Crafting Digital Transformation in Travel Experiences With DevOps

The global leader in the travel industry – Amadeus – is a travel technology giant operating in more than 190 countries, processing more than 3.9 million net bookings per day and over 55,000 transactions per second at peak. Amadeus IT Group connects over 90% of international transactions between travel buyers, providers, and sellers, worldwide.

Although the travel industry has evolved significantly over the last two decades, adapting to the rapidly changing customer requirements has been the most challenging aspect. Currently, nearly every travel company is in pursuit of simplifying and decreasing the cost of their IT operations, and the DevOps approach is the right move in that direction.

DevOps - The Concept

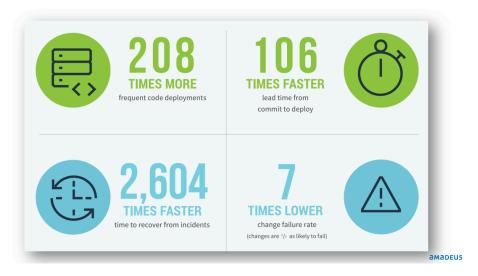
DevOps is a set of principles and practices aimed at breaking down silos to promote better business alignment. It powers the automation of development, testing, and deployment. When implemented across an organization, it creates efficiencies across various IT processes.

With DevOps, usually 60% less time is spent handling support cases and 33% more on infrastructure improvements. Predictions by <u>Gartner</u> forecast that by 2023, 40% of product and platform teams will employ AlOps (for automated change risk analysis) in DevOps pipelines, thus reducing unexpected downtime by 20%. Gartner further predicts that over 75% of large enterprises will use container management by 2024 due to the growing adoption of cloud-native applications and infrastructure.

Furthermore, according to <u>the DevOps trends survey in 2020</u>, by Atlassian, 99% of respondents said DevOps had positively impacted their organization.

DevOps tools enable developers to streamline their products or software's SDLC (Software Development Life Cycle) to ensure higher efficiency, fast delivery, and better results. The right set of DevOps tools can be a game-changer for your project, automating redundant processes, eliminating context switching, and improving team communication and collaboration.

Benefits of Moving to DevOps



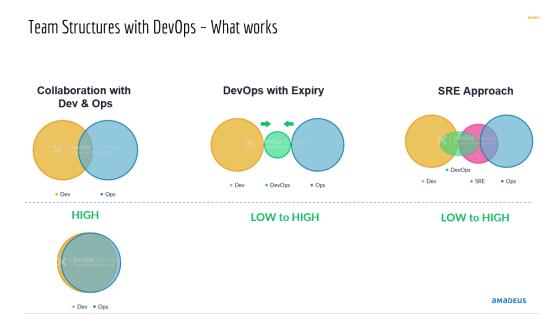
The travel industry, in its evolution journey, can immensely benefit from using DevOps practices, including cost optimization, shortening the feedback loops, ensuring business continuity, and improving company loyalty.

Initiatives by Amadeus

Amadeus' reservation platform - the backbone of Amadeus travel technology - has been there for almost 30 years. Since its launch, it has even experienced extensive technological re-engineering. The reservation unit embarked on its DevOps journey a few years ago to integrate development and operations teams seamlessly, and undertook transformation to bring in more engineering skills and practices into these operations units.

Earlier, Amadeus had also embarked on a journey towards its version of SRE (*Service Reliability Engineering*) a few years ago. However, Amadeus' reservation platform teams later had to organize their model further to facilitate their DevOps transformation.

Collaboration between Amadeus SRE and RnD (DEV) units into virtual teams in an agile configuration with a shared DevOps philosophy and backlog, ushered in a new setup named ResOps. The DevOps model - ResOps was organized in the process to unlock operating efficiency via automation and ongoing advancement.



A DevOps setup where operational activities are fully ingrained within the product development units emerged naturally, and Amadeus is now in the final stages of its DevOps transition. With the right level of resilience that DevOps and SRE bring along, Service Level Objectives are also being taken care of. Further, having an operational perspective early in the design and execution phase helped us achieve our resilience goals.

Global Demand for DevOps Talent

A rise in DevOps talent to meet global remote workplace demands has been witnessed during the pandemic. There is a high demand for top DevOps talent in many organizations. DevOps pros is currently the most sought-after job position as 65% of enterprises are looking forward to hiring more DevOps talent (against 59% in 2018), according to the 2020 Open Source Jobs Report findings.

Amadeus's global team comprises over 16,000 professionals of 149 nationalities distributed across 190 countries. The team includes 4000 engineers, of which DevOps professionals form a considerable part.

Final Words

DevOps is not a one-size-fits-all strategy. Prima facie DevOps sounds like a strategy for large businesses but can benefit small and medium-sized ones too.

However, the DevOps journey for an upcoming small size travel start-up might be pretty different from Amadeus's journey, but considering the aspects of your service scaling from both reliability and operational costs perspectives might help your business in the long run.