



# **DevOps Engineer: IT's most in-demand job title for the future**

**By Eveline Oehrlich, Research Director Research In Action.**

It was not long ago that the job title “DevOps Engineer” didn’t exist, but like many things in technology, radical change can happen very quickly. Within the past few years the title has grown rapidly in popularity - with LinkedIn declaring it one of the most-recruited roles in 2018 - and 51 percent of respondents to the [2020 Upskilling: Enterprise DevOps Skills Report](#) saying they had recently hired or plan to hire someone for that title.

But does the “DevOps Engineering” have staying power? Will it be the must-have title within IT in years to come? Should technology organizations be planning to add this role to their roster in 2021? And why is a job title in technology worth debating anyway?

First, let us explore why technology employees often put a lot of stock into their job titles.

I admit that at the beginning of my IT career, my perception of a job title was extremely important. Here is a quick personal story that underscores the importance (or lack thereof) of job titles in IT.

After graduating with a Master of Science in Computer Information Systems and a minor in Computer Science, I landed a great job as a software engineer in one of the business units at a large technology company. Before starting, I took a few months to travel the world. On my first day, the hiring manager took me aside and told me the job I was hired for no longer existed because the software team had given up on the development of the product. However, they had found something else for me to do. I was disappointed, but as a German optimist, I was eager to understand my new assignment. The new assignment was to help the Finance team reengineer some applications.

Shortly after that conversation, on my way to the coffee station, a gentleman greeted me with the words, “Hello to my new programmer.” I was shocked! Me a programmer? I was hired as a software engineer and not a programmer! That title just did not sound important enough to me. But ultimately, I loved the job and the team. It was an opportunity to learn and hone my skills.

Since then, titles do not matter to me anymore. But titles do matter when industries are going through major transformations.

I have been following the DevOps transformation as an industry analyst since its beginning. Today’s usage of the DevOps methodology is at 74 percent (aside complementary methodologies) with enterprise wide adoption of 24 percent and project (or multiple project) adoption at 42 percent, according to the [2020 Upskilling: Enterprise DevOps Skills Report](#).



The number one challenge facing DevOps is the finding and attracting skilled DevOps people. 58 percent of respondents said that finding skilled individuals is a huge challenge, whereas 48 percent say the retention of skilled DevOps individuals is a challenge. With salaries in the high \$ 180,000 for experienced people and the current skill gap, 2020 and beyond will be a tough year for hiring managers and HR leaders.

Which is it: Titles do not matter or long live the title? While there is a lot of debate around the importance of job titles, I would argue that no matter what title is used, each should reflect on a person's skills and expertise. Once the title is determined, it is up to that person and their accomplishments to define or refine the title further.

Before exploring the title of DevOps Engineer, one must ensure the following when using or creating job titles.

- **Job titles must inspire confidence and contribute to a mission.** DevOps transformations are equally difficult across people, process, and technology. A significant part of the transformation is to have team members who are stewards of such a transformation. This shows that the company has put people in place who own and have the skills to initiate or continue such as transformation. Using the title of DevOps Engineer provides the owner of such title the confidence that there is support. The title signals to colleagues throughout the organization that the person with this role impacts the DevOps transformation for the business and that they contribute to fulfillment of the mission and vision of their company's DevOps journey.
- **Job titles must capture a focus area.** The focus area for a DevOps Engineer is of a technical nature. He or she must understand the software development lifecycle and its associated dependencies and topics. Combining "DevOps" and "Engineer" into one title reflects the necessary diligence that DevOps is not just a methodology but rather it requires an engineering background and a variety of skills to balance several different responsibilities. Those responsibilities include designing, building, coding, integrating, testing, and maintaining – all with the goal of enhancing the collaboration between two silos of development and operations.

### **The DevOps Engineer title is here to stay**

When looking at the definitions of engineer and engineering we find the following: an engineer is a person who designs, builds, or maintains something; whereas engineering is defined as the branch of science and technology concerned with the design, building, and use of somethings. If we relate this to the title of DevOps Engineer, then the DevOps Engineer is the person who designs, builds, or maintains within the branch of DevOps Engineering.



The transformation toward DevOps can be supported by using the DevOps Engineer as the title because:

- **DevOps is a methodology and using the DevOps Engineer title shows purpose.** While there are different DevOps capabilities or maturities across enterprises today, the challenges of adoption are centered around making changes to the existing culture, processes, and practices, as well as the adoption of new tools. There is no right answer on how to best adopt DevOps because a multitude of factors influence the journey, such as business drivers, organizational state, and more. But to ensure that the methodology is grounded, you must leverage the title of DevOps Engineer to indicate the purpose of the journey.
- **Purpose means creating alignment around a common goal.** DevOps transformations are continuous and difficult. These transformations need to be owned, championed, and managed, which is why owners are needed for introduction and sustainability. The DevOps Engineer title shows ownership and makes it clear that adopting the methodology is not a fad.
- **The title of DevOps Engineer describes a different way of engineering.** While there are core foundational responsibilities for a DevOps Engineer (coding, scripting, re-engineering, automating, collaboration, and communicating) the role itself is an engineering role. Engineering is about innovation, with creativity being a basic human trait that drives the development of new technologies and new products, processes, or services. The combination of the words of “DevOps” and “Engineer” puts forth that the future is about innovation around how development and operations is done together: The title “DevOps Engineer” highlights that spirit.

### **Let the outcomes start from within**

The title of DevOps Engineer can have multiple meanings. But the meaning and the actual role the person owns and the skills they have must depend on the outcomes you want to achieve when hiring or reskilling.

As new approaches and methodologies such as Holocracy and SRE are being adopted into the world of software factories, the DevOps role will continue to evolve. Additionally, new word combinations such as AIOps, ModelOps, GitOps, DataOps, FinOps or NoOps are being used. Regardless of what you choose to call the people holding roles in those areas, they all have one thing in common: The adoption of automation and the collaboration of functions or roles.

New and emerging role titles will continue to show up as new technologies are adopted. Areas such as artificial intelligence, augmented reality, blockchain, and machine learning are already introducing new challenges that create new demands for engineering



capabilities. In years to come, other titles may eclipse the popularity of the DevOps Engineer role.

What is important is that IT organizations provide autonomy to augment the title of DevOps Engineer. Individuals owning the DevOps Engineer title should be empowered to augment their title with additional details around their areas of responsibilities by hiring managers and team leaders. Organizations using DevOps have adopted integrated product teams that are empowered, autonomous, and networked. These teams focus on areas that support key value streams e.g. customer on-boarding.

Over time, these teams will have the responsibility to further decide the expansion of responsibility for the DevOps Engineer and augment the title further within the job description.

If you have concerns about using the term “DevOps” in job titles in the years to come, now may be the time to get over it. You will be better served spending your time using the title to help you achieve certain outcomes. Many IT organizations are moving out of the triage and stabilizing phases of their response to the COVID-19 crisis and are entering the transformation phase.

In recent months, organizations had to learn to quickly shift into virtual operations and interactions not just with their employees but with their entire ecosystem. This rapid shift to virtual resulted in swift adoption of technologies they helped organizations with security, usability, and scalability.

As organizations settle into their new remote normal, there are three main skills we believe that will be rising in importance in the next normal. These are skills that many DevOps practitioners have already adopted because of the need to continuously learn and be resilient in the face of change. Others in IT can benefit from these areas as well.

### **Collaboration is essential today and even more so in the next normal**

The [2020 Upskilling: Enterprise DevOps Skills Report](#), (completed just before the COVID-19 outbreak) found that collaboration and cooperation was the number one must-have human skill globally. While many people refer to skills such as “collaboration” as “soft” or “core” skills, I prefer to call them “human” skills because of the importance they play in our day-to-day, human work lives.

While DevOps itself has had a great impact on developers and operations teams working together, collaboration and cooperation must be extended to work across all groups within IT and other areas of the business during this next normal. Collaboration is the next source of value for IT. Here is why: One of the key challenges to support the next normal while adopting digital channels and services is that of scale and speed.



Let's take, for example, a retailer that envisions the rollout of a new application across a large geographic area to different consumer types. This rollout requires the testing and scaling of many different parts across the customer journey. Therefore, it is essential to ensure collaboration with multiple parts of a business and technology teams to understand the interaction among multiple variables in times of crisis or beyond. This is collaboration that must happen beyond the developer and operations teams. It must happen company wide. In the next normal, companies that fail to extend collaboration skills beyond IT will not be able to scale their digital efforts at the speed needed to succeed.

### **Empathy is the pillar for a great culture**

Many thought leaders agree that the key challenges to DevOps adoption and transformation are not technology related but organizational and cultural. The DevOps skill research shows that leaders must invest in their DevOps organizational change capability and their cultural people strategies to both remain competitive and deliver continuous value at scale.

Creating cultures of high trust and collaboration, enabling continuous experimentation, improvement, and upskilling are key investments that support DevOps return on investments.

But to lead or change culture one must possess empathy, a trait that each one of us must remember in the next normal. In a 2017 commencement speech, [Apple CEO Tim Cook said](#), "People will try to convince you that you should keep your empathy out of your career. Don't accept this false premise."

Empathy is the ability to understand and share the feelings of another. Our current frame of reference across the world is the pandemic, with each one of us able to place oneself into the position of others. This is true for all of us no matter what company, role, culture, or country we are from. We can take this empathy with us to the next state to help us build and change the culture of our teams, organizations, and ourselves.

### **Certification to ensure survival and the continuous work in the next normal**

This can be the optimal time to consider how you can best support the ways your talented employees learn, but also enable them to certify their knowledge so that it is tracked and acknowledged.

Certifications should be made available within the boundaries of your own company, from across technology providers, vendors, and your suppliers to improve learnings to ensure the survival and next normal state. This type of upskilling is not just for your already-



trained workforce but for your entire team to be able to work with or continuously develop digital products leveraging new technology and processes.

A large group – 43 percent of respondents from the [2020 Upskilling: Enterprise DevOps Skills Report](#) confirmed that certifications are nice to have. The topics of certifications vary greatly depending on the different levels of DevOps capabilities, environment, existing tools and technical debt, but from our technical skills gap we know that certifications around continuous integration/continuous delivery, cloud platforms and environments, knowledge around APIs, analytical knowledge, multiple programming languages, frameworks such as .NET, CSS and AJAX, UX design are just a few of the high ranking ones.

New capabilities such as SRE and DevSecOps are on the rise as well which might be additional candidates for certifications.

All of us have been thrust into the next normal due to the worldwide pandemic. While the COVID-19 crisis has caused challenges for businesses, families, and individuals worldwide, there has been an accelerated and bold move by many organizations to shift towards digital channels and new ways of working. By embracing these three areas, employees and employers have a better chance of transforming themselves and their organizations in the next normal.

Always enjoy life to the fullest!

Eveline Oehrlich