



# 5 Ways Technology is Changing IT Support Forever

By ITSM.tools

The corporate IT support landscape is rapidly changing, with employees – buoyed by their personal-life, consumer-world experiences – increasingly expecting more from their IT departments and service desks. But it’s not just a demand-side change, the supply-side is changing too, in line with these increased employee expectations, to offer both omnichannel access and a better employee, or customer, experience.

Part of the required IT-support change is a mindset shift, with people understanding that employees now expect their often-superior, consumer-world service and support experiences in the workplace. Think of it as the “consumerization of IT support” rather than the device-focused “consumerization of IT.” Ultimately, consumerization has raised employee expectations of corporate service providers, such as IT, across the board.

In meeting these needs, IT service desks need to take full advantage of new technologies and capabilities, and the benefits they bring. These include:

# 1.

Self-Service

# 2.

Chat

# 3.

Knowledge  
Management

# 4.

Machine Learning

# 5.

Chatbots

Please read on to understand how these technologies and capabilities can help IT service desks, and how best to adopt them to meet higher employee expectations of:

- IT support’s service, or customer, experience
- Quicker solutions
- Omnichannel access to IT services and support.



# 1. Self-service

Self-service has long been sold as a magic cure for multiple IT department ills – providing IT service desks with the ability to:

- Deflect calls (and thus reduce both pressure and workloads)
- Increase operational efficiency
- Reduce costs, and
- Better meet end-user expectations of modern IT support and customer experience.

However, many IT departments have struggled to reap these promised benefits, as well others such as 24x7 service desk availability and quicker resolutions. Why? Because an insufficient number of employees want to use these new self-service capabilities, with the reality being that IT self-service is killed by the failure to provide a good enough, let alone great, customer experience.

## THE CURRENT STATE OF SELF-SERVICE

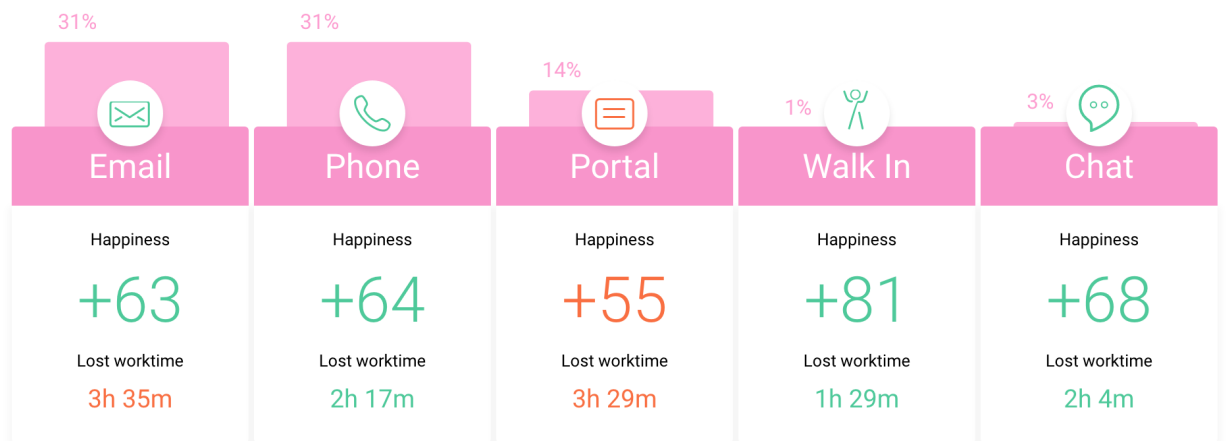
[Service Desk Institute](#) (SDI) research shows that only 17% of organizations think that they've received the promised benefits from their investments in self-service. And employee self-service usage statistics from both [HappySignals](#) and [MetricNet](#) have the channel at just 10-15% of ticket volumes – still a long way behind the more traditional IT service desk access and communication channels of telephone and email. And this is despite over 80% of both US and UK organizations having already invested in some form of self-service technology<sup>4</sup>.

There are many root causes for this continued low level of employee adoption, but a major one is that self-service change efforts are overly focused on the front-end technology, with insufficient investment in people change. Then, if self-service is seen solely as a cost-saving replacement for telephone access, it just compounds things further. As does insufficient use of both knowledge management and automation, which should be providing the self-service backbone for both cost savings and greater speed of delivery. The latter of which would also help drive customer experience improvements. The result is a poor customer experience, with it still probably easier for employees to call the IT service desk.

HappySignals employee experience management data, based on circa 100,000 employee feedbacks received over a rolling six-month period (shown in Figure 1), reinforces this:

- The self-service channel (Portal) offers the lowest level of employee happiness at +54, and by a long way.
- More time is lost, by the employee, with self-service than with any other channel, even email.

**Figure 1: Employee Experience by Contact Channel**



Jul 6th 2017

Source: <http://benchmark.happysignals.com/benchmarks>

HappySignals

## HERE, HOW TO GET SELF-SERVICE RIGHT

The aforementioned barriers to self-service, and others, need to be removed; with five of the most important success actions being:

1. **Treating self-service as a business project.** Recognizing that self-service isn't about the implementation of new technology, with it instead a business project that changes the way employees work. And, thus the self-service initiative unsurprisingly needs to be focused on the end users, i.e. employees. So, involve the real end users from the start – from planning and design through to testing and launch. Make self-service reflect how employees want and need to work, and understand what terms such as "intuitiveness" and "ease of use" really mean to them.
2. **Focusing on a better customer experience over cost savings.** Recognizing that financial savings, and a positive return on investment (ROI), will only be realized if there's sufficient employee usage – with a sufficiently good customer experience required for employees to use the self-service capability over alternative channels. Why? Because employees are bringing their often-superior consumer-world experiences and expectations into the workplace. And, as such, it needs to be designed and deployed with the customer in mind. Ultimately, the better the customer experience and outcomes, the more self-service will get used and the higher the financial savings will be.

3. **Using organizational change management techniques to facilitate the transition.** As already mentioned, self-service success is more about changing behaviors and the way of working than it is training employees to use a new technology. To engender change, employees not only need to know the “how” of self-service, they also need to know the “why.” Thus, an investment in a proven organizational change management methodology is required to minimize the resistance to change that manifests from people’s sense of the unknown. Ultimately, employees need to buy into the change, from the explaining of the “What’s in it for me?” to providing the required level of education and training for the self-service capability to be used effectively.
4. **Investing sufficiently in knowledge management and automation.** Knowledge management is the fuel that powers the IT self-help capability. But it not only helps employees directly, it also serves as an effective self-service “stickiness” mechanism – with the level of immediacy, versus logging a self-service ticket and waiting (and waiting), helping to get employees to use and reuse the self-service capability. Automation offers a similar level of immediacy to both the resolution of incidents and the provisioning of service requests. And while the first thought of benefit of automation is usually cost savings, the real benefit for self-service is the increased speed of delivery (which in turn makes for a better customer experience). Both of which will positively influence employees to return to self-service and to actively promote it to peers.
5. **To never stop improving.** Consumer-world self-service capabilities will continue to improve and thus the external benchmark that IT’s capabilities need to meet will continue to rise. For instance, new technologies such as [machine learning](#) are already being employed in business-to-consumer (B2C) support scenarios. These will quickly make their way into employee-support use cases.



## 2. Chat

Chat is currently an underused contact channel for IT support, especially when compared to B2C use case scenarios. Importantly, it's no longer just a way for IT to save money on supporting remote users. Instead it's an employee support requirement based on their personal-life customer service experiences and expectations. Consumerization is bringing the need for IT service desks to reconsider their chat use and capabilities.

### THE CURRENT STATE OF CHAT

In backing up the assertion that chat is underused, and perhaps underappreciated:

- [HDI's 2016 Technical Support Practices & Salaries Report](#) shows a relatively low level of chat adoption in the US – with chat used by only 38% of support centers, albeit up from 32% the year before. To put this into perspective, the telephone channel was reported at 87% and email at 85% in 2016.
- Slightly older Service Desk Institute (SDI) UK-focused data – from its [2015 Service Desk Benchmarking Report](#) has the UK level of chat adoption at just 21%, and even allowing for growth since then it will still be at less than half the level of telephone and email channels in the UK (at 100% and 93% respectively).

Thus, chat is still a minority IT support access and communication channel. But it should be leveraged far more based on HappySignals' employee experience management data.

Referring back to Figure 1., chat-based support (at +68) makes employees happier than telephone (+64), email (+63), and self-service (+55); lagging only behind walk-up (+78). And then it's second again in terms of the speed of resolution – shown as the total worktime lost to the IT issues being feedback on. However, only 3% of the received feedbacks are for chat-based contacts, little more than the 1% for walk-ups.

Thus, we have a similar scenario to self-service, albeit on a smaller scale – there's currently little employee uptake of the chat channel. But, unlike self-service, it's not because the chat experience is failing end users.

So, for IT support teams wanting to:

- Better meet employee expectations of available support channels
- Offer a better quality of service and customer experience
- Improve service desk agent productivity, and
- Do a better job of keeping their business operational

Chat is a great opportunity to improve.

## HERE'S HOW TO UP YOUR CHAT GAME

Chat is a potentially different scenario to self-service. The HappySignals data demonstrates that chat is easier to get right than self-service (from an employee experience perspective) – because it has “far fewer moving parts” and requires less organizational change in terms of people’s behaviors (although there is a need to ensure that the IT support people involved are up to the challenges of chat).

Chat is thus just sitting there, quietly in the corner, waiting to be picked up as a potential “quick win” for over half of internal IT support teams, and most likely many more.

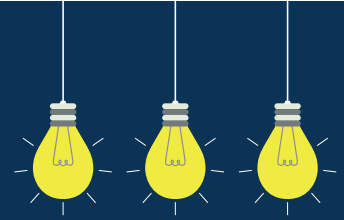
To up your IT department’s chat game, start by:

1. **Assessing the current level of chat use and end-user satisfaction/dissatisfaction.** It doesn’t need to be anything fancy, just the simple baselining of the status quo, with a dash of continual service improvement, to understand the level of chat uptake and what’s working and what isn’t. It’s the platform on which to grow your chat capability.
2. **Seeking advice from your chat provider and their exemplar customers.** Baselining and receiving end-user feedback is great but it can be too insular. So instead, look further afield for improvement opportunities and best practices, starting with the successful IT use cases that your chat technology and/or ITSM tool vendor can point you at. It’s a quick way of finding out both what works and what not to do – learning from the mistakes of others.
3. **Looking to consumer-world exemplars – and have chats!** IT doesn’t have a monopoly on support technology and best practice. So, look to exemplar B2C companies in terms of customer experience, how they position their chat capabilities, and how their chat works – from the technology to the people that engage with customers. It’s as simple as starting chats related to your real-life or imaginary issues and queries.

4. **Addressing chat shortcomings and opportunities, as appropriate.** Having worked through bullets 1-3, use the collated information to understand where your chat capability is, where you would like it to be, and what would be realistic short-, medium-, and long-term goals for chat improvement and adoption levels.
5. **Planning for and actioning a chat growth strategy.** It's where the rubber starts to hit the road. Create a road map to where you want to be, and by when. With suitable metrics to understand the distance travelled and the level of success achieved. And ensure that metrics focus on adoption levels and employee experience ahead of costs savings, because the former will lead to the latter. Whereas the latter will most likely prevent the former.



# Knowledge 3. Management



How good is your organization's knowledge management? Does it support these three IT support needs?

1. **Service desk enablement** – allowing service desks agents to extend their personal know-how and capabilities in helping end users or customers more quickly, thanks to the collated knowledge and wisdom of others.
2. **Self-help enablement** – allowing customers to access frequently asked question (FAQ) information or the solutions to common IT issues and needs.
3. **New support technology enablement** – [artificial intelligence](#) (AI), and in particular machine learning, needs information and knowledge to function, i.e. to make decisions or to be able to answer end-user questions when employed in a [chatbot](#) capacity, say.

The benefits of better knowledge management are definitely there to be had by IT departments. From quicker resolutions and an improved customer experience, with associated financial savings thanks to speed and potentially automation. To knowledge management making it easier to recruit staff and ensure that corporate knowhow is retained as people move on to new roles either inside or outside the organization.

However, as with self-service, there are common issues with knowledge management that result in low employee participation levels – in terms of knowledge capture, knowledge use, or both. With the root causes including:

- A lack of people change investment, i.e. in organizational change management, to bring in a new way of working (as there is with self-service).
- An unfortunate mix of knowledge article issues, including the inability to find knowledge, insufficient knowledge articles, low quality (unhelpful) articles, and that knowledge is outdated.
- That the employed technology doesn't make knowledge management easy enough for people to actively participate.

But, as with both self-service and chat, the challenges and lack of success to date present an opportunity for improvement built on the collected experiences of the industry.

## HERE'S HOW GET KNOWLEDGE MANAGEMENT RIGHT

Twenty years of knowledge management failures and successes make it easier for organizations to get knowledge management right today. Important knowledge management best practices to employ include:

1. **Focusing on people and how they work.** Understanding that knowledge management success is dependent on people change, requiring a change in employee mindsets and behaviors. New knowledge management technology alone won't bring about the required change – instead an investment in organizational change management techniques is needed to help with moving people to what will ultimately be a new way of working.
2. **Not doing “half a job” with organizational change management.** A knowledge management initiative will probably fail without a proper investment in the management of people change – it's the same as what's outlined in the third self-service “What to do” bullet. Plus, how knowledge management metrics are employed is really important. Why? Because the employed metrics drive employee behaviors, and organizations need to ensure that they drive the right behaviors not the wrong ones. For example, if service desk agents think that creating new articles is the most important facet of knowledge management, then the knowledge base might quickly become little more than a knowledge graveyard, where knowledge goes to die. Knowledge only has value when used.
3. **Focusing on knowledge use and reuse (not knowledge capture).** Importantly, organizations need to look beyond knowledge article creation. This might seem an odd thing to state, because without sufficient knowledge articles there's no documented knowledge to use (and reuse). But organizations need to avoid falling into the trap of seeing knowledge management as purely the drive to create as many knowledge articles as possible. The reality is that it's so much more, that the real business value of knowledge management is in the use and reuse of knowledge.
4. **Not treating knowledge management as an add-on activity.** Instead there's a need to embed knowledge management practices into business-as-usual processes. Why? Because if knowledge management is treated as an add-on process or activity, then it will never be seen as the real job in hand. Instead, it will be something to be tackled “after the real work is done.” Embedding knowledge capabilities also makes it easier for staff.

5. **Don't try to reinvent the knowledge management wheel.** There's no need to, because there's already a wealth of knowledge management best practice out there for organizations to exploit. From a service desk perspective, there's both [Knowledge-Centered Support](#) (KCS), a well-known knowledge management methodology for ITSM and service desks. And [Level Zero Solvable](#) (LZS), a technique that helps prevent organizations from launching self-help capabilities before they're fit for purpose.

# 4 & 5. Machine Learning & Chatbots



The use of machine learning, and chatbots in particular, is quickly growing. And it's not just the consumer-world use – where Siri and Alexa are used to answer questions, play music, alter the home environment, or to order physical and virtual products. The technology is also increasingly employed in supporting business-to-business (B2B) and B2C customer relationships, with the same soon to be true for internal IT support.

A big driver of this technology-fueled support revolution is the continued customer expectation for speed, or even immediacy, of contact and resolution. And now, thanks to consumerization – that's employees bringing their personal-life, consumer-world experiences and expectations into the workplace – the challenges of immediacy, and delivering a better customer experience, are hitting internal IT support teams too. Making machine learning and chatbots an ideal opportunity for IT support teams to keep up with their B2C support peers.

Starting with machine learning, this can be considered the “heavy thinking” version of the “heavy lifting” that IT departments have already offloaded onto automation. Offering insight and decision-making capabilities that are beyond the scope of humans in a similar timeframe. Then, employing machine-learning-powered chatbots offers up more practical benefits:

- “Additional team members” that don't tire of the same questions being repeatedly asked and that never need sleep – providing for 24x7 operations and the potential to reduce costs while providing quicker support.
- Human IT support agents are freed up to do more complex and interesting work.
- Employees get the immediacy of response they expect (based on their constantly-improving personal-life experiences).

But chatbots are just one of many machine learning use cases for IT support. Others include:

- **Improved search capabilities** – with search results no longer based on keywords but on context and meaning, plus what worked for previous searches for similar things.
- **Intelligent routing and workflow** – with the technology understanding which groups are best positioned to deal with particular requests based on both previous successes and current staff availability.

- **Intelligent autoresponders** – with end-user emails automatically responded to with the most likely solutions. When successful, the end-user presses an embedded-button that automatically logs the solution and closes the ticket without any human involvement. It's self-help via email that avoids the need to visit a self-service portal.
- **Demand planning and resource allocation** – with the technology accurately predicting what will be needed when in near real-time.
- **Virtual personal assistants (VPAs) for support staff** – through which support staff can benefit from what the technology "knows" when needed. It's a faster and simpler way for them to access the information or knowledge they need, and the technology can also automatically offer up information they don't even know they need.

And returning to chatbots – they really are a great machine-learning use case for IT support. They will interpret the customer's questions and responses, and pass back the most appropriate answers. Eventually delivering against the customer's need, particularly when that need is for information, or handing the customer over to a human as and when necessary.

For example, AgentBot has an intelligent, natural-language engine which interprets customer questions and, in doing so, it understands grammatical/typographical errors, regionalisms, and the different ways the same question can be asked. When you stop to think about it, chatbots are less about the evolution of chat, and more about the evolution of self-service and self-help – bringing us full circle on the five ways technology is changing IT support forever.

## HERE'S HOW TO GET STARTED WITH MACHINE LEARNING

Right now, IT support organizations should be understanding the "art of the AI possible," and what it means to them. It's about assessing the size of the water expanse, dipping a toe in to check the temperature, and then taking those few, potentially awkward, first steps into the unknown. So, start by:

1. **Identifying exemplar consumer machine learning uses, in particular chatbots, and try them.** Google is a wonderful thing, use it to understand which companies are already succeeding with machine-learning for B2C support. And, as with the earlier chat advice, go try them to understand both what's possible and how the technology works – and sometimes doesn't – in practice.
2. **Conducting a corporate AI "audit" to understand who is testing/using what, where?** The IT service desk is not the only use case for machine learning and chatbots, so find out which other business units are investigating, and potentially investing in, machine learning. Find out how far they have travelled, and what IT support can learn, and potentially borrow, from them.

3. **Understanding, and assessing, the IT support and wider ITSM AI technology landscape.** This is both embedded ITSM-tool technology and niche players, and is different to the first two bullets. It's the zooming in on what the ITSM and IT support market is doing with AI to understand what's available now and what's just around the corner, and from whom.
4. **Linking support-based AI activities into the corporate enterprise service management strategy.** It would be easy to forget this in the excitement over the new support technology. If the IT department is helping other lines of business – such as HR and facilities – to improve operations and service quality through the use of ITSM best practice and technology, then it should also include any successes with AI, machine learning, and chatbots.
5. **Starting to test the water – either with your ITSM tool vendor or a niche player.** It's time to dip your toe into that vast expanse of AI water. This might be via a niche player, your existing ITSM tool vendor, or through a partnership and integration that a niche player has with your ITSM tool vendor. This small first step into the AI waters is a necessary evil, given that it might be superseded pretty quickly, but every organization will need to start somewhere. Otherwise they will continue to sit on the shore, waiting for the waters to warm up, while their competitors are happily reinventing their businesses using the power of AI.

## HOW TO GET STARTED

The world of internal IT support is rapidly changing, and will continue to do so. On the one hand, thanks to new technologies, and on the other due to the growing expectations employees have of corporate service providers such as IT. Both of which offer challenges and opportunities to the IT department and IT service desk.

So, what should your IT service desk do to get started in addressing these? Your next steps should include:

1. Getting better at both self-service and knowledge management to better meet employee expectations of support. The key is to focus on the management of people change.
2. Revisiting chat capabilities. Chat not only offers another access and communication channel but also a better customer experience to employees. It's also easier to deliver a better employee experience with chat than it is with self-service.
3. Understanding that AI, in particular machine learning and chatbots, will radically transform both external and internal support. Your IT department needs to start its AI planning and tentative testing and adoption now.