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### How does DevOps impact an organization?

In recent years companies have felt a great need to improve their processes in order to grow and open up to new markets, there are many methodologies, tools and practices that have allowed them to achieve great things, but today we will talk about DevOps and how it greatly impacts organizations.

Development Operations or DevOps as it is commonly known, is a set of practices that are carried out in the implementation and development of software, basically what DevOps does is to eliminate that intermediate line that existed between the development department and the operations department, this in order to improve the collaborative work and communication between the two departments. DevOps has been characterized in recent years as highly beneficial to the companies that implement it. Through it, significant reforms have been made in the operations with which they have managed to find fundamental approaches that help them to operate and be aligned with the specific needs of each business.

To understand a little more what DevOps is think of a situation in which the development department and operations are not communicating, the development department most of the time considers that just creating an application or system is enough, but do not realize that they need to see beyond the business, understand perfectly each of the processes involved in order to propose an innovative solution that meets the business objective, believe it or not most software development companies have to fail in their implementations by failing to understand the customer and what he wants. To summarize, DevOps has been promoted by large companies in order to obtain agile processes within their operations, in order to increase the production of software as it has been shown that DevOps improves delivery times, collaboration and communication between departments, reduces costs, and many more, and to demonstrate this we will talk about Netflix and how this company thanks to DevOps managed to position itself as one of the largest streaming companies in the world.

Netflix is an American company dedicated to streaming movies, series, documentaries and others that in 2012 had enough problems to realize that one of the services they provided was too expensive to operate and test so that profitability and success was not the best at the time, by then, Netflix had to test each of its operations manually for a week and which often showed complications so that the different teams and departments refused to take on these responsibilities.

Realising how serious this was, Netflix decided to look for methodologies and practices that would provide a definitive solution to this situation, and that is when they came across DevOps and carried out its implementation by identifying two phases, the first is based on knowing and understanding what is the internal life cycle in the creation of software, this cycle is composed of a design, testing, deployment, operations and support, and Netflix identified that they were very effective in each of these stages but overall, in carrying out the entire development cycle they were extremely slow. On the other hand, when they implemented DevOps in the second phase,

they realized that it was actually very positive and that if the software development team was in charge of carrying out the maintenance and operation process of the system, it would allow them to be more agile in detecting and solving errors. The hiring of engineering staff trained in the entire software cycle and the use of special tools for developers were the principles of DevOps that led Netflix to improve communication and align its operations towards the same goal, but beware, this is not a process that is done in a short time, Netflix managed to obtain relevant results six years later, it was in 2018 where Netflix managed to reduce processes that lasted days and weeks to just a couple of hours.

DevOps then through best practices within the software development cycle allows all those companies that want to deploy new versions and features in their software several times a day, reduce errors and increase efficiency, but this does not mean that it cannot be implemented in any other type of software development project, on the contrary, if you do it for sure your project will have more chances to be successful and to take its implementation in a much shorter time than expected. DevOps gives you as an organization the ability to easily adapt to changing markets, the ability to implement innovative solutions ahead of the competition, solutions that are in a low-risk environment, and the ability to scale with no limits in mind.

Finally, the next two to three years because of the massive economic downturn due to the effects of covid-19 and those that may come from a possible third world war will lead to many more companies looking to validate and optimize their processes through DevOps. Many of these processes will also focus on new technology trends, microservices and continuous integration tools to leverage what already exists and provide solutions to specific tasks in an easier and faster way. Undoubtedly DevOps will become a pioneer of technology and development in the coming years and will surely bring many more tools that increasingly simplify as much as possible each of the processes, this is because beyond DevOps is an implementation, it is considered as a cultural change and mentality of information technology.

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