

Google DevOps

SRE as an operating model allows for balancing the work of IT operations teams between automation and troubleshooting all for the purpose of improving across a wide area of topics in a continuous way. Beyond achieving fast flow, DevOps is driving opportunities to provide measurement across the entire software delivery value stream for fast and continuous feedback. The top five must-have process and framework skills are understanding process flow and analysis, Agile, Scrum, SRE, Design Thinking, and System Thinking.

SRE to continue the automation autobahn and reduce toil. *While organizations have adopted Agile and DevOps to improve the software development and deployment aspects with increased speed and quality, some IT operations teams have adopted SRE to bring efficiency into their processes and workings. The adoption of SRE as an operating model is 22% in 2021 compared to 15% in the previous year. 47% of our survey respondents voted SRE skills as a must-have skill in the process and framework skill domain this year compared to 28% in the previous year's survey.*

Site Reliability Engineering (SRE) is a term (and associated job role) coined by Ben Treynor Sloss, a VP of engineering at Google. DevOps is a broad set of principles about whole-lifecycle collaboration between operations and product development. SRE is a job role, a set of practices found to work, and some beliefs that animate those practices. If you think of DevOps as a philosophy and an approach to working, you can argue that SRE implements some of the philosophy that DevOps describes, and is somewhat closer to a concrete definition of a job or role than, say, "DevOps engineer."

Unlike the DevOps movement, which originated from collaborations between leaders and practitioners at multiple companies, SRE at Google inherited much of its culture from the surrounding company before the term SRE became widely popularized across the industry. Given that trajectory, the discipline as a whole currently does not foreground cultural change by default quite as much as DevOps. (That doesn't imply anything about whether cultural change is necessary to do SRE in an arbitrary organization, of course.)