

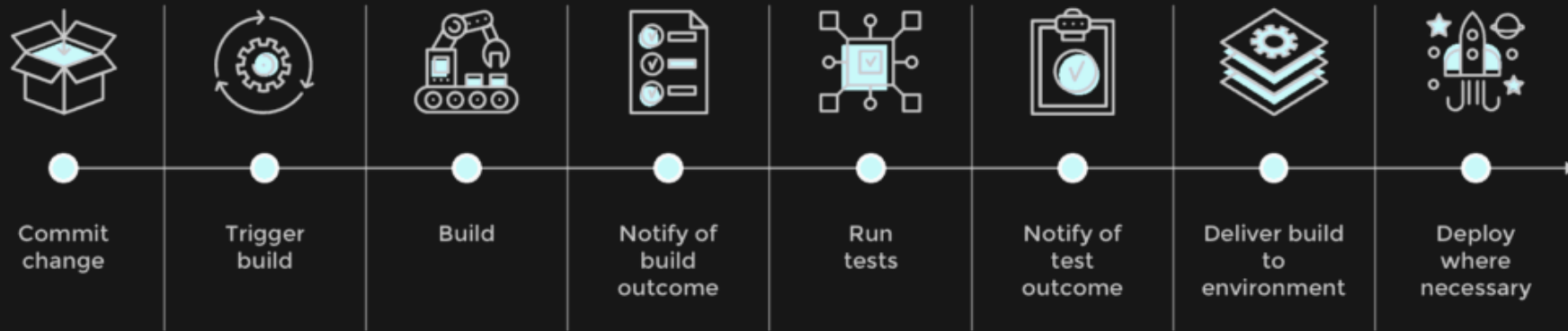
Continuous Integration

Continuous Development



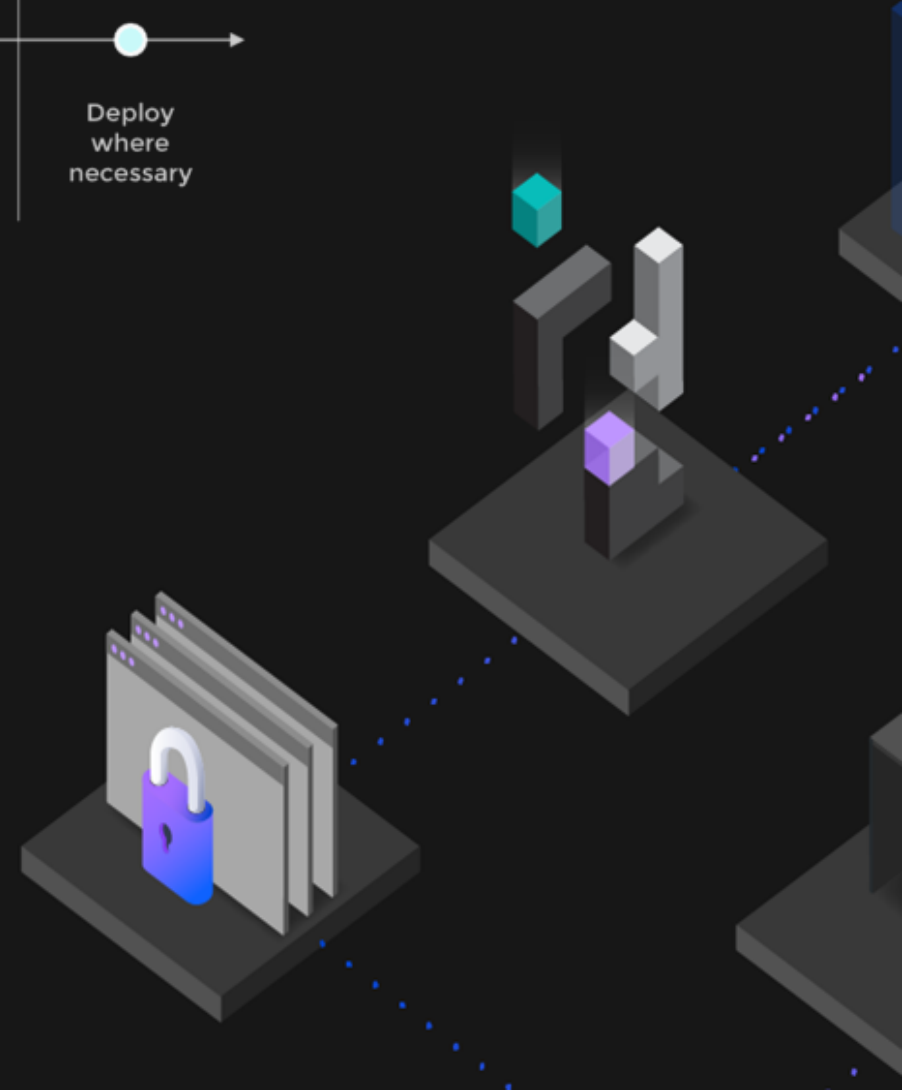
The modern method of automating the lengthy development
process of cloud-based software development

CI/CD Pipeline



CI / CD is a method of constant application delivery to customers by introducing automation in the application development stages. The main concepts attributed to CI / CD are Continuous Integration, Continuous Delivery and Continuous Deployment. Automation is the solution to the problems that the integration of new code can cause for development and operational teams.

This introduces automation and monitoring throughout the development process, from integration and testing to delivery and the eventual release. Combined, these connected practices are often referred to as the pipeline and are utilised by development and operational teams working together.



The Benefits

Releasing your software can be a painful and time-consuming process. There is always a risk of a serious error causing drastic delays and incurring significant financial losses to the company.

However the implementation CI/CD into the stages of development can reduce costs and avoid unnecessary ones altogether.

There is a cost of implementation in the short run in terms of time and capital, however in the long run fixed and variable costs will decrease and significant increases in net revenue for the firm



Faster time to market

Increase Revenue

Faster bug fixes

Avoid Cost

Automated Stress Tests

Protect Revenue

Efficient infrastructure

Reduce Cost

Shorter review time

Reduce Cost

Progression Metrics

Increase Productivity

Better code quality

Increase Revenue

Collaboration

Increase Productivity

Smoother production

Reduce Cost

Communication

Increase Productivity

Production stages CI/CD Assists or Displaces

Coding



The use of modern machines to automate systems and production processes is faster, more efficient and more reliable.

Review



Compilation/Integration



Running Tests



Security Strength Tests



Infrastructure Creation



It will allow developers to focus on the key components of the project. Most processes are displaced by CI/CD and also provides assistance on client and user interface tasks. Visual displays of information are generated and can be compiled into communicate complex data relationships and data driven insights in a way that is easy to understand.

“The average cost of data centre downtime is \$5,600 per minute, and the average downtime is 90 minutes, so that's more than half a million dollars per incident.”

CI/CD Helps minimises damage and prevents future errors