

SearchUnify®

EBOOK

# Cognitive Search for Better Self-Service

## 10 Secrets No Vendor Will Tell You



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# Introduction

As businesses are becoming more and more data-driven, knowledge has become an important asset for any organization. Technology Services Industry Association (TSIA) does a great deal of research to help tech companies optimize their services and achieve better outcomes. They have created a knowledge management maturity model. It is basically a way to measure and improve the knowledge sharing process of your enterprise.

**TSIA's knowledge maturity model** (shown below) uses four phases across people, process, technology, and corporate culture to help companies reckon where they are in the knowledge management journey and what they need to do to improve their knowledge sharing. Technology section, as you can see, focuses heavily on having a unified search strategy. Since the knowledge in a firm is collected in multiple applications & repositories, it makes sense to have a federated search in place. A unified cognitive search platform fits perfectly as the technology solution in each of the four phases.

When firms analyze the above knowledge maturity model, usually, they first want to invest in a sophisticated search technology that is enabled by AI. And companies have observed that the payback on this investment is dramatic. The ROI is almost 100%. It, therefore, comes as no surprise that more of them are investing in it. The adoption of unified search has risen from a mere 7% to 19% from 2018-19 according to a survey by TSIA.

# TSIA Knowledge Management Maturity Model

	Recognition Phase	Instantiation Phase	Value Realization Phase	Strategic Phase
Corporate Culture	<ul style="list-style-type: none"> <li>Share knowledge and others take credit.</li> <li>Employees recognized and rewarded for knowledge hoarding.</li> </ul>	<ul style="list-style-type: none"> <li>Executives realize potential to boost productivity and cut costs through enhanced knowledge sharing.</li> </ul>	<ul style="list-style-type: none"> <li>Executives see ROI for KM programs.</li> <li>Program expands beyond support.</li> </ul>	<ul style="list-style-type: none"> <li>Executives lead by example and reward knowledge sharing.</li> <li>Executives receive regular updates on KM programs.</li> <li>Cross-enterprise knowledge czar appointed.</li> </ul>
People	<ul style="list-style-type: none"> <li>Informal collaboration.</li> <li>Experts identified by topic.</li> <li>No goals or incentives for knowledge sharing.</li> </ul>	<ul style="list-style-type: none"> <li>Knowledge management training provided.</li> <li>Goals/incentives introduced for KM outcomes.</li> <li>Dedicated editing and maintenance resources.</li> </ul>	<ul style="list-style-type: none"> <li>Employee: impacts to core productivity metrics, such as FCR, talk/resolve time, cost per incident, and ESAT.</li> <li>Customer: rise in assisted and unassisted support CSAT, self-service success, and deflection.</li> </ul>	<ul style="list-style-type: none"> <li>Customers involved in knowledge creation/ maintenance.</li> <li>Improved collaboration enables "swarming" support.</li> <li>Long-term funding committed for dedicated KM resources.</li> </ul>
Process	<ul style="list-style-type: none"> <li>No formal processes.</li> <li>Knowledge tracked in support cases and by <i>Post-it</i> notes.</li> </ul>	<ul style="list-style-type: none"> <li>Processes established for knowledge capture, publishing, and maintenance.</li> </ul>	<ul style="list-style-type: none"> <li>Publishing process optimized.</li> <li>Knowledge-sharing processes expand across service to involve PS, ES, and MS.</li> </ul>	<ul style="list-style-type: none"> <li>KM processes expand across enterprise (development, QA, product management, product marketing, marketing, billing, etc.).</li> <li>Development priorities tied to root causes identified by support KM.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>Knowledge collected in multiple applications and repositories.</li> <li>No unified search index or strategy.</li> </ul>	<ul style="list-style-type: none"> <li>Employee/customer knowledge repository identified.</li> <li>Unified search strategy in place.</li> </ul>	<ul style="list-style-type: none"> <li>Knowledge maintenance automated.</li> <li>Analytics identify content gaps, top/least-used content, relevancy.</li> <li>Concept-based trend analysis.</li> </ul>	<ul style="list-style-type: none"> <li>Infrastructure to further enable knowledge consumption, including search paradigms (chat bots) and formats (video, mobile).</li> <li>Long-term funding committed for KM infrastructure improvements.</li> </ul>

However, only investing in technology is not enough; you need to have a well-thought-out strategy around the technology solution to make the most of it. Unified search is no different. To make it work the best, there are best practices - or secrets that no vendor tells you - before and after adopting and implementing search in your organization. In this ebook, we'll talk about those secrets or best practices.

# 5 Best Practices to Follow Before You Implement Intelligent Search

Before you adopt cognitive search technology, you need to identify a couple of things like what are your goals or objectives that you're trying to achieve, what's the ROI that you're expecting out of this implementation, how are you going to measure it, etc. Let's discuss them in detail.

1. Identify Your Audience
2. Draw a Content Strategy
3. Place Search Strategically
4. Leverage Historical Insights
5. Set Your Goals

# 1. Identify Your Audience

The first thing you need to figure is - who you're implementing search for and what their use case is. Customer support teams, community teams, product teams etc. are all looking for search and they have their own set of problems that search can solve. A lot of organizations restrict search to one particular team rather than adopting it for the entire enterprise.

This siloed approach has an impact on the overall productivity of your business. The best way to avoid it would be talking to all the teams in your firm - the product team, sales & customer success team and narrow down how you can install search that brings all of them under an umbrella of unified search. Typically, teams that make a strong use case for search include:



## **SUPPORT AGENTS**

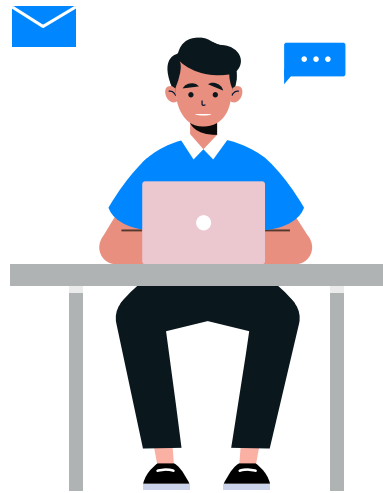
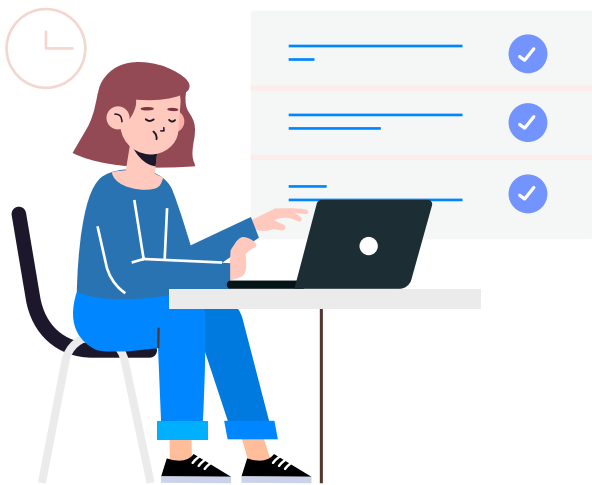
Your service reps have to go through a lot of documents and articles to provide a solution to customer queries and tickets. So, an intelligent search over the employee-facing portal would improve the agent productivity manifold.

## **COMMUNITY MANAGER**

Having a successful community means constantly trying to enhance user engagement. A good self-service experience drives engagement on community and to power a good self-service experience on your portals you need to have an AI-fueled search that delivers relevant and personalized results.

## **KNOWLEDGE MANAGER**

Would be concerned if the employees are able to access relevant documentation that's spread across the enterprise.





## 2. Draw a Content Strategy

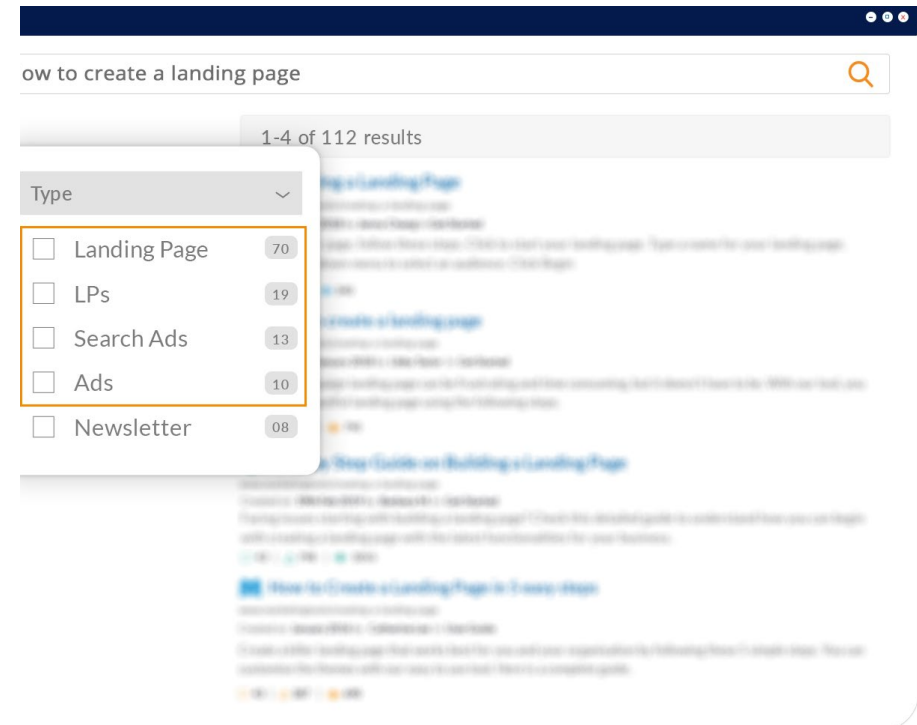
Content is king, but more isn't always better. Making all the information from all your content sources searchable at one place may not be the best way to leverage the power of a search engine. It will make irrelevant content surface in the search results as well, which will lead to a bad search experience and low customer satisfaction score.

For instance, you do not want to show content from your corporate blogs to users on your support community - users there would be searching for help articles, not marketing collateral. Hence, it's better to have a content strategy in place before implementing search.



Identify & narrow down which content repositories are driving users to specific portals. Then prioritize those content sources to make them indexable for your implementation.

Since we're talking about content pools, another major wrinkle you need to iron out is different nomenclature used across content repositories. When multiple teams contribute to knowledge creation, one topic can be referred to by multiple names (like an acronym by some) on different solutions. And when you have to integrate these disparate solutions, it creates a problem as the search engine has a hard time identifying iterations of the same terminology.



# 3. Place Search Strategically

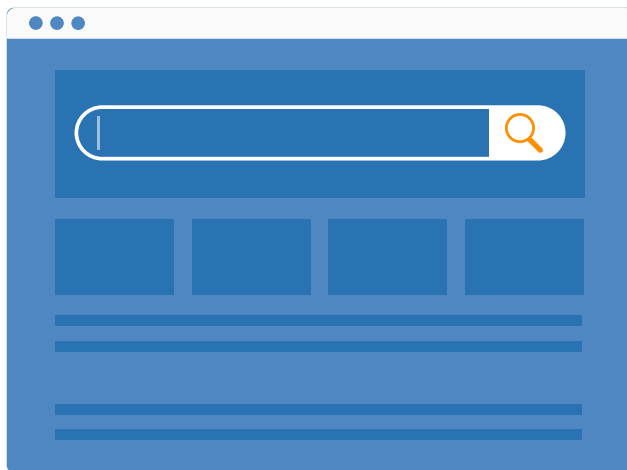
This is the world of omnichannel support and customers spend their time on different company channels like - support portal, help center, customer community, etc. You would want your users to reach out to you via any channel they want. So to get the maximum out of your search strategy, it's really important to identify what channels they use and for what purpose. Once you know that, you can better decide where to place search.



A simple exercise would be to recognize the web properties getting the maximum traffic. Consider this example:

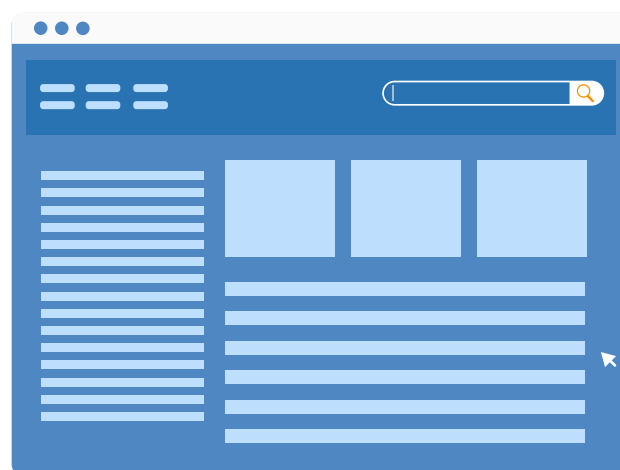
Let's say you are looking to implement search on your support portal and the below is the search volume across your firm's web properties. This suggests that you have more users searching on your community and support portal, & fewer on your help center. But you also need to know what those users are doing on those channels. Keep in mind that a lot of users that come to the support portal could be simply for raising a ticket since they did not find the relevant content on the other channels.

### Support Portal



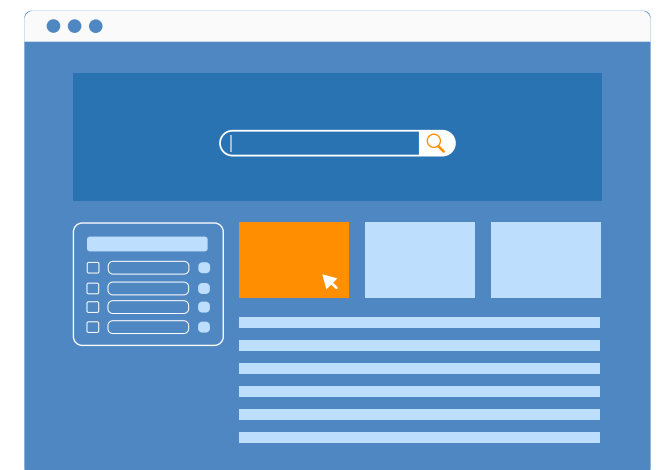
**Search Volume > 25000**

### Help Center



**Search Volume < 5000**

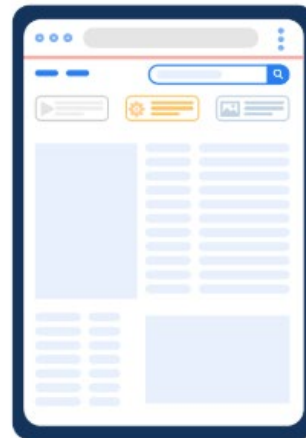
### Community



**Search Volume > 50000**

Therefore, installing a cognitive search engine on the support portal won't really do wonders. You need to place search on the help center and community. To nail the placement of search on your organization you need to identify how your users interact with knowledge on different channels.

Another thing that is important to consider during the placement of the search tab is the way your users are consuming the knowledge. Find out which kind of devices they use, for example, it could be a mobile phone, laptop or maybe a voice interface (commonly used by old age groups) because they don't like to type much. Check if the search solution that you are going to implement has the capability to cater to your users across different interfaces.



# 4. Leverage Historical Insights

The tool or technology that you've been using over the years would have accumulated some legacy data. You would want the search engine you're investing in to leverage this useful data and valuable historical insights. The new search solution that you're going to install should be advanced enough to seamlessly migrate this old data & insights to the new system.

If your new search solution isn't able to leverage the historical insights that your old tools built over the years that simply means starting the race again. The AI of the new platform will take some time to re-build user insights which in turn will affect the relevancy of search results. So, choose a search solution that allows you to import all the insights (like page rating, article views, discussions) so that you don't have to start from scratch.



**Legacy Data and Historical  
Insights Have Built Up**



**New Systems Don't Permit  
Integration with Old Data**



# 5. Set Your Goals

The fifth thing you should focus on before implementing cognitive search is to have a set of goals. Since search is one solution that multiple teams require and benefit from, it's a good practice to talk to various teams across your firm and set clear goals - what they want to achieve by implementing search. For instance, for a community manager the goal of implementing search would be to increase engagement on their community; that for a support leader would be to increase case deflection and CSAT. You may also have revenue generation as one of your goals by showing contextual ads in search results on your help center or community. Having clearly defined goals before you implement cognitive search will help you measure the ROI of search.







**INCREASING  
CASE DEFLECTION**



**BOOSTING  
CSAT**



**ELIMINATING  
DUPLICATE CONTENT**



**ENHANCING  
COMMUNITY  
ENGAGEMENT**



**DRIVING  
REVENUE**

# 5 Best Practices to Follow After You Implement Intelligent Search

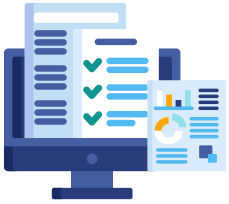
Once you've implemented intelligent search, the battle is already half won. However, you still need to take care of a few things in order to drive more value out of the beefed-up search engine. This includes:

1. Measure The ROI
2. Define Case Deflection
3. Extend Search Capabilities
4. Close The Loop Between Self-service & Support
5. Augment The Intelligence

# 1. Measure The ROI

Post-implementation, the first thing you would want to do is calculate the ROI. It's easy to measure it as long as you have a clear goal (5th secret in the previous chapter). An intelligent search solution provides a number of analytical reports to quantify the efforts you're putting to improve your strategy. Here are some of them you should keep an eye out for:



**CONTENT GAP ANALYSIS:**

It identifies what's missing in your content strategy by diving into search insights. It tracks queries that don't return results to the users which will then help you create more content that users want to consume.

**SEARCHES WITHOUT CLICKS:**

What if there are plenty of searches on but not a lot of clicks? That means relevant information is not coming across and the results need to be fine-tuned accordingly. This report will help identify searches with scope for improvement.

**CUSTOMER JOURNEY INSIGHTS:**

This report will come in very handy when your support agents are interacting with customers. It shows the complete user journey across different touchpoints to the point of case creation. This gives your agents the opportunity to provide a better solution and resolve tickets faster.

**CASE DEFLECTION:**

A 100% case deflection sounds like a dream. Measure how your self-service portals are performing, by measuring how many cases are deflected. This is a broader topic that requires an in-depth discussion which is given in the next section.

## 2. Define Case Deflection

Measuring case deflection is a very debatable topic. Different firms in the support industry have different ways of measuring case deflection on their portals. For instance, here are two different approaches organizations generally take:



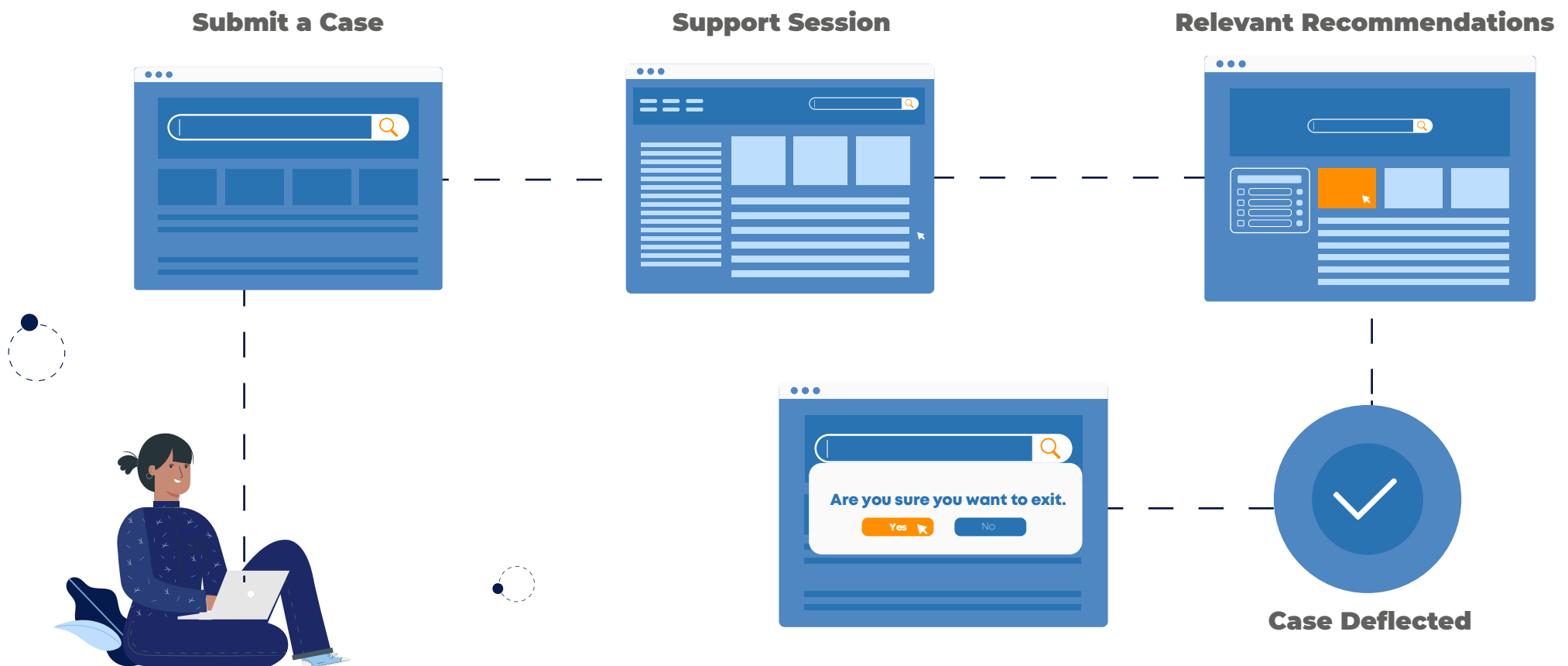
### **BROADER SENSE**

For a user with the intention of using your self-service portal before raising a ticket: a case is said to be deflected if he runs a search, clicks on one or more results he/she sees, and leaves without logging a case.



## STRICTER SENSE

In addition to the previous case, this methodology also takes into consideration the people who didn't go through any of the help content and straightaway head towards the case creation page. There, a search box precedes the support form. As the user enters a query, relevant knowledge is suggested to address the issue. And when they click on the suggested article and leave without creating a case, the case is considered deflected. These suggestions are derived from search data provided by the smart engines.



It's up to you which method you want to use. But define it so that you can measure it and boost self-service over your portals.

Some organizations try to boost case deflection by not providing a clear support or help tab to the customers in order to prevent them from creating a case. Another thing we've noticed is organizations asking for too many details on the case creation form. Both these practices significantly tarnish the customer experience and can lead them straight to the competitors. Instead, you can leverage the engine to personalize the home page for users based on their behavioral and historical data.



# 3. Extend Search Capabilities

Search has gone way beyond simply the search box. After you've implemented cognitive search. You can harness its full potential with the help of interfaces and apps. Here's how:



**SEARCH-ASSISTED CHATBOTS:**

Some search vendors have upped the ante by offering chatbots that can tap into search insights for personalized interactions. This helps to deliver helpful content after understanding the users' issue from the interaction and speed up the training process.

**DYNAMIC NAVIGATION:**

Search can also be used to create dynamic recommendation lists based on the usage pattern of the respective user. This will increase user engagement at your portals since users generally do not interact with static menus on digital properties.

**IN-PRODUCT SEARCH:**

AI-fueled search can enable real-time assistance inside the product in the form of contextual recommendations. This helps save users' time who'd otherwise have to bounce around the help center, support community, etc. and then back to the product.

**EMAIL RESPONSE SUGGESTIONS:**

Sometimes, a majority of the cases come from channels like email where the customers do not check the KBs. One would obviously want the users to take a look at the firms' help center or community. Fortunately, there is a solution. You can embed relevant search suggestions in the acknowledgment email sent to the case creator. When the users go through the suggested knowledge, they will see the information wealth on the said portal which would subsequently boost its usage.

## 4. Close The Loop Between Self-Service & Support

As we said in the beginning, you should use search across all the teams in your enterprise. Here's how you'll benefit from it in the long run. Let's say you've implemented search at employee portal & customer-facing portal.

Your customer comes to create a case at the portal and he sees suggested articles but doesn't find them relevant and goes ahead with case creation.

However, when your support staff starts working on the case, they find the right solution. This means that the customer-facing search interface was unable to optimize the results for relevancy.



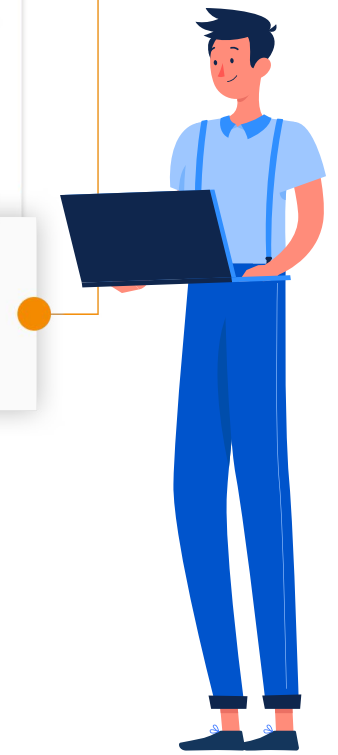
A cognitive engine should be smart enough to automatically improve the relevancy score of that content piece (used by agent) for the search query used by the customer. Hence, if your agents attach a particular article to resolve a case, that article should be displayed higher in the subsequent interactions. This helps to close the loop between self-service & support.

**How do I fix the bluetooth on my iphone 6s** by Chris in FAQs & Knowledge Base  
Date: 11-12-2014 Type: Knowledge Base  
If you previously connected your **Bluetooth** accessory to your iOS device, unpair the accessory, put it back in discovery mode, then try to pair

**Attach to Case** Copy To Clipboard

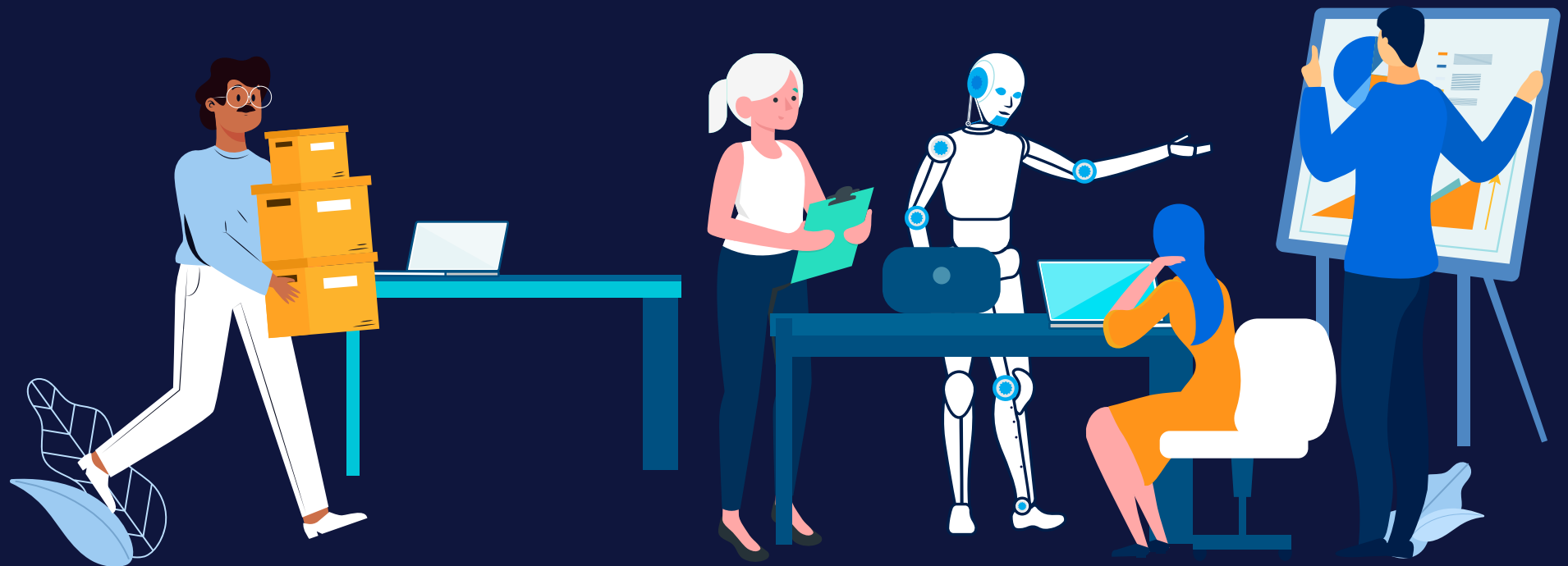
Bluetooth not working in my iphone 6s

**How do I fix the bluetooth on my iphone 6s** ✓  
Created on December 28, 2015 by AntonC in Integrations  
[www.rgtvsupport.com/what-steps-to-follow-set-up-rg12](http://www.rgtvsupport.com/what-steps-to-follow-set-up-rg12)  
If you previously connected your Bluetooth accessory to your iOS device, unpair the accessory, put it back in discovery mode, then try to pair  
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



# 5. Augment The Intelligence

The last secret is about enhancing the cognitive in cognitive search aka training the AI. According to Gartner, by 2023, 40% of I&O teams will use AI-augmented automation in large enterprises, resulting in higher IT productivity with greater agility and scalability. Having said that, you don't want to put the plane in autopilot mode and let AI do the rest. AI works best when trained continuously.



Some amount of human supervision is still needed. It is only when AI-powered features learn about your users and content, it will be able to provide the best experience. The more they learn, the more relevant they become. Keep track of how these features are behaving and make changes accordingly.



Check the Ink level on my printer  Is my printer cartridge empty 

**Printer Cartridges: How To Check The Ink Level**  
Date : 23rd jan 2019  
Want to check your printer cartridge level? [Click here to find out how?](#)

Suggested synonyms	Count
<input type="checkbox"/> ink,cartridge	03
<input type="checkbox"/> Sheet, paper	02
<input type="checkbox"/> inkjet, ink-jet	02
<input type="checkbox"/> printer, printing machine	02
<input type="checkbox"/> blur, unclear	01

[Accept Synonym](#) [Reject Synonym](#)

### Configuration for Personalised boosting

Configuration	Action
Enable Auto Boosting	<input type="checkbox"/>
Enable Auto Spell Corrector	<input checked="" type="checkbox"/> 
Enable Facet Interpreter	<input checked="" type="checkbox"/> 
Enable Rich Snippets	<input type="checkbox"/>

# Conclusion

Implementing cognitive search in your enterprise is no piece of cake but with the right set of techniques in mind, you can achieve success. The adoption of unified search has grown from 7% to 19% in the last year, according to TSIA. And this number is expected to grow strongly. So if you want to be one of the early adopters of this revolutionary tech and reap its benefits across your firm, a successful implementation is of paramount importance.

This Ebook is based on our Webinar with TSIA: “ Cognitive Search for Better Self-Service: 10 Secrets No Vendor Will Tell You”.

Watch this Webinar to deep dive into the common pre- and post-implementation considerations and learn more about topics like mapping case deflection and ROI of search. You can watch the on-demand webinar [here](#).

## Let's Connect



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## About SearchUnify

[SearchUnify](#) is a unified cognitive search platform that revolutionizes information discovery, fuels an insight engine, and makes for a robust platform for AI-based apps like customer-facing and agent-assist chatbots. Its AI powers relevant and personalized search results for customer support and self-service. It indexes disparate content repositories, makes relevant content easily discoverable (on online communities, sites, customer portals, service consoles) and provides advanced insights into user search behavior, content usability, and content gaps – all while self-learning to personalize and keep responses within the context and ensuring the security of the enterprise data.

To see it live in action, request a [free demo!](#)