DevOps is a methodology that emphasizes collaboration between software developers (Dev) and IT operations (Ops) teams to improve the speed and quality of software delivery. The approach aims to reduce silos, automate processes, and create a culture of continuous improvement. The origins of DevOps can be traced to various movements and practices that sought to address inefficiencies in software development, such as the Lean Movement, the Agile Manifesto, and the Continuous Delivery Movement.

The Lean Movement originated in the manufacturing industry from the Toyota production system in the 1940s. It was focused on optimizing efficiency by eliminating waste, improving quality, and enhancing flow in the production process. Lean thinking aims to reduce bottlenecks and ensure that every step in a process adds value to the end product. Lean methodologies were later adapted to software development in the early 2000s when organizations saw that similar principles could be used to streamline coding and delivery processes. The seven types of waste defined in Lean manufacturing like overproduction, waiting, and defects were translated into software development tasks like writing redundant code, waiting for approvals, and encountering bugs. Lean principles set the foundation for the continuous improvement and automation mindset that later became central to DevOps. DevOps teams seek to reduce "waste" in the development and deployment processes by automating repetitive tasks, improving communication, and continuously delivering value to customers.

In 2001 a group of software developers met in Utah to discuss new ways to approach software development. This meeting led to the creation of the Agile Manifesto which outlines a set of principles that prioritize individuals and interactions, working software, customer collaboration, and responding to change over rigid processes and documentation. The Agile Manifesto was a response to inefficiencies of the Waterfall development model where software was developed in specific phases like planning, designing, coding, testing which were often long and disjointed. The result was a slow straight line process where feedback from users was delayed and the end product often failed to meet customer expectations. Agile introduced practices like short development cycles (sprints), iterative development, and regular feedback loops. While Agile focused on improving the collaboration between developers and business stakeholders it did not address completely the operational aspects of software deployment. This gap in Agile practices led to the development of DevOps which expanded Agile principles to include operations teams, ensuring a more holistic approach to software development and deployment.

Continuous Delivery (CD) is a software engineering approach in which teams aim to produce software in short cycles making sure that it can be reliably released at any time. This involves automating a lot of the testing, integration, and deployment processes to allow faster feedback loops and reduce manual errors. The Continuous Delivery Movement rose in the 2000s with people like Jez Humble and Dave Farley advocating for practices that allowed software to be deployed frequently and with high quality. The goal of CD is to ensure that software is always in a deployable state regardless of the complexity of the system. This required an automation-first mindset, where manual processes that could introduce delays or errors were replaced by pipelines that handled testing, integration, and deployment. The idea of continuous delivery built upon Agile's incremental development approach but focused on the technical aspects of getting software into production. CD helped bridge the gap between development and operations by encouraging practices that could ensure a smooth and continuous flow from code development to deployment, directly influencing the rise of DevOps.

DevOps has had a profound impact on the software industry, transforming the way companies build, deploy, and manage software. By improving collaboration between development and operations teams, DevOps has enabled organizations to release software faster, with fewer errors, and with greater flexibility. This has made DevOps particularly well-suited to industries like e-commerce, finance, and telecommunications, where the ability to quickly respond to changing market conditions is critical.