

The logo for Milestone, featuring the word "MILESTONE" in a blue, sans-serif font. The letter "O" is replaced by a stylized blue circle with a white crescent shape inside, resembling a globe or a satellite. The background of the top left is a dark blue gradient with a hexagonal pattern and faint binary code (0s and 1s) scattered throughout.

MILESTONE

# AUTOMATED SERVICE DESKS

8 WAYS VIRTUAL AGENTS ARE IMPROVING IT  
SERVICE DESK ECONOMICS AND PERFORMANCE

[www.milestone.tech](http://www.milestone.tech)

# What's inside this ebook?

Introduction ..... 3

Many Organizations Struggle with Improving their Service Desk Effectiveness 4

The Future of Service Desks is Here. The Automated Service Desk ..... 5

What is a Virtual Agent? ..... 6

Are Virtual Agents the Same as Chatbots? ..... 7

Eight Ways Virtual Agents Make Service Desks Better ..... 11

Getting Started with an Automated Service Desk ..... 12



# Introduction

Virtually every IT department that supports end users provides some kind of service desk. Yet many IT organizations face an ongoing struggle to maintain cost-effective and well-run service desk functionality. We are seeing automated service desks powered by AI-based Virtual Agents deliver breakthrough benefits when compared with traditional manual service desks.



## What kinds of breakthroughs?

Our experts are seeing automated service desk customers achieve results such as:

>35%

**of all service desk cases handled by automation**

>50%

**reduction in escalations**

>80%

**reduction in Average Handle Time**

>85%

**automated resolution rate for L0 tickets**

This paper introduces the concept of the automated service desk, explains what a virtual agent is and isn't, and describes eight ways Virtual Agents are improving service desk economics and performance.



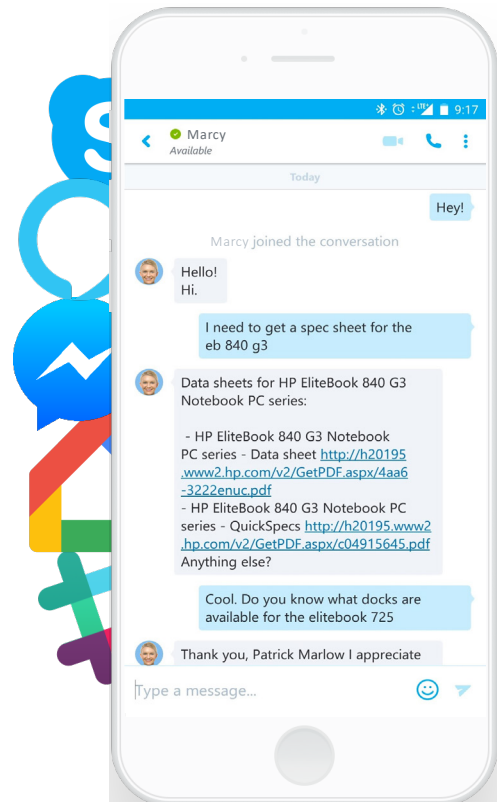
# Many Organizations Struggle with Improving Their Service Desk Effectiveness

IT service desks are supposed to provide well-informed, single points of contact to quickly resolve technical issues and enable users to submit service requests. But maintaining a cost-effective, well-run service desk is often an uphill battle for even the best-intentioned organizations.

Some of the challenges we see include:

- The current staffing model no longer scales and cannot support company growth
- The company needs 24/7 coverage, but cannot afford to staff such a service desk internally
- Service desk costs are too high and need to be reduced
- Service levels are inadequate, but the company does not have the resources or expertise to fix them
- An incident such as a pandemic, natural disaster or security breach requires a significant increase in capacity
- A current supplier is not providing sufficient service

Many tactical service desk improvement techniques focus on staffing, such as more hiring, better hiring, better training, and reorganizing. Sadly, these measures can only help so much. Previous technology solutions, such as knowledgebases and self-service portals, have also had limited success due to usability issues or limits in what they can provide.



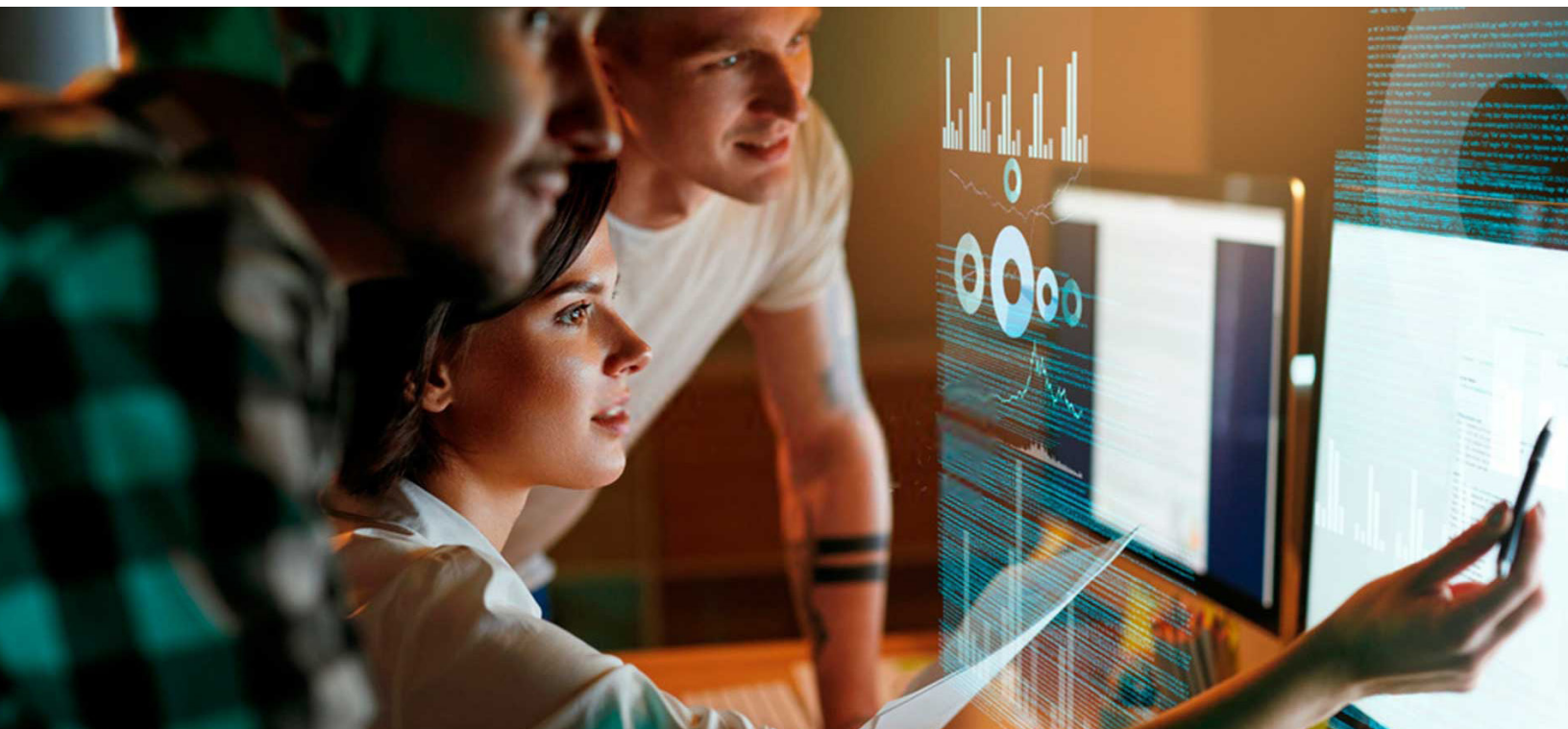
# The Future of Service Desks is Here. The Automated Service Desk

Milestone has pretty much seen it all in terms of service desk challenges, innovations, and trends. The solution to many of today's service desk difficulties is via intelligent automation: an automated service desk.

## What is an automated service desk?

It is a service desk that uses artificial intelligence technologies to deploy Virtual Agents to complement the existing human agents. By doing so, automated service desks deliver a better employee experience for the end user community, as well as better efficiency, capacity, and productivity for IT.

Innovative technologies such as artificial intelligence, machine learning, natural language processing, and robotic process automation have matured rapidly, making the latest iteration of “thinking machines” a reality. Virtual Agents founded on these technologies are already boosting outcomes in healthcare, retail, banking, government, and other areas.



# What Is A Virtual Agent?



Virtual Agents are cognitive platforms that augment existing staff to deliver best-in-class service, fully automating what were previously human-to-human interactions.

They incorporate extensive AI capabilities including natural language processing and machine learning so they can:

- Service your users in their natural language, using a conversational interface to provide a seamless user experience
- Interact with users via their choice of communication channel, whether that be via mobile app, messaging platform, email or website
- Connect to CRM, ERP, HR, ITSM and other enterprise systems to obtain data and automatically execute processes
- Monitor your user's sentiment or mood and act accordingly with empathy
- Make real-time decisions based on analytics
- Learn best practices from your top employees by observing how they work complex cases and bring them to successful conclusions
- Provide instant scalability as demand increases

# Are Virtual Agents the Same as Chatbots?

No. According to [Forbes Magazine](#), while the underlying concept may be similar, there's a significant difference between the two. In fact, in many ways, they couldn't be more dissimilar.

Most of us have interacted with chatbots. For example, you may have used the "live chat" feature of a website. Chances are the initial portion of the conversation was with a chatbot that asked and answered a few basic questions via predefined options before handing the conversation over to a human agent to resolve your issue or concern. The problem is that these chatbots lack the functionality and versatility of Virtual Agents. The fundamental issue is limitations in the chatbots' cognitive ability.

Simply put, chatbots are one-dimensional. They are pre-programmed to respond to basic inquiries and common requests based on predetermined scripts. When interacting with a chatbot, it may seem as though you're holding an actual conversation, but in reality, you're really just receiving canned responses.

Conversely, the responses you receive from a virtual agent aren't scripted, but cognitive and bidirectional in nature, based on artificial intelligence and machine learning. Thanks to natural language processing (NLP), Virtual Agents can contextualize human inquiries—even vague or ambiguous ones—to determine meaning and intent. As a result, they can hold much more complex and realistic conversations, generate meaningful dialogue, and provide intelligent responses based on the context of the data received. This means that imperfectly phrased questions or requests from users are still understood.





# 8 Ways Virtual Agents Make Service Desks Better

## Eight ways Virtual Agents make service desks better

Automated Service Desks with Virtual Agents that supplement highly-skilled, customer-focused human workers generate breakthrough benefits in eight ways.



### Radically improved economics

Automated service desks provide radically improved economics by reducing the number of human service desk staff. Not only do direct headcount-related costs drop with the introduction of Virtual Agents, but indirect costs such as recruiting, training, and QA also drop. According to a recent Help Desk Institute study, it costs about \$12,000 on average to replace a single service desk FTE in North America (NA), including training costs once the agent starts work (<https://itchronicles.com/automation/virtual-agents-future-work/>). Even a 10% reduction in staff and training can make a significant change in overhead.

In our own experience, automated Virtual Agents can resolve up to 85% of L0 tickets, and fully 35% of all service desk use cases with no human intervention.



### Greater consistency and accuracy for improved service quality

With a manual, human-staffed service desk, the difference in knowledge, intelligence, and training between the top and bottom team members can be significant. With Virtual Agents on the job, end users consistently get the best agent, every time.

Virtual Agents only need to be trained once, and they get smarter continually. They follow established best practices and adhere to policies and procedures. They never forget or deviate from the rules, which helps IT remain compliant with industry regulations.

Virtual Agents can pull up accurate data from databases, applications, and other systems, so they are always working with the right information to solve the end user's problem and close the case.





### **Infinite scalability and availability without adding human resources**

Many service desks struggle with scalability, particularly increases in demand for services caused by unexpected events such as security breaches, natural disasters, or pandemics. Even planned rollouts of new technology and seasonal spikes can cause increases in demand.

Virtual Agents can scale up to handle higher volumes infinitely and immediately, without an increase in headcount. This factor alone is prompting many large, global organizations to pursue the deployment of Virtual Agents to their service desks.

With today's increasingly global and mobile workforces, delivering 24/7 IT service and support is a must. Virtual Agents are always available. They allow employees to submit issues, ask questions, and request services 24 hours a day, seven days a week, 365 days a year, without needing to staff the service desk.

Virtual Agents also enable IT to remain compliant with SLAs, even during times of increased incident volumes.



### **Observational learning capabilities result in continual service improvements**

Today's automated service desk Virtual Agents can handle a significant number of service desk use cases ranging from relatively simple but common scenarios such as password resets to complex use cases such as lost laptop replacements. Once deployed, Virtual Agents learn on the job by observing how human agents handle tickets, so their capabilities increase over time as they become more knowledgeable.

Once a human agent closes the case, the virtual agent can review the history of how the SME worked the case, learning the process for solving similar cases in the future. They are continually improving their knowledge and accuracy based on relevant knowledge, conversation history, and trend analytics. This allows them to provide the most accurate answers to questions even as policies change, people move, and products get new features.



### **Improved job satisfaction for your human agents**

According to Gartner, password resets account for 40% of all service desk requests. Ironically, it is these everyday and relatively simple use cases that can make human service desk agents feel like robots, repeatedly responding to the same requests over and over (and over) again.

With Virtual Agents on the job, these mundane tasks transition to actual robots. Virtual Agents can handle everything from simple tasks to complex workflows. This frees up human agents from lower-level tasks so they can focus on higher-level functions that are more interesting, more challenging, and allow them to develop skills that will improve their career prospects.



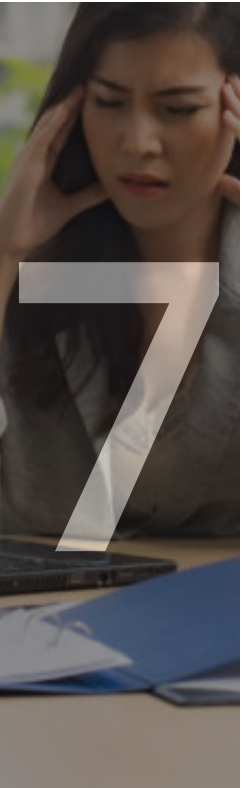
### **Improved customer experience for your end users**

In addition to providing improved employee experience for your service desk agents, Virtual Agents also provide an enhanced employee experience for your end users. On-demand, online communication, and collaboration with intelligent agents like Siri or Alexa has become commonplace in personal lives. End users (particularly millennials) expect the same and more in their work environments. Research also shows that users hate calling tech support.

Virtual Agents communicate with end users via their favorite channel - such as voice, text, or email. Conversations can even switch between channels. Virtual Agents provide context-driven natural language Q&A dialogs that guide the user to the desired result.

Virtual Agents also help end users resolve their problems faster and with less effort. With a manual service desk, new tickets enter a queue and have to wait for a human agent to be assigned to the case. Virtual Agents work tickets immediately as users submit them. Our service desk customers have seen Average Handle Time (AHT) decrease by as much as 80% when they deployed Virtual Agents.

Furthermore, they have seen Virtual Agents reduce escalation rates by 50%—and nothing frustrates an end user more than having to ‘start over’ explaining their problem when their case gets escalated.



### **Reduced management headaches**

Managing the HR side of a traditional manual IT service desk is a challenge. Due to the nature of the position, job satisfaction is often low, and turnover is high. To maintain desired service levels, managers continuously struggle to recruit and hire new agents, train them, monitor quality, assign remedial training where necessary, and replace agents when they quit. Also, larger organizations have to overcome scheduling challenges when supporting multiple time zones and languages.

In contrast, Virtual Agents are always available. They work weekends and holidays, and they don't require overtime. For today's global workforce, any service desk strategy must include the ability to support multiple languages, dialects, character types, and geographies. Virtual Agents are multilingual, so they can be used across geographies where local languages, terminologies, and expressions vary. Consequently, IT can deliver real-time service and support to all employees, regardless of their location.



### **Support for modern mobile remote workforces**

A recent innovation in service desks has been the deployment of Apple Store-inspired onsite 'genius bars.' But onsite genius bars aren't useful in supporting increasingly remote workforces. Even before COVID-19, workforces were getting more and more mobile, remote, and distributed. Back in 2016, the Global Mobile Workforce Forecast Update 2016–2022 from Strategy Analytics pegged the global mobile workforce at 1.45 billion. As employees increasingly change when, where, and how they work, the expectation is that IT services and support will adjust to their needs, not the other way around.

Delivering services that follow employees across all of their "work" environments requires IT to rethink its traditional support models. Attempting to drive business value while relying on static workflows, asynchronous communication channels, and standard SLAs—the old way of delivering support—no longer works. Virtual Agents, with their unlimited capacity, universal availability, and ability to continuously improve service quality while simultaneously lowering costs will be essential to delivering service desk functionality going forward.



# Getting Started with an Automated Service Desk

According to a recent [Service Desk Institute Report](#), 75% of survey respondents list “Using More Automation” as their top priority for the next 12 months. Yet in the same report, only 18% of respondents say they have implemented AI, are in the process of implementing it, or are working with a partner. Now is a great time to get on the leading edge of this trend and gain a competitive advantage.

At Milestone, we have unmatched experience implementing automated service desks at many of the largest and fastest-growing Silicon Valley companies. We deliver automated service desk functionality both via managed services and by adding automation capabilities to internal service desks.

## Milestone Managed Services

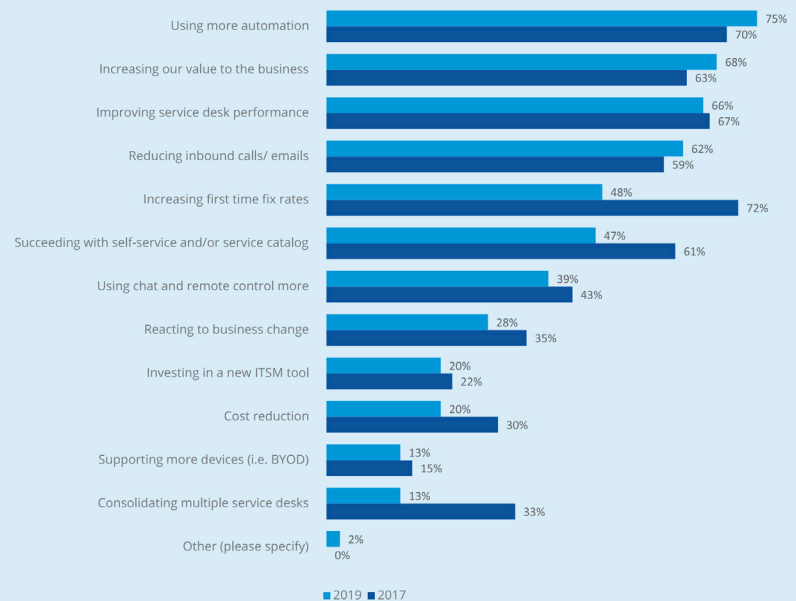
Unlike vendors with a single delivery model, we offer flexible onsite, remote, shared, walk-up, onshore, offshore, and even hybrid delivery models to best meet your specific needs. We also provide ITIL 4-based best practice guidance for the service desk capabilities you need. Finally, we always offer a dedicated team that understands your unique situation and requirements, regardless of your size as a client.

## Milestone Cognitive Automation

If you are interested in adding virtual assistants to your existing service desk, Milestone’s AI team works with multiple artificial intelligence, machine learning, and robotic process automation platforms. They have partnerships across the AI spectrum that allow us to recommend the best combination of tools and platforms to meet your needs. They also have extensive service desk expertise, having implemented the AI components for all of Milestone’s automated service desk managed service clients.

## The Next 12 Months

What are your top service desk priorities for the next 12 months?



## About Milestone Technologies

Milestone has been transforming how companies deploy technology since 1997.

With over 20 years of managed services experience, we have enabled some of the largest companies in the world to grow exponentially by allowing them to focus on their core businesses. Our pioneering methodologies, immense focus on customer experience, and excellent service quality allow us to partner seamlessly with our clients. Today, we provide cutting-edge services to companies worldwide.

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