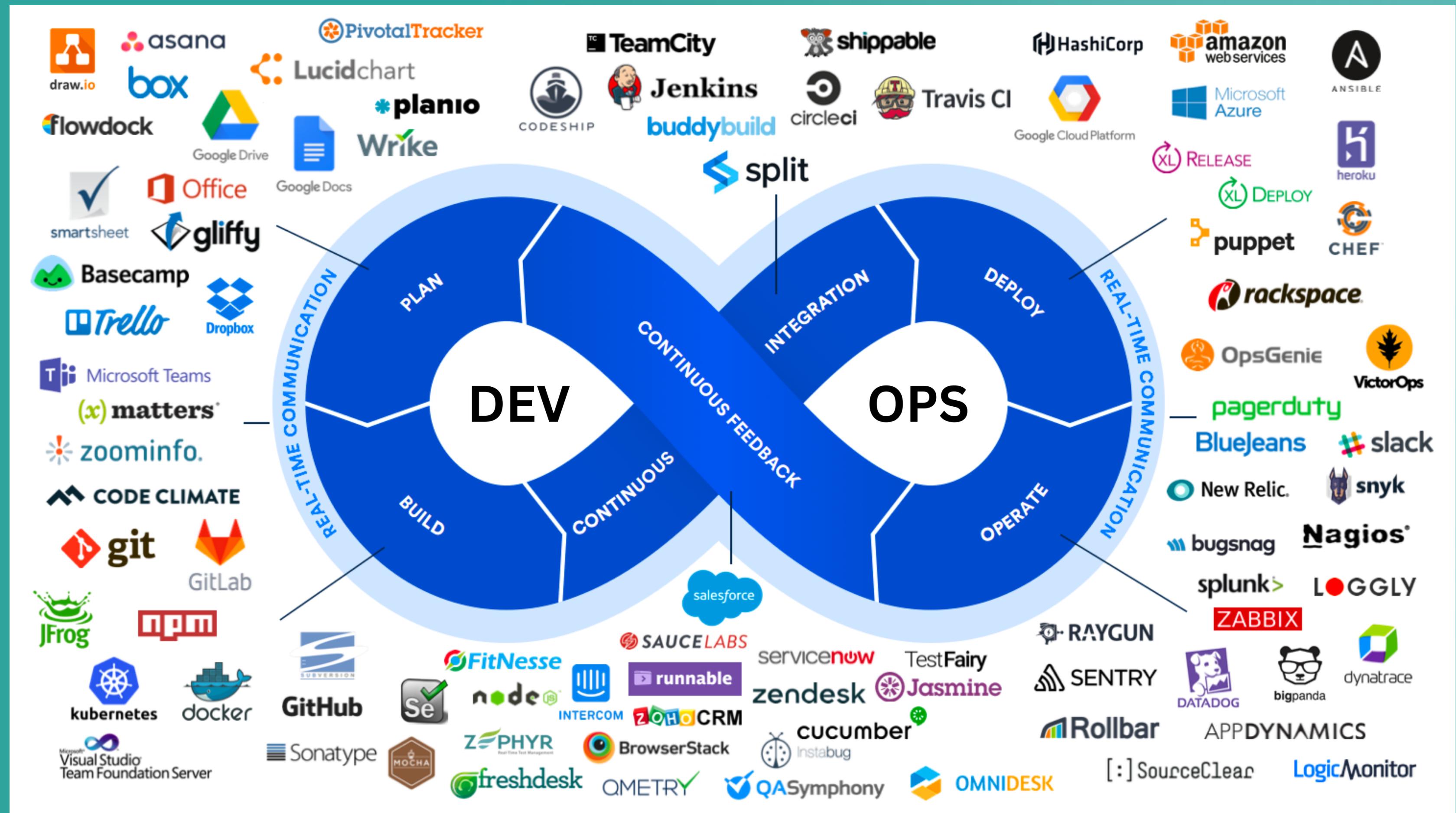


Introduction to DevOps



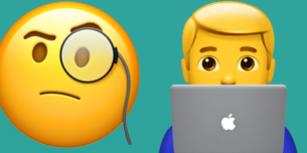


What Is DevOps

DevOps is a set of practices that combines software development (**Dev**) and information technology operations (**Ops**) to shorten the systems development life cycle while delivering features, fixes, and updates frequently and reliably.

Goals of DevOps



- Improved collaboration between development and operations teams 
- Faster delivery of software and updates to customers 
- Increased reliability and stability of software and infrastructure 
- Greater efficiency and cost savings 

DevOps Lifecycle



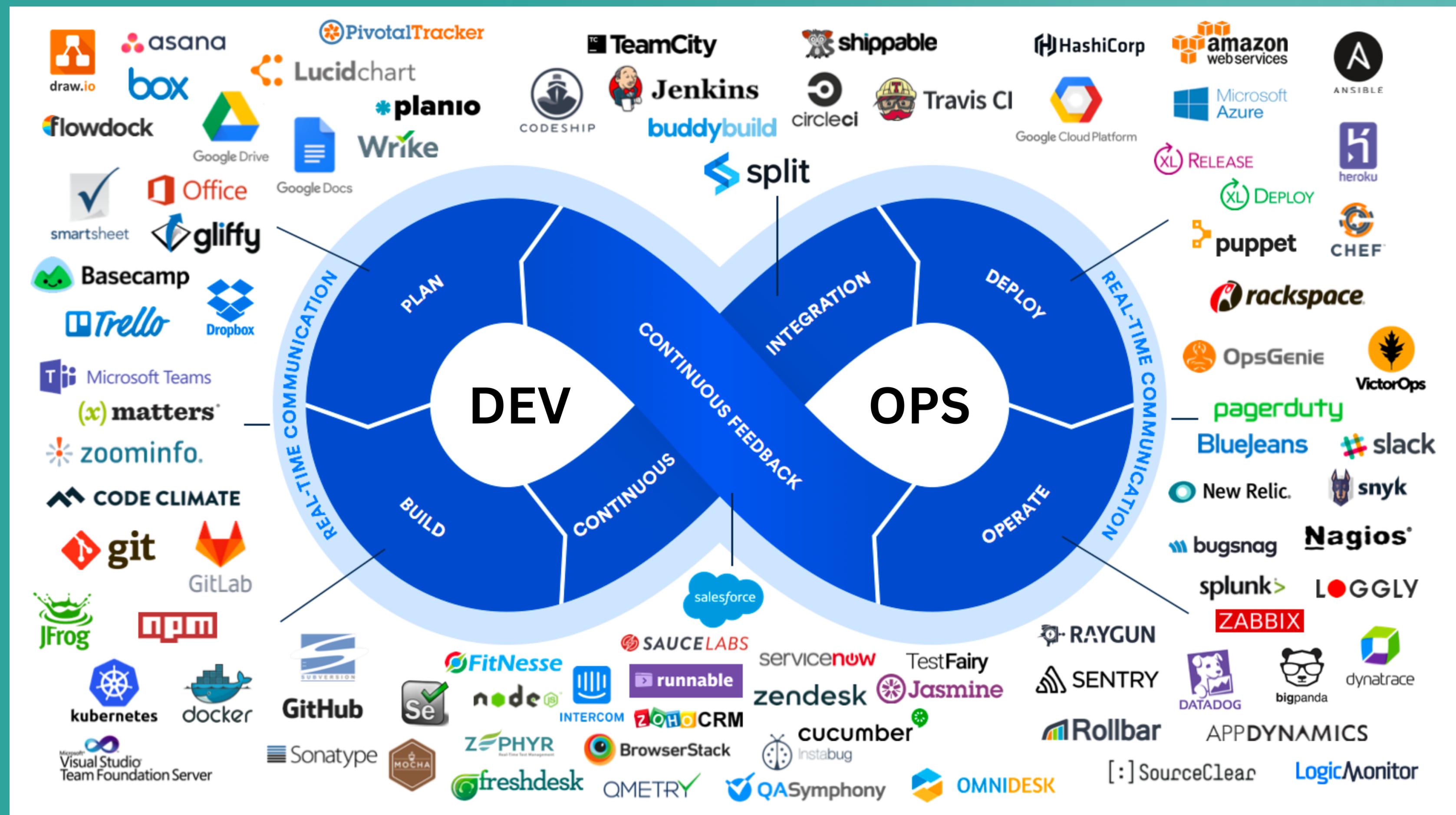
The DevOps lifecycle consists of several stages, including **planning**, **development**, **testing**, **deployment**, and **monitoring**.

Each **stage** is iterative, with feedback loops between stages to ensure continuous improvement.

Key DevOps Practices



- Continuous Integration (CI)
- Continuous Delivery (CD)
- Infrastructure as Code (IaC)
- Monitoring and Logging



Key DevOps Practices



Continuous Integration (CI)

The practice of regularly merging code changes into a central repository, which is then built and tested automatically.



Key DevOps Practices



Continuous Delivery (CD)

The practice of automating the entire software release process, from building and testing to deployment and infrastructure provisioning



Key DevOps Practices



Infrastructure as Code (IaC)

The practice of managing and provisioning infrastructure resources using code and automation tools.

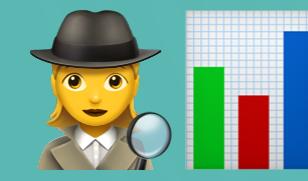


Key DevOps Practices



Monitoring and Logging

The practice of continuously monitoring and logging software and infrastructure performance to identify issues and opportunities for improvement.



Benefits of DevOps

- Faster time-to-market for software and updates 
- Greater collaboration and communication between teams 
- Increased reliability and stability of software and infrastructure 

Benefits of DevOps

- Better alignment with business objectives and customer needs 
- Greater efficiency and cost savings 

Conclusion

DevOps is a powerful set of practices that can help organizations deliver software and updates more quickly and reliably, while also increasing collaboration and efficiency across development and operations teams



Conclusion

By adopting DevOps, organizations can better align their software delivery processes with business objectives and customer needs, ultimately leading to greater success and competitiveness

