

TECHNICAL SUPPORT ENGINEER ROLE AND RESPONSIBILITIES



Most people probably have some idea about what a technical support engineer does. We've all gone through tech support at one point or another, but several essential duties separate a technical support engineer from other help-desk related roles.

Think you know tech support?

Do you really know what a Tech Support Engineer does? Sure, this might be the person that answers when you call the help desk, but you may be surprised to learn that they're often not just waiting around to help you.

Summary of a technical support engineer

Technical support engineers provide troubleshooting and tech support services to a wide range of internal and external clients across many industries, including telecom, healthcare, and financial services.

Just about every large company has its own IT department, and the main function of that department is to provide tech support. Medium- and large-size companies might even separate their technical support into two areas: those engineers that help internal departments and employees and the representatives that are client-facing, talking with customers who have called in or started a live chat seeking help.

Reporting suggests this is a mid-career position that provides high levels of job satisfaction. Most technical support engineers work in the field for around 20 years before moving into other tech roles outside of support. Individuals looking to career path into tech support should seek a degree in computer engineering, computer science, engineering or technical discipline depending on the type of company they'd like to work for.

This job requires a skill set that includes technical knowledge, communication, flexibility, patience and problem solving.

Technical support vs. customer support: are these the same?

A technical support engineer by any other name may still have the same goal: providing technical support when needed in order to elevate the customer experience to a positive one.

The technical support team may also be called the customer support team depending on whether customers are internal or external. There's no one size that fits all flow chart to describe how all companies should structure their technical support. Some offices may have an IT department with one or two technical support engineers. Others have a robust and organized network ready to deploy for customer support.

Some titles that you might find under the latter include Chief Services Officer, Customer Services Manager, Contact Center Manager, Process Analyst, Business Analyst and Issue Manager. Regardless of the size or robustness of the technical support team, the responsibilities of the technical support engineer remain remarkably similar. That includes troubleshooting hardware and software problems, answering inquiries and documenting results.

A senior or team-lead technical support engineer likely only handles [Tier 3 escalations](#) and above. They spend most of their time working with monitoring tools, implementing system updates and upgrades, developing big picture tech support strategy and ensuring team success with accountability measures.

Roles and responsibilities

Monitoring systems

Continuous monitoring of systems and software is a critical part of being a technical support engineer. Technical support engineers can use a variety of monitoring tools, both offensive and defense. The ultimate goal is to be proactive – identifying issues before they occur.

Monitoring tools may be custom developed or purchased through an enterprise service provider like Microsoft. It will be the job of the technical support engineer to:

- Determine which tools are the best and most appropriate to use.
- Train all necessary parties on how to use them including other help desk employees.
- Document and resolve any issues.

Troubleshooting, diagnosis, resolution, and escalation

Technical support engineers usually have a running queue of issues that they are working to resolve. They are responsible for prioritizing and managing the workflow to resolution. Some companies may

have an explicit flow chart that aligns with tiers or levels to estimate time to completion, but smaller companies may have to manage the workflow more manually.

Either way, the first step in resolving a case is troubleshooting. Troubleshooting is a logical process to find the source of an issue first, in order to solve the problem. Once the issue has been reproduced, Tech Support Engineers look for causality, diagnose the issue, and resolve it. If the issue cannot be reproduced, troubleshooting becomes more difficult. (Thus, the joke about tech support always starting with whether you've turned your computer off and on first.)

Sometimes escalating a case to Tier 2, 3, or 4 is the best thing a technical support engineer can do to ensure timely resolution. In those cases, engineers must be familiar with escalation workflow processes and software as a necessary part of the job. They will be responsible for communicating this process back to the client and following up.

Skills needed: During this time, technical support engineers often work under a high degree of pressure, closing out cases on deadline. Often, customers are already frustrated that their systems are malfunctioning. Patience, friendliness, and clear, non-technical communication are necessary to ensure customers don't feel frustrated or talked down to.

Interacting with customers

In addition to handling cases with customers who are experiencing software malfunctions, technical support engineers also communicate with new employees during the onboarding process and offering on-going training and education to customers. Technical support engineers may be required to participate in Forums or Masterclass sessions across an organization. They may lend their voice to training tutorials or be a key presenter in a webinar. They spend most of their day talking to other people, so someone who'd rather hide in solitude might not make a great technical support engineer.

Skills needed: Strong telephone etiquette skills ensure constructive, professional relationships with colleagues and customers. Active listening and written communication follow-up are just as necessary to knowing how to tactfully communicate directions. A "customer first" attitude is inherent in every step a technical support engineer takes.

Technical Knowledge

Most organizations expect to be a resource of information and technical knowledge. More often, this comes from hands-on experience and professional development than just academic learning. While the information technical support engineers receive is usually full of jargon, they should be able to communicate that in a meaningful way to less tech-knowledgeable people.

Skills needed: Companies look for certain competencies and the most important is technical knowledge. A strong basis in computer science is the first step. From there, companies will look for skills that match their enterprise needs. These may include knowledge of the following:

- Network security
- Broad knowledge of virtual environments
- Experience with specific enterprise software
- VPN technology and redundancy, other security measures
- SQL

- CRMs
- Understanding source code
- Writing commands and workflow processes
- Using monitoring software
- Comfortable with different types of applications (Web, PET, etc.)
- Proven experience with troubleshooting and diagnosing problems
- Enterprise hardware expertise

Professional Development

As a respected resource within your organization, the technical support engineer is expected to pursue professional development in order to stay knowledgeable about market trends. In many cases, this type of training may be provided at the expense of the employer.

There are many certifications available for Help Desk employees. Some of the most valuable certifications include:

- [Apple Certified Systems Administrator](#) certification is aimed at “the help desk professional, technical coordinator, or power user who manages networks or provides technical support for Mac users”. This certification validates your understanding of macOS core functionality and your ability to configure essential services, troubleshoot, and support multiple Mac users.
- [CompTIA A+ 2019 certification](#), an industry certificate particular to technical support and IT operational roles. This program focuses on improved troubleshooting and problem solving thanks to a wide breadth of networking, operation systems, mobile, and security training.
- [HDI Technical Support Professional](#) certificate looks to elevate help desk employees to be capable of handling Tier 2 and Tier 3 support, whether customer-facing or supporting internal IT infrastructure and practices.
- [ITIL Foundation Certification](#), which can help professionals seeking to understand the ITIL framework and how it can enhance IT service management. The latest version, ITIL v4, was released in February 2019.
- [Microsoft Certifications](#) (MCSA), of which there are many. Technical support engineers may find the [MCSA: Universal Windows Platform](#) certification particularly useful.

Outlook

Organizations of all sizes hire technical support engineers. In a marketplace where support services are being driven in-house by high outsourcing costs and turnover rates, it's more important than ever for businesses to find career technical support engineers to support growing IT teams and needs.

After Q1 of 2019, the national average pay for technical support engineers is around \$62,000 with a few thousand more in bonus, profit sharing, and/or commission, depending on your company's structure. The minimum salary falls around \$42,000 and, for those with expert experience, the maximum hovers in the low \$90,000s.

The field is expected to grow at an above average rate of 12% through 2024. Roughly, 800,000 jobs fall under the umbrella of Computer Support Specialist, including technical support engineer.

While people who enter this career field typically spend about 20 years in support before moving on

to other career paths, there are a number of technical jobs available to them. Being a Help Desk professional offers a rewarding way to gain a wealth of experience in IT that provides countless opportunities to develop a career path. Some paths outside of support that technical support engineers explore or move into include:

- Software engineer
- Network engineer
- Systems administrator (sysadmin)
- Senior software developer
- IT manager
- Project/product manager (IT)

References

https://www.glassdoor.com/Salaries/technical-support-engineer-salary-SRCH_KOo,26.htm

https://www.payscale.com/research/US/Job=Technical_Support_Engineer/Salary

<https://www.thebalancecareers.com/technical-support-engineer-skills-2062490>

<https://en.wikipedia.org/wiki/Troubleshooting>

https://www.richmond.com/jobs/news/customer-service/how-to-become-a-technical-support-engineer/article_056cd30f-62e9-5aee-b1d3-58fb01e23422.html

<https://www.superoffice.com/blog/tech-support/>