so the specific results I want come in before I have to scroll down”

WHAT IS VOICE SEARCH?

• Voice search allows people to search the internet by saying terms aloud rather than typing them into a search field.

• Audio technology uses speech recognition to understand what people are saying and analyse their questions and commands. It then delivers relevant search results, either orally or on a screen.

WHAT IS VISUAL SEARCH?

• Visual search replaces text – the traditional input for searching for things online – with images.

• It starts with an image that can be pulled from anywhere: taken in real time by a camera on a device, from the device’s photo library, or from anywhere else, including the Internet.

• When presented with an image, visual search identifies objects within it, and then searches for images related to those objects.
MARKET FACTORS

Regulatory climate
The regulatory climate in both Europe and the US is pointing towards increasing efforts in the coming years to restrict and regulate the tech giants. In the US, Senator Elizabeth Warren’s recent calls to break up Big Tech are undeniably driving a policy discussion that the next Democratic presidential nominee, no matter who it is, will likely take up. In the specific context of search, we have also recently seen Google receive fines of €1.49 billion for more than a decade of abusive practices in how it ran on-site search for other publishers. All of this points to the next decade seeing a market environment where Google will be less dominant in search than it has been in the past decade.

Privacy concerns
For a number of years, Google has paid Apple a substantial sum (Goldman Sachs estimate that it will be $12 billion in 2019) to be the default search engine in Safari to ensure a large volume of traffic. As privacy concerns become more significant to both regulators and consumers, and Apple increasingly sees privacy as core to its strategy, might Apple forego the revenue and turn to a more privacy-focused search engine, maybe even DuckDuckGo, as its default?
BEYOND GOOGLE INCREASING DIVERSITY IN THE TRADITIONAL SEARCH LANDSCAPE

With changing consumer behaviours, we can expect to see increasing diversity in the traditional search landscape, with Google’s dominance being challenged by a range of competitors better suited to satisfying people’s needs. While it still plays a dominant role, with over half of the people we surveyed admitting they couldn’t function without it, people are getting savvier with the way they structure their searches – they know exactly what they want and how to find it. Google is their safety net, always there to back them up, but people are starting to venture out to explore other ways of getting the information they seek. Google’s share is therefore likely to be eroded not because of cannibalisation, but because of these other types of search activity that are growing faster and increasing the size of the overall market.

The sheer quantity and variety of online content that people now have to navigate is necessitating this change. In order to sift through the information at their fingertips and arrive at the right content as quickly as possible, people are increasingly opting for the specialised nature of vertical search.

Across a wide range of search topics, our research shows that a significant proportion of people say they would rather start their search journey on a specialist platform than on their search engine of choice, something that was especially the case within product-led categories (see Fig. 04). And it’s the brand-led searches that drive vertical behaviours: while just under two-thirds claim they would choose to look for groceries outside of Google, it still wins people’s preference when it comes to finding recipes.

“You’ve found the product you want from the website you want. You’ve been on there, you’ve done it all. You Google to close it, at the very end, just as that last tick, to make sure it’s not cheaper elsewhere”
Historically, vertical search on websites has been characterised as occurring when people are close to purchase and are looking to finalise their choice. We asked our respondents to document the searches they made for their last online purchase and found that, across a range of different categories, vertical search is now playing much more of a role at earlier stages within the journey than was previously thought. While just under a fifth of people went to a search engine, around three-quarters reported starting their search at a specialist website or app. The dominance of Amazon in e-commerce has undeniably fed into this, as over half of those we surveyed claimed they would go straight to Amazon when searching for a particular product. When it came to actual behaviours, we found this to be particularly the case for certain categories – more than half said they started their search at Amazon when buying entertainment or children’s products (see Fig. 05).

**“Websites have now got much better search functions, whereas five or ten years ago, websites were clunky, and you couldn’t really search through”**

**Fig. 05**
Where the online purchase journey starts (last online purchase)

### WHAT IS VERTICAL SEARCH?

Vertical search occurs on platforms that focus on one specific industry or type of content. Common examples would include a travel search engine like Skyscanner, an online retailer such as Amazon, or the image-based interface of a social platform like Pinterest or Instagram.
I’ve just bought a house so have been looking at loads of furniture. I don’t even go to Google. I go straight to Instagram or Pinterest to get my ideas and where to buy from that.”

While the broader categories such as finance and travel have remained largely stable in growth, the most significant changes have occurred within the more specific categories such as make-up, accessories and women’s clothing.

Fig. 06  
Growth in vertical search (top categories)

- **MAKE-UP / COSMETICS**: 216%
- **NEW BORN AND PARENTING**: 196%
- **ACCESSORIES**: 170%
- **WOMEN’S CLOTHING**: 153%
- **BUYING NEW CARS**: 143%
- **MEN’S CLOTHING**: 137%
- **MOBILE PHONES**: 136%

Source: Captify, Data based on like-for-like UK publishers Q2 2018 – Q1 2019
The past few years have also seen search within social platforms develop rapidly, orientated towards exploratory searches related to a topic or product category of interest (see Fig. 07). Pinterest is a good example of this, and the rise of visual search capabilities has only served to strengthen this discovery role.

But just as Amazon and other verticals are playing more of a role across the early stages of the search journey, we can expect social platforms to facilitate more of those later stage, transactional searches, particularly within highly visual categories such as fashion, beauty and homeware. Instagram’s recent announcement of an in-app checkout for its shoppable posts typifies the way in which social will be able to fulfil ‘full funnel’ searches more effectively. These changing roles of the different players are likely to make the part that vertical search plays within the search journey more varied than ever before.

**Fig. 07**

Use of platforms across the search journey (among platform users)
12% of clothing searches ended on social
**1 RE-EVALUATE YOUR CROSS-PLATFORM SEARCH STRATEGY**

Brands will need to think harder about the different roles the various search platforms are playing for people in their particular category, at different stages of the journey.

The challenge for marketers is to provide a cohesive strategy across the increasing number of search platforms that people are using. Getting the balance of investments right across these platforms will become more difficult as measuring the contribution of different search types becomes more complex.

**2 SEO BEYOND GOOGLE**

Search Engine Optimisation (SEO) will need to get more sophisticated and tailored to the specificities of the advertiser than ever before.

In a more diverse search landscape, the broad principles that underpin SEO for Google need to be adapted with platform-specific tactics. Brands will increasingly need to develop a cross-platform SEO strategy that reflects the nuances of the key platforms for each brand.

For example, brands will need to adapt their SEO approach for Amazon to focus more on product features, reviews and images, rather than the inbound links which are an important part of SEO for Google.

**3 UPGRADE YOUR OWN ON-SITE SEARCH**

For retailers or vertical specialists running their own on-site search, it will be imperative to keep up with the wider market search capabilities. To take advantage of the growing shift towards vertical search, it’s important to ensure that the experience for consumers is of comparable quality to general search platforms.

Retailers need to retain their direct relationship with people wherever possible, and that means keeping pace with the user experience around new forms of search.

**4 MAKE IT SHoppable**

Social search is likely to play a bigger role in the next few years as social platforms from Instagram to Pinterest make purchase simpler and easier. As well as making their own social content shoppable, brands need to ensure they’re employing the right techniques to push their brand up the social search rankings.
THE RISE OF SENSORY SEARCH
MOVING BEYOND THE SEARCH BAR

The increased diversity that we have seen developing in the search landscape isn’t just limited to the screen. Over the next few years we expect to see people’s search behaviours move beyond computer and laptop screens, becoming less ‘text’ dependent and much more sensory.

Since the introduction of Siri in 2011, voice as a search behaviour has taken some time for people to adapt to due to challenges such as recognition of different accents, quality of results, being comfortable talking to a machine and a general lack of understanding as to when voice might be more useful than text.

“Finally! Years ago, when Shazam first came out I used to think ‘I’d just love to go up to someone and Shazam their outfit’”

“Using voice comes much more naturally to me now, it’s just like multitasking”

But in 2019, it seems that voice technology has really come of age with people’s perceptions of voice shifting from a short-term, fun and gimmicky technology, to truly understanding the longer-term time-saving benefits of having voice search capabilities built into daily life. In fact, almost half of 18–34-year-old voice users can’t imagine going back to the days before they had a smart speaker.

Visual search, on the other hand, is a much more natural and familiar search behaviour. From scrolling friends’ and influencers’ feeds on Instagram, to searching weddings or home renovations on Pinterest, or even future love interests on Tinder, while search inputs haven’t traditionally been image-based, processing search output as images certainly has. As a result, when introduced to the concept of visual search, people can immediately recognise the benefits of the technology and potential use cases, both in terms of changes to the way we search now and in opening up new possibilities in the way we search in the future.
But the shift to sensory search is not as simple as a Find and Replace for current search behaviours. As we start to move away from purely text-based search, these new ways of searching will be used in quite different ways, based on their strength in delivering to people’s needs (see Fig. 08).

Voice is best suited for specific, focused queries, with one objective answer. It’s the perfect platform for when a person has something very specific in mind, where the input and output are simple. While the use of voice search has mostly been limited to the household through smart speakers, we are increasingly seeing voice technology being embedded into other products and a rise in usage of voice search in other locations and moments in people’s lives, such as in the car or on the go, through the mobile phone and wireless headphones.

Where voice works less well is when the query yields a complex or over-detailed answer. Explorational and conversational search methods are currently limited by neuro-linguistic programming capabilities, as well as a lack of screen (particularly in the case of smart speakers). When the platform fails to deliver on its inherent benefits of ease and simplicity in such search moments, people are quick to become frustrated, as the issues they’ve had with voice in the past have made people increasingly intolerant of the technology letting them down.

Where it does work, however, people are truly starting to appreciate the broader benefit of having access to voice search, particularly from the perspective of removing friction in their everyday lives.

“For voice it’s pretty much an instruction, a fact or query. Short questions and answers that aren’t complex”

Fig. 08
Perceptions of key needs met by voice and visual search
While voice search moments are short and sharp, visual search is best suited for tasks that are focused on inspiration, exploration, and discovery, in terms of both inputs and outputs: where either you are faced with a spontaneous search that’s hard to articulate, or the ‘correct’ output is subjective, or even both!

Over half of people agree that visual search is a good way to get inspiration before shopping or to discover new products and brands, and almost two-thirds believe visual search will make it easier to search online.

With this in mind, it’s likely that we will see voice and visual search becoming stronger and more useful to people at different stages of the consumer journey. While visual search is at the start of the journey as people seek inspiration and discover or explore new products and brands, voice will be much further along with specific product queries or details, and potentially even through to purchase.

It’s important, however, to ensure we aren’t thinking about voice and visual search as siloed search channels. In reality, it’s likely that we will see voice and visual search used together with text in the future, with visual methods triggering searches, and voice then used to refine queries further down the line.

“Most people now are time poor – I know I am. So if voice means you can now do something quicker and more efficiently – of course I’m going to do it that way”
"To me, visual search opens up new moments, whereas voice is replacing things and making it easier."

We expect to see significant growth in sensory search over the next three years as these new ways to search not only cannibalise existing text search moments, but also create new ones.

Fig. 09 - 1 shows current perceptions of search moments where people think voice and visual search would work well.

When compared to our more tech-savvy 18–34-year-olds, we can see that acceptance of voice to address popular search moments, at least in the short term, is a much larger opportunity for brands than visual search.

While text will still do most of the heavy lifting when it comes to search in the foreseeable future, we believe voice will achieve greater scale than visual in the search space over the next three years as it cannibalises common text search moments such as directions, specific questions, news and entertainment.
As people are so quick to accept the concept of visual search and how it may fit into their lives, visual search has the potential to become a victim of its own success. Current visual use cases are less common, relatively limited to identification of objects and focused on certain sectors that already lend themselves well to image-based searches (e.g. fashion, homeware, beauty). However, the search moments that people think (and expect) visual search to address go far beyond its current capabilities (see Fig. 10). People have visions of visual search being able to do things such as pulling together nutritional information and recipes for the food they currently have in the fridge, identifying issues and providing solutions for situations in front of them such as a sick-looking plant or a red wine stain on their carpet, or being able to search their living room and have visual search identify complementary home décor pieces.

Because images are computationally harder to process than words, and intent in visual search is much harder to determine, the technology simply cannot currently meet people’s expectations of what they want it to deliver. If visual search is pushed onto people before it is ready to deliver on its promises, there is a danger that this will halt uptake and, much like the introduction of Siri, delay adoption of this technology for far longer than if higher performing technology was to be introduced at a later date.

“**The problem is, I think, you start to use it and it doesn’t deliver and so you kind of end up wasting time. So, you just go back to your everyday searching which you know can get you the results**”

**WHAT WE LEARNED FROM NEURO-SCIENCE**

**VOICE**

Elements of the voice search experience are associated with a lower cognitive load for people. While a voice platform that can also deliver text results on a screen may be preferable for searches that require comparisons or complex results, it doesn’t have the same simplicity benefit as a pure voice result.

As we found in our 2017 Future of Voice project *Speak Easy*, branding seems to evoke a particularly positive response when spoken. Voice seems to play a role in reinforcing people’s affinity for a brand that is less apparent in other search platforms.

**VISUAL**

Visual search is a more right-brain response and appears to evoke an experience more strongly than other platforms are able to do, working particularly well when the task is focused around expanding an idea or revealing an inspiring answer. The congruence of seeing an image (e.g. a poster) combined with the visual search mode can result in a stronger cognitive response throughout the search journey.

It does however, elicit initial frustration when people are tasked with a complex task that either doesn’t have a clear visual start point or isn’t easy to complete without clearly expressing an intention. For complex tasks using visual search, the pay-off comes later in the process.
“It’s shocking how easy visual search is to use. It’s definitely changed some of the constant typing I do. It makes me think – actually I would do this in a different way”
1 **VOICE SEARCH SHOULD BE THE PRIORITY**

For most brands, voice search is going to affect consumer behaviour faster than visual search. The clear exceptions are categories where the visual aesthetic is critical to decision-making, such as fashion, beauty or homeware.

For product categories that sit outside of these areas, and particularly for services, voice search is likely to have a much bigger impact in the short to medium term. Most marketers should make voice search the priority.

2 **EVOLVE YOUR SEO FOR VOICE (& VISUAL) INTERACTIONS**

For voice search, the focus for marketers should be ensuring their SEO evolves to take into account how content is surfaced in voice search or through voice assistants. A critical role will be enabling discovery through voice, by deploying the right tagging and mark-up to ensure content is identified as being designed for voice search.

The aim here is to be included in the featured snippet that Google Assistant typically turns to for smart speaker answers or the ‘people also ask’ features that occur within the search engine result page (SERP). This may include specific content creation such as Q&A style content, focused on answers to relevant questions people may ask, and Alexa Skills or Google Actions, that people can converse with.

While there is no specific PPC voice search ad product, the rise of voice search does not necessarily require a change of strategy. But PPC specialists will need to monitor how voice search develops within the category and potentially restructure keyword accounts accordingly.

Ultimately the growth of voice search and its effect on the increasingly fragmented long tail will be one of the drivers of the shift towards intent buying (outlined later).

In visual search, a similar set of principles applies but the focus is on optimising images or video with the appropriate image mark-up language for search engines to be able to interpret them.
3 USE CODES TO GUIDE PEOPLE THROUGH VISUAL SEARCH

One of the challenges from the user perspective in using visual search is that it’s hard to express what the intent is when scanning the object. This also presents problems for brands when looking to surface content for visual search optimisation.

Over time we can expect Google Lens to incorporate a blend of voice and visual input, but in the meantime, it may make more sense for physical brands to use codes (QR or otherwise) to guide people through to a specific destination. With a call to action on the product / label / packaging, brands can direct people to re-order and access more product information.

As visual search is currently quite hit-and-miss, providing a code gives reassurance that there will be something of use if the product is scanned. For many brands, it currently makes more sense to focus on encouraging further interaction through a well-thought-out code, rather than creating web content optimised for a visual search of your brand that leaves you at the mercy of the search algorithm.

4 BUILD VOICE & VISUAL SEARCH CAPABILITIES INTO YOUR OWN PLATFORMS

For publishers and retailers with significant on-site search activity, upgrading search capabilities to incorporate voice search (and, in relevant sectors – visual search as well) will be an increasingly important consideration. This will become even more pressing as on-site or ‘vertical’ search grows in significance.
Search has always been about matching content with a person’s need or intent. In the early days of search the only expression of that intent came through the keyword itself. Over time, a greater understanding of people and their context has improved both the search platform and the advertiser’s ability to understand someone’s intent.

The emergence of in-market audience targeting in search over the past couple of years has meant that the relative importance of the keyword for search marketers has begun to decline. Using an analysis of intent signals such as recent search queries, location and website browsing activity, advertisers are becoming less reliant on the keyword itself to indicate what need someone is trying to resolve. We estimate that approximately half of PPC activity already includes some form of audience targeting – typically a strategy of using various audience types layered with positive and negative keyword bids.

In the coming years, the application of machine learning to a wider range of data signals will lead to a much more sophisticated understanding of people’s search needs. As well as using direct expressions of intent (i.e. keywords or voice commands) machine learning algorithms will use data relating to physical context, social graphs, and past behaviour to predict intentions.

This will have two key effects:

1. **From the user perspective**, we will move towards a world where the search engine becomes increasingly assistive and proactive, often meeting our needs before they are expressed as a keyword search.

2. **For the advertiser**, there will be a gradual shift in focus from keywords to intent buying.

“I like it. I think that it’s prompting you and it’s giving you extra help along the way to manage your hectic lifestyle. You could opt out from it and you can use it how you want but it’s just giving you that helping hand.”
The Future of Search

Assistive Search

The Rise of Sensory Search

Beyond Google

Search Today
As long ago as 2007, Google stated their ambition to be able to understand someone’s need before they did. With the launch of Google Assistant in 2016, this ambition has started to become clearer. Google define assistance as ‘help getting things done’ and it’s clear that the main intended role for assistive search will be in removing the friction around everyday tasks or problems. While the role for an AI-powered companion or source of entertainment may emerge at some point, the focus for assistive search in the short to medium term will be on delivering practical help to people.

Our research shows that people already have growing expectations of Google to take their context into consideration, suggesting support for the concept of assistive search. Educated to the possibilities by autocomplete on search engines or suggested replies in Gmail, people in our qualitative research stage remarked that when using mobile search they no longer add ‘near me’ to a query, out of the expectation that Google will already know their location and take it into account.

But assistive search faces challenges beyond the technical, based on what type of assistance people will accept and value in terms of devices used, topic and context. While in general terms people find value in the concept of a form of search that demands less effort from them (see Fig. 11) – only less than a third say that they find the idea unappealing – the extent to which they will be comfortable ceding control to a digital assistant is up for debate.

“With Google, you must be precise, or you don’t get what you’re looking for. I’m going to Dusseldorf soon and staying at the Mercure. I typed Mercure into Google and it came up with hundreds of Mercure hotels. I wanted the one in Dusseldorf that I searched and booked last week. It should have known that”

THE USER

“Our job is to give you the information you want and need with you doing as little work as possible to get it”

Sep Kamvar
Google Engineering
Lead for Personalization
2007
Two-thirds say ‘I want to make my own decisions rather than rely on a digital assistant’ and just over half agree that ‘Using a digital assistant feels like giving up control’. As we know, in uncertain times, the feeling of ‘taking back control’ is a powerful force. Working out the boundaries of where assistive suggestions cross over from being helpful to being irritating or intrusive will be the major challenge for Google and the wider search community for the next five years at least.

“You want it to solve problems, but you don’t want it to take over your thought process too much. Suggestions are good, but it’s when you’re getting bombarded with too much that it freaks people out”
In the PPC marketplace, there will be a gradual shift in focus from keywords to intent buying – buying an ‘intent’ (for example, looking for holiday clothes ideas) and optimising across a range of keywords – rather than bidding on specific keywords. Advertisers have begun to move away from match types and terms toward context and people as audience targeting has advanced, and we can expect that to continue. The growth in the long tail of keywords as search has become more fragmented, and conversational search has been one of the driving forces behind this. The increased prevalence of automation in keyword bid management has also enabled a change away from the keyword itself towards the underlying intention of the person searching.

While in the short-term we can expect to see the emergence of intent buying within text search roughly as we know it today, the longer-term direction of travel is towards advertiser integration within assistive search or suggestions. From an organic content perspective, assistants are already surfacing the best available content from brands in the form of Google Actions, Alexa Skills or featured snippets from brand pages.

Assistive search is also highly likely to evolve to incorporate some form of paid suggestions, but their exact form is still very much up for debate and experimentation.

One key difference to established search is that assistive search suggestions will come in a much more diverse set of contexts which determine the ideal output: with voice or on a display in a car there might be room for only one ‘result’ or suggestion, but sometimes a menu of visual options will be available either right away or as a second layer of outputs.

It will be challenging to present a paid suggestion to consumers in situations where there has been no search query and the only content is suggestions. We may see a reversal of the current model, with the organic suggestion delivered first, followed by an invitation to explore a second sponsored suggestion if desired (effectively a new form of PPC). For assistive search to succeed it will be necessary for people to trust the impartiality of the assistant’s suggestions, while also accepting a role for paid suggestions – not an easy task.
**1 CHANGING ROLES FOR PPC SPECIALISTS**

The role of PPC specialists will become increasingly strategic as automation takes away much of the current day-to-day management of keyword bid optimisation and reporting.

As we move towards a world of intent buying and keyword targeting recedes into the background, it will be even more important for PPC strategists to set the overall strategy and KPIs for the activity, identify which particular intents to focus on and manage the investment between different search platforms.

**2 COMPETITIVE ADVANTAGE IN SEARCH INCREASINGLY LIES IN FIRST-PARTY DATA**

As the understanding of a person’s intent is increasingly informed by a range of signals from across Google’s ecosystem, competitive advantage will lie in the additional understanding and context that brands can bring to the platform through their own first-party data.

While everyone in the marketplace will be able to bid on a particular intention within their category, only brands with a deeper understanding of a particular person gleaned through their own data will be able to spot under-priced opportunities.

The accumulation of first-party data and the extraction of understanding and value from it, is, of course, a key strategic priority for all marketers. But it is arguably more critical for search than any other channel, as machine learning drives the evolution of search from keywords to intent to assistive suggestions.

**3 IDENTIFY THE CONTENT NEEDED TO MEET INTENT OR PROVIDE ASSISTANCE**

SEO has always been about surfacing a brand’s content to meet a person’s need. In that sense, the evolution of search towards a more sophisticated understanding of a person’s intent and, eventually, assistive suggestions doesn’t change these underlying principles.

However, as Google gives greater prominence to features such as the ‘featured snippet’ or ‘people also ask’, brands will need to think about creating content to meet a much wider and more nuanced set of needs and intents. This also includes identifying the key moments where a brand can be of assistance to people and creating ways to address these moments in the form of Alexa Skills or Google Actions. A rich set of first-party data, and crucially the ability to extract meaning from it, will be critical in working out where a brand can provide meaningful assistance.

The key strategic decision for marketers will be in assessing where to draw the line in creating content for evermore specific and fragmented intents.
MINDSHARE FUTURES

Mindshare Futures is Mindshare’s emerging media and technology research programme. It focuses on the underlying consumer behaviour behind future trends and advises marketers on the implications for communications. It produces annual trends publications, deep dive reports on specific tech trends and offers consultancy services.

Report Contributors
Contributing authors & research leads: Josie Ung, Ksenia Kharkina, Julia Ayling and Jeremy Pounder
Report design & marketing: Amanda Harrison, Davina Rajaopillai, Emma Sexton, Jenna Revell and Ric Santeugnini
Additional research: Emily Goodyear, Graham Ridley, Blake Spooner, Jonathan Whitney and Sophie Harding

A special thank you to our industry experts:
Dominic Joseph
Co-founder & CEO, Captify
Ian Carrington
MD of Performance, Google
Omar Segal
Product Manager – Discover and Core Experiences, Pinterest
Ravleen Beeston
Managing Director, UK Sales, Microsoft Bing
Matt May
Paid Media Manager (Acquisition), Three UK
Sarah-Anne Bray
Senior Communications Manager, Criteo
Nicole Kivel
Head of Brand & Agency Sales, Criteo
Ashley Fletcher
VP of Marketing, Adthena
Björn Beth
Director, Digital Strategies Group EMEA, Searchmetrics
Dave Isbitiski
Chief Evangelist, Alexa & Echo, Amazon

For more information, or to enquire about how we can help your organisation, please contact:

Sophie Harding
Futures & Trends Director
E: sophie.harding@mindshareworld.com

Julia Ayling
Head of Research and Insights
E: julia.ayling@mindshareworld.com

1 Central St Giles, London, WC2H 8AR
www.mindshareworld.com/uk