



| IFS assyst

A GUIDE TO

# Building Your Own Service Desk Virtual Agent

and simulating human conversations





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# Executive \_\_\_\_\_ Summary



A virtual agent can look after 30% of a service desk's tickets<sup>1</sup>, giving human agents more time to focus on solving the big challenges that make a real difference. But as with any advanced IT implementation, the risks of getting it wrong are significant. This ebook looks at why virtual agents are rapidly becoming must-haves for the service desk – and how to get them right first time.

**30%**

of service desk tickets can be managed by a virtual agent

<sup>1</sup>IFS assyst: How to launch a service desk chatbot



# Introduction: \_\_\_\_\_

## 3 Reasons You Need a Virtual Agent on Your Service Desk

Whether you call them virtual agents or chatbots, they offer an affordable, instantly scalable addition to your service desk and bring an array of incredibly attractive benefits. It's why you're looking at them as a tool in your ITSM setup. With budget as the primary constraint, service desk managers need to be smarter in the way they manage what they already have. By focusing on their existing people and skills, processes and capabilities, tools and data, and information and knowledge, they will be able to find efficiencies and squeeze out more value.

## Virtual Agents Free Up Time for Human Agents to Work on the Big Challenges

Virtual agents can handle essentially infinite volumes of low-level issues, such as password resets, service requests, and information queries. Since these make up around 30% of a typical service desk's inquiries<sup>2</sup>, this frees up a lot of time for human agents to focus on more challenging issues.

As a result, human agents can bring more value to the organization. Not only do they have more time to focus on the bigger issues, they also have more time to update information and capture knowledge in your knowledge management system.

This creates a virtuous cycle of knowledge sharing, which helps virtual agents solve more issues in the first instance.

## Virtual Agents Solve an Increasing Problem with Service Desk Staff Recruitment

Research shows us that 64% of organizations struggle to recruit and retain service desk staff<sup>3</sup>, a significant problem that needs to be solved, especially in the context of the "War for Talent".

Virtual agents take away the simple, repetitive queries that rapidly become tedious and uninspiring for human service desk agents. Because this translates to more time spent on engaging, interesting work, job satisfaction improves, which in turn helps staff retention rates improve.

In the longer term, the reduced staff churn ends the 'brain drain', helping to improve the organizational knowledge pool.

**64%**  
of organizations  
struggle to recruit  
service desk  
staff<sup>4</sup>

<sup>2</sup>FS assyst: [How Chatbots are Changing Life on the Service Desk](#)  
<sup>3&4</sup>FS assyst: [Key Strategies for Reducing Service Desk Calls](#)

# 6 Steps to Building a Successful Virtual Agent

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A virtual service desk agent offers exciting benefits. But, like every large-scale IT roll-out, the risks are significant. Here are six steps to maximizing your chances of success.

## 01 Create a Minimum Viable Product

Chatbots offer extraordinary potential for enhancing IT help desk delivery. But don't be tempted to attempt to secure all the wins at once. Instead, take an agile approach by starting small with a minimum viable product (MVP).

Once you have got the MVP right, you can iterate to extend the capabilities (and the ROI) of your chatbot.

To build your MVP, analyze your service desk tickets to identify the most popular items. Assess which of these are suitable for resolution by a virtual agent. The quickest wins are likely to be incident management queries.

At this stage, focus on the queries that bring the biggest wins for employees in the wider business, not employees on the service desk. When employees in the wider business can see what a difference the chatbot makes, they are more likely to adopt it, and it's more likely to be a success.

This brings us on to step 2.

## 02 Engage with Stakeholders

Your virtual service desk agent is an employee-facing tool. You therefore need to get employees on board early on. Once you have your MVP, validate it with subject matter experts in the business. It is likely that they will want to make changes and additions. Remember that, at this stage, as long as you prioritize the minimum element of the MVP (that is, you don't allow scope creep), these changes and additions are quick, cheap, and easy. It is only once you take the MVP to its technical development phase that things become trickier.

Now too is the time to start communication with employees about the virtual agent you are developing. Starting communication now will improve adoption when it goes live.

Bear in mind the mantra of all marketing departments when creating customer-

facing communications. All the customer (in this case, the employee) is interested in knowing is: what's in it for me? Communicate how the virtual agent will benefit employees – i.e. instant solutions and answers that mean they can get on with their day.

## 03 Research Virtual Agent Options

A critical next step is choosing the chatbot solution that's right for your organization.

To secure the biggest wins, you may also need to take a step back and look at your wider IT infrastructure too. Virtual agents will be much more powerful when they are underpinned by a unified ITSM.

Legacy ITSM solutions are likely to result in a virtual service desk agent that involves multiple modules

and multiple integrations. This makes it harder to provide a seamless, user-friendly front end. It is also likely to create a back-end architecture that is complex and fragile – and that requires more monitoring and maintenance.

With a unified ITSM there is a single link between your virtual agent and your service catalog. You can connect it to your knowledge base one week, connect it to your service catalog to handle service requests the next week, and empower it to trigger workflows the week after.

Plus, when your chatbot is linked to a unified ITSM platform such as IFS assyst, iterating and adding further functionality is much easier and more straightforward.

## 04 Consider What Success Looks Like

Your next step is to set the metrics you'll use to define success – and see where there is room for improvement. Here are a few to consider.

- The number of tickets raised via the virtual agent during a specific time frame.
- The number of tickets that went via traditional channels in the same time frame – but which could or should have gone via the virtual agent.
- The retention rate – the proportion of employees who have used a virtual agent on more than one occasion.
- User satisfaction scores.

Taken together, these first four will give you insight into adoption rates and satisfaction levels.

For quality and ROI metrics, these next four can be helpful:

- Conversation length. This will help you quantify the amount of time saved by employees and human service desk agents.
- Goal completion rates. These will help you assess how effective your virtual agent is.
- Fallback rate. This metric tells you how many times your virtual agent failed to deliver a correct response to employees. When this metric is too high, this can indicate concerns with the quality of your chatbot script or your knowledge base.
- Handover rate. This tells you how many times your virtual agent had to hand a

problem onto a human service agent. Again, this can indicate issues with either the chatbot script or knowledge base.

## 05 Raise Awareness to Drive User Engagement and Adoption

Once your virtual agent is live, you can ramp up internal communications to raise awareness and drive adoption. Assuming the quality of your virtual agent is there, the success of your virtual agent depends on it being used by your organization's employees. Work closely with your internal comms team to build a campaign to maximize the take-up rate.

## 06 Ramp Up Your Virtual Agent's Capabilities

Once you know you've got the basics right, it's time to expand your virtual agent's capabilities. The more it can do for employees, the more they will use it, and the more time your human service desk agents will have to spend on value-adding tasks.

If you consider that your MVP probably covered incident management queries, you can scale out by adding request management queries.

Initially, this can simply be sharing a link to the relevant page in the knowledge base for the employee to request the service. In advanced iterations, it can trigger the service request in the ITSM workflow, saving the employee a step.

Perhaps the biggest pitfall here is that your service catalog needs good service descriptors if it is to offer maximum value, so roll out new functionality slowly but steadily so you can test and measure as you go.

Virtual agents are also valuable for inquiry management – updates on the status of service tickets. To do this, your chatbot will need visibility of service performance and infrastructure monitoring data. It will also need visibility of support records and the audit trail.

Advanced solutions are context-aware and reduce friction for users. For example, an employee can simply ask ‘what’s the status on my request’ without needing to find or give a support ticket number. The chatbot can check incidents logged against that user and provide one or more answers as required.

For the ultimate chatbot functionality, the most advanced tools harness the power of Enterprise Service Management, rolling out self-service across the organization into HR, Facilities, Legal, Marketing, and more.

## 5 Virtual Agent Pitfalls to Avoid

We’ve looked at the steps to success, but what about the pitfalls to avoid? Here are five to bear in mind. They cover practical issues for the ITSM team. They also give insight into how to simulate human conversation intelligently and effectively.

### 1. Don’t Starting Coding Before You Script the Conversation

In effect, your virtual agent replicates your human agent. Therefore, start with the human side of things by scripting the conversation first.

Involve subject matter experts so you can be sure the input is realistic and accurate. When you code first, you end up with very restrictive conversations that reflect the IT team’s expertise and understanding – but not the real-world experiences of real-life users.

### 2. Making Things More Complicated Than They Need To Be

Try to create a conversation architecture that is modular. Your welcome, menu, trigger words, and exit elements can be the same. Only each menu item needs to have a unique conversation. This makes things much simpler in terms of maintenance. It also delivers a much more coherent experience for employees using the service.

### 3. Seeing It As a Once-and-Done Activity

A chatbot isn’t a ‘one-and-done’ project. Like everything else in ITSM, it should be the subject of continual improvement. This is why an agile approach is so important. If you take a waterfall approach, development will have a start and end point. Once live, your chatbot will immediately start to lose its value until it is ultimately forgotten by both the IT team and employees in the wider organization.

#### 4. Pretending It's a Human Agent Not a Virtual Agent

This is a tricky balance. The nature of natural language processing and machine learning means that a virtual agent can understand – and replicate – human conversation very effectively.

Use these benefits to create friendly, warm conversations. However, it should always be clear to your service desk customers that they are interacting with a virtual agent not a real agent. Pretending otherwise can be a source of frustration – especially if the interaction doesn't resolve the employee's query for any reason.

#### 5. Being Too Conversational

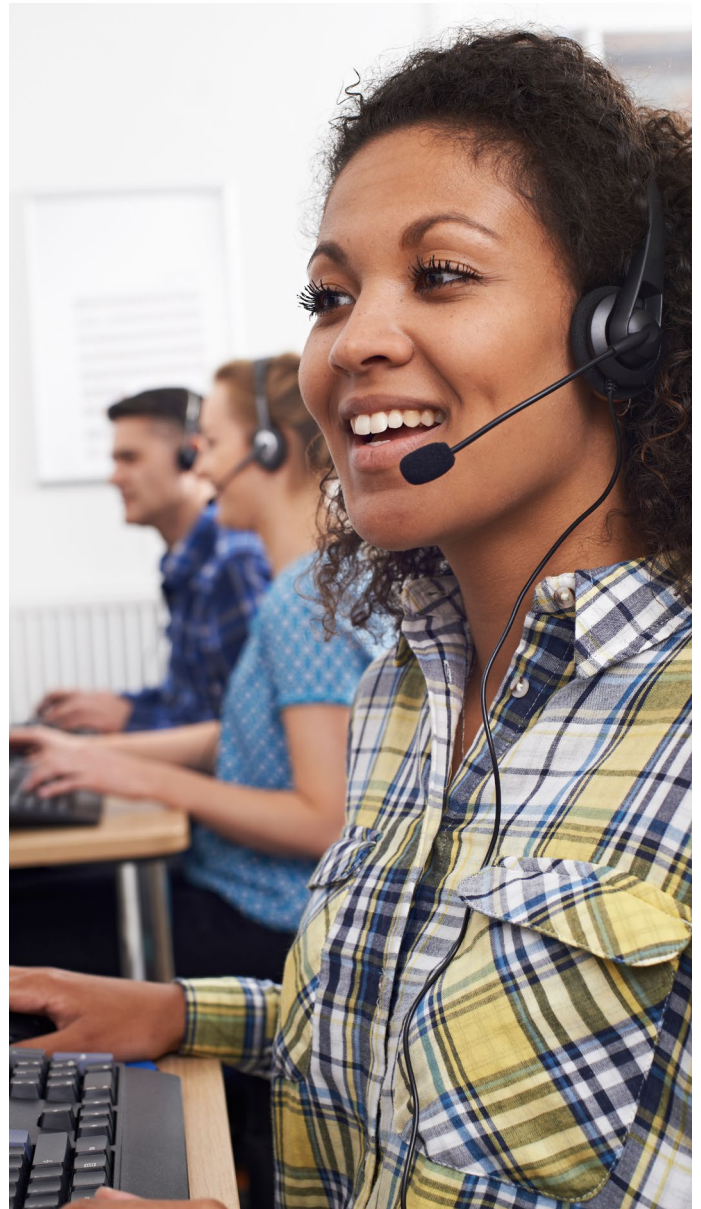
Conversational language is typically longer than 'direct' language. This can be a drawback when most chatbots operate in limited size windows. Keep questions and answers as brief as possible so users have to scroll as little as possible.

Remember too that users may not have English as their first language. Make sure to use language that is easily understandable by everyone – avoid slang, colloquialisms, or regional language quirks.

Use humor sparingly. This is partly because it doesn't always translate well to the written word. Not only that, the IT help desk is often only accessed in times of crisis. Humor may not land well in this context.

“

**A chatbot isn't a 'one-and-done' project...it should be subject to continual improvement**





# Meet the IFS assyst Virtual Agent Chatbot

As you start to research virtual agent options for your service desk, take a look at what the IFS assyst chatbot integration framework has to offer.

**The IFS assyst chatbot integration framework works with 100+ chatbot engines, including the Microsoft Bot Framework.**

## Rapid Deployment for Rapid Results

The IFS assyst chatbot integration framework is built on a single CMDB (configuration management database) for IT service and operations management. This makes it simple to integrate it into your

your chatbot engine of choice and enable rapid deployment.

**“We had a workable prototype ready within 2 days and live-launched the chatbot on our self-service portal the following week.”**

*Leading retailer, Canada*

## More Than Just Answering Questions

Through tight integration with IFS assyst, your chatbot can handle incident management, request management, and inquiry management.

**“We started off with a simple Q&A model to cover the top queries and quickly extended into more advanced handling and automation.”**

*UK manufacturer*

## An Enterprise-Wide Solution

The IFS assyst solution supports service management across all corporate service providers – including HR, Facilities, Legal, Marketing, and others – in one solution. This means your employees can get the help they need – from any department – through the chatbot. A true one-stop shop for smart support.

**“Having started with the service desk, we have extended our virtual agent to cover five more internal service providers and our staff love the simplicity of it.”**

*EMEA financial corporation*

## See a Service Desk Chatbot in Action

To see the functionality and power of the IFS assyst Virtual Agent, request a demo today.

[Request a demo](#)





# Conclusion

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There are compelling business reasons to add a virtual agent to your IT service desk. Virtual agents improve the employee experience and enhance productivity across the organization. Within the IT team they improve job satisfaction, drive staff retention, and enable the delivery of more strategic work. They are also infinitely scalable, helping you to do more with less, even as your organization grows.

However, like all IT implementations, it is important to get it right first time if you want to secure all the wins. And as always with IT projects, the critical elements for success are to focus the majority of your efforts on the thinking and planning phases, and to promote stakeholder engagement right from the start.

However, underpinning all of this is the need for an ITSM architecture that enables the effective, efficient rollout and scale-up of virtual agent capabilities. With IFS assyst powering your ITSM, you have the solution you need.

# About IFS assyst

Global brands trust IFS assyst to automate complex business processes easily without fuss. We deliver frictionless customer and employee experiences, one intelligent workflow at a time. Our modern service management technology lets you automate service delivery and support so your customers get what they need fast, and you can focus on building the future of your organization. IFS assyst is uniquely easy to buy, set up, use, and upgrade. Whether you're in IT, HR, Facilities, Finance, or any other team that provides services to customers and employees, IFS assyst puts service management technology within your reach.

Our process automation takes the boring out of everyday tasks, allowing you to focus on work that matters.

Everyday we assyst!

# About IFS our Parent company

IFS develops and delivers enterprise software for companies around the world who manufacture and distribute goods, build and maintain assets, and manage service-focused operations. Within our single platform, our industry-specific products are innately connected to a single data model and use embedded digital innovation so that our customers can be their best when it really matters to their customers – at the Moment of Service.

The industry expertise of our people and of our growing ecosystem, together with a commitment to deliver value at every single step, has made IFS a recognized leader and the most recommended supplier in our sector. Our team of 4,000 employees every day live our values of agility, trustworthiness and collaboration in how we support our 10,000+ customers.

## Find out more

For further information, e-mail [assystme@ifs.com](mailto:assystme@ifs.com), contact your local IFS office or visit our website, <https://www.ifs.com/solutions/enterprise-service-management/>