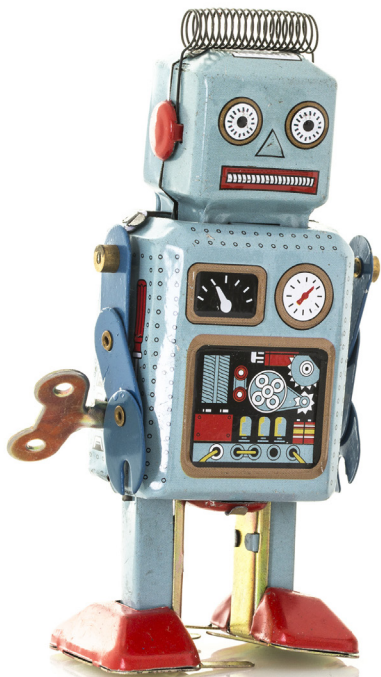


A Service Desk Manager's Quick Guide to the Opportunities of AI

STEPHEN MANN

Contents

The key challenges for modern IT service desks	4
The opportunities for, and benefits of, AI	6
The available AI-enabled capabilities and use cases for IT support	8
The current level of AI adoption by IT service desks	10
5 tips for successfully starting your service desk's AI and automation journey	12
Next steps	16



If you're an IT service desk manager that's looking for more information on the applicability of artificial intelligence (AI) to IT support, then this e-book is for you.

In the next 14 pages, it will outline the following:

- [The opportunities for, and benefits of, AI](#)
- [The available AI-enabled capabilities and use cases for IT support](#)
- [The current level of AI adoption by IT service desks](#)
- [5 tips for successfully starting your service desk's AI journey.](#)

But first, it's important to understand the IT service desk status quo and how AI will help.

The key challenges for modern IT service desks

For most IT service desk teams, there are a number of pressures, challenges, and – on the upside – opportunities for improvement related to how they serve and support their business colleagues. With the pressures and challenges often driving the opportunity to improve. For example:

- The need to meet increasing employee expectations – with this often influenced by their superior personal-life consumer-world experiences
- Keeping pace with the changing business and IT landscapes – from quickly meeting new business requirements to managing and supporting new technologies
- Higher work volumes and static budgets (or potentially budget cuts) – reflecting the now-decade-old mantra for IT service desks to “do more with less”
- Staff recruitment and retention issues – related to both existing and future service desk analyst skillset needs
- IT service management (ITSM) tool issues – whether related to ease of use or the lack of modern IT support capabilities versus what’s now simply expected
- Finding the time for operational and service improvement – with ITIL 4’s continual improvement too often an unexecuted aspiration
- Understanding the impact that AI will have on IT support operations – from the opportunities it brings to how best to successfully introduce it.

Your IT service desk might be subject to some or all of these.

And, importantly, when it comes to AI’s ability to help with them, there are two points that need to be recognized:

1. AI adoption is inevitable for IT support teams
2. AI-enabled capabilities for IT support are already here, with the need to research and plan for this inevitability now, not later.

Please bear these two points in mind when reading the rest of this e-book.

The opportunities for, and benefits of, AI

With AI, the “do more with less” mantra that has hurt IT service desk operations for the last decade is still applicable. However, AI elevates this mantra to what is now a quality- and outcome-focused “better, faster, cheaper.”

This is thanks to AI’s ability to avoid the limitations of the traditional “quality, time, and cost, pick any two” constraint of manually reliant operations.

This “better, faster, cheaper” mantra can also be used to describe AI’s key benefits:



Faster

with AI increasing the speed of task and workflow execution. It can also lead to faster identification of issues and trends, and aid in speedier decision making. Plus, changing what the AI does can be far easier, and swifter, than the equivalent human-based process change.



Cheaper

AI offers reduced operational costs versus the human labor that would otherwise be needed. This can be the augmentation of human capabilities, not just the replacement of people with technology. There are also positive cost implications related to reducing the level of human error and the associated employee lost productivity and rework costs.



Better

AI improves quality, outcomes, and the associated employee experience (particularly thanks to speed improvements), along with offering 24x7 operations where cost and staff limitations currently prevent it. AI-based analytics and the ability to do what was previously impossible, or at least cost-prohibitive, manually also both provide a platform for additional improvement beyond simply replacing manual activities with technology.

In considering the available benefits, it’s important to appreciate that AI extends traditional automation capabilities through what can be thought of as “intelligent automation” as well as analytical capabilities such as predictive intelligence. Examples are provided in the next section.

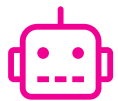
The available AI-enabled capabilities and use cases for IT support

There are a variety of AI-enabled capabilities already available to IT service desks, with this set to continue at pace. These early capabilities include:



Virtual agents

these can augment service desk analyst knowledge and capabilities in undertaking tasks, or they can be employed to improve upon the capabilities of employee self-service portals. The term “ChatOps” is sometimes used for service desk agents engaging with such virtual agents while working within ITSM processes such as incident and change management.



Chatbots

these are automated 24x7 first-contact support capabilities that might use machine learning and natural language processing (NLP) to understand and respond to employees' questions and requests. This can either be text-based or interacted with via voice UIs using consumer products such as Amazon Alexa-based devices.



Repetitive task automation

with AI taking over high-volume, low-value activities that consume a disproportionate level of manual labor. Speeding up processing and increasing accuracy. For example, intelligent ticket receipt – with this the automated categorization, prioritization, routing, and potentially actioning of received issues and requests based on historical data patterns.



Predictive intelligence, trend identification, and decision support

this can relate to ITSM processes such as problem management and change management, plus operational IT service desk needs including demand planning and staffing optimization. Importantly, the technology swiftly provides insight into large datasets that would otherwise be beyond human capabilities.



AI Ops

this is machine-learning-powered event management that highlights the most important issues, within the monitoring “noise,” based on pattern recognition. AIOps capabilities can also include the predictive identification of issues and apply automated remediation. For example, highlighting the potential for major incident occurrence.



AI-assisted knowledge management

these capabilities range from intelligent search, through intelligent email autoresponders, to the automated identification and filling of knowledge base gaps.

The current level of AI adoption by IT service desks

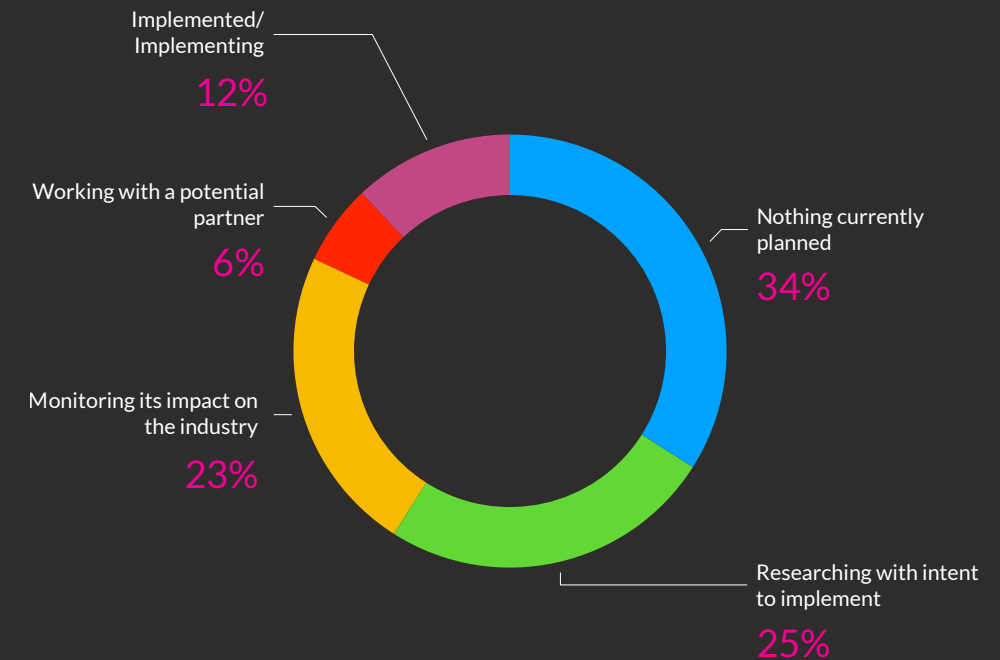
As an IT service desk manager, it can be difficult to get a handle on the current uptake of AI-enabled capabilities for IT support. There's the continued media hype around AI. Then product-based marketing related to AI being embedded in ITSM tools or third-party solution offerings. And, at the other end of the spectrum, you might not have seen or heard of any AI successes from your peers and wider network yet.

Thankfully, there's some degree of survey-based industry data available. Hopefully, with more to come; along with customer case studies that outline the ups and potential downs of AI adoption. An early-2019 ITSM tools global "Future of ITSM" survey found that:

- Only 9% of survey respondents view AI as a serious job killer, with this down from 16% in 2017
- 9% of survey respondents are already using chatbots and other bots in IT management use cases, plus another 29% are experimenting with them.

A mid-2019 survey and resulting "A View from the Frontline" report by the Service Desk Institute (SDI) found that a total of 18% of organizations (in the UK and EMEA) either have implemented, or are implementing, AI capabilities or are working with a potential partner:

Has your organization started looking into implementing AI technologies?



Source: SDI, "View from the Frontline" (2019)

Half of IT service desks are still working out what can, and should, be done – with 48% either monitoring AI's impact on the industry or researching with the intent to implement it. The final third of organizations currently have nothing planned (for AI).

Different industry surveys will, of course, provide different results based on the companies within their sample and their respective geographies, sizes, and industries. So, please bear this in mind when reading AI, or any other ITSM, statistics.

5 tips for successfully starting your service desk's AI and automation journey

Even if your IT service desk currently has no remit or funding to focus on the potential of AI, the realization that AI-enablement of IT support is inevitable, combined with industry learning that the adoption of AI is likely to take longer than expected, offers up the first of the five tips:

1. Don't wait until your organization is ready for AI, start your preparation now.

AI is not a plug-and-play technology, nor a case of simply switching it on to receive its benefits. In addition to matching available solutions to your business needs, and choosing what's best for your organization, there'll likely be significant effort and cost investments needed to create the required AI-enabled IT support capability. And this takes time. So, don't sit on your hands waiting for the authority to proceed with AI. Instead, use your initiative to do what you can now (at minimal cost) such that you don't have to start cold when it's finally time to move on AI. This includes research of the market and who is currently achieving what with AI for IT support. Then there's the impact AI will have on IT service desk metrics and required people skills. Plus, there are the needs of tip #2.

2. Manage people's expectations (of AI) now.

There has been much hype, plus scaremongering, around the impact of AI. From the fact that it will take everyone's jobs to it providing a solution to every known issue (IT or otherwise). So, ensure that everyone with a vested interest knows what AI currently entails in terms of what it can and cannot do for IT support. Including that there are no immediate silver bullets for either IT or the business, and no production-ready out-of-the-box solutions (as per tip #1). In terms of people's concerns about their jobs, there's a need to explain why AI for IT support is beneficial to everyone (and inevitable) but also that AI is currently only replacing people in specific tasks, not their roles. That it's the augmentation of people's capabilities, not the replacement of them. With this ideally part of a larger organizational change management initiative that's helping to shepherd in the new ways of working.

3. Build your AI-enabled capabilities around employee needs and expectations.

Here there's a need to deliver based on what employees want to, and will, use – rather than simply implementing technology that ends up as a white elephant. Self-service technology is a great example of how IT organizations have failed to do this in the past. Where the technology has been implemented – probably to time and budget – but it simply doesn't get the level of usage that was expected. And, importantly, it fails to get the level of employee adoption that delivers the anticipated return on investment (ROI). There's much to be learned from the ITSM industry's failures and successes with self-service. So, start with your employees' views of what AI-enabled capabilities need to be, not what the available technology can do. This will no doubt be heavily influenced by the exemplar business-to-consumer (B2C) capabilities that they've already experienced. Think of this as the high bar that your corporate AI-enabled capabilities need to clear.

4. **Recognize that AI, and machine-learning-based capabilities in particular, will be dependent on the quality of your IT service desk's knowledge management capabilities.**

Machine learning needs data, information, and knowledge to function, and to shape itself to deliver against the tasks for which it's being employed. So, how good is your knowledge management in particular? From capture through to use, and not forgetting all the issues that are still hitting the IT service desk that could otherwise be deflected thanks to fit-for-purpose knowledge articles. Don't assume that you have knowledge management down pat – use something like the Level Zero Solvable (LZS) technique to quantify your organization's ability for employee self-help via suitable knowledge articles that are firstly available, then findable, and – importantly – usable (and used).

5. **Look beyond the front-end use cases for AI.**

Much of what's written about the AI-enablement of the IT service desk relates to people-based touchpoints – namely chatbots and virtual agents. These definitely have their place, and offer a raft of benefits to various stakeholders, but there's more to AI-enablement than presenting people with the information and services they need as and when they need them. A big opportunity for AI is at the backend, through intelligent automation. This is the replacement of high-volume, low-value manual tasks with technology. For example, the intelligent ticket receipt capability mentioned earlier, where tickets are automatically categorized, prioritized, routed, and potentially actioned based on historical data patterns.

Next steps

AI for IT support is already here in terms of the first wave of technology solutions and their use by early-adopter organizations. Its mass adoption is also inevitable, as organizations seek to optimize their IT support capabilities and the better business outcomes they enable.

The big question for your IT service desk is not whether you'll use AI or not – because, as with many consumer-world uses cases, AI will become part of technology-based services you use whether it's explicitly wanted or not. Instead, it's more of a question of when and how. Especially as competitors adopt AI as a short-term differentiator.

So, your IT service desk's next steps with AI need to, as a minimum, seek to employ the above five tips to move forward despite the current lack of approval (and funding):

1. **Start your AI preparation now**
don't leave your IT service desk with a cold start.
2. **Manage people's expectations**
it will be a big factor in your AI-adoption success as and when it happens.
3. **Understand employee needs and expectations**
there's no reason why this can't begin now such that you're in an informed position for when it's needed.

4. **Address the quality of your IT service desk's knowledge management capabilities**
your assessment and improvement of your knowledge management will also pay dividends even before any AI adoption is approved.
5. **Consider the potential backend use cases for AI**
again, be prepared by matching your organization's challenges with the art of the possible to identify opportunities for what might then be relatively quick wins.

The important thing is not to simply stand by, waiting for AI to be approved for your IT service desk, because this will only lengthen the time it takes for your AI adoption initiatives – once approved – to deliver the expected business value.



