CloudScaleQA
Assert Assure Accelerate

CI/CD MATURITYANALYSIS

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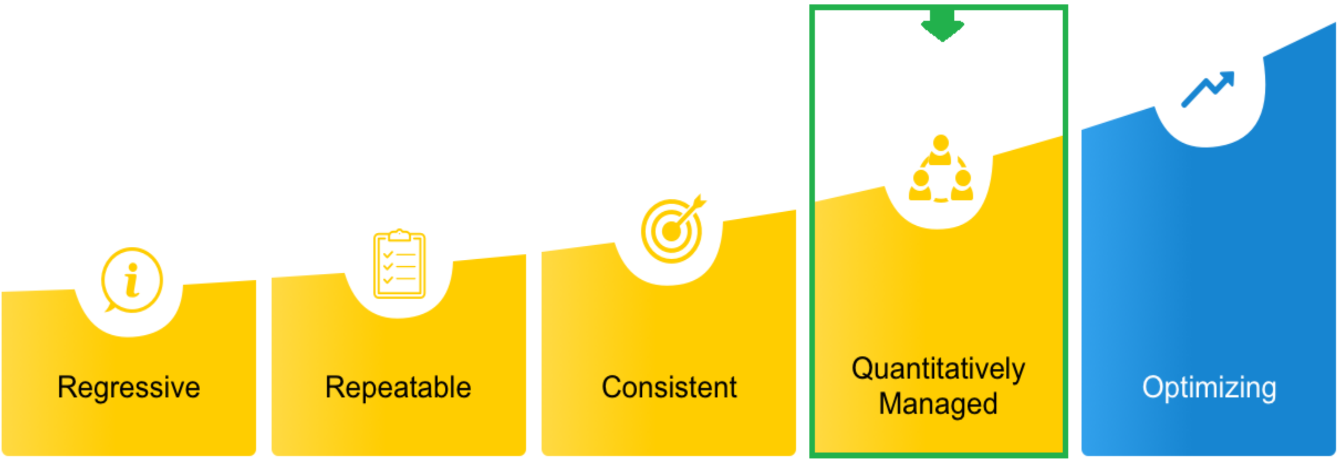
CI/CD Maturity Analysis Report

This DIY assessment will provide guidance to you on how to make Continuous Delivery work within your organization. Thank you for using this survey. Here is where you stand in terms of the maturity of your processes around Build management and continuous integration, Environments and deployment, Release management and compliance, and Testing. Please have a look at our recommendation and guidance for you to mature your practices progressively.

Build management and continuous integration

You are at level 4



What you are doing well:

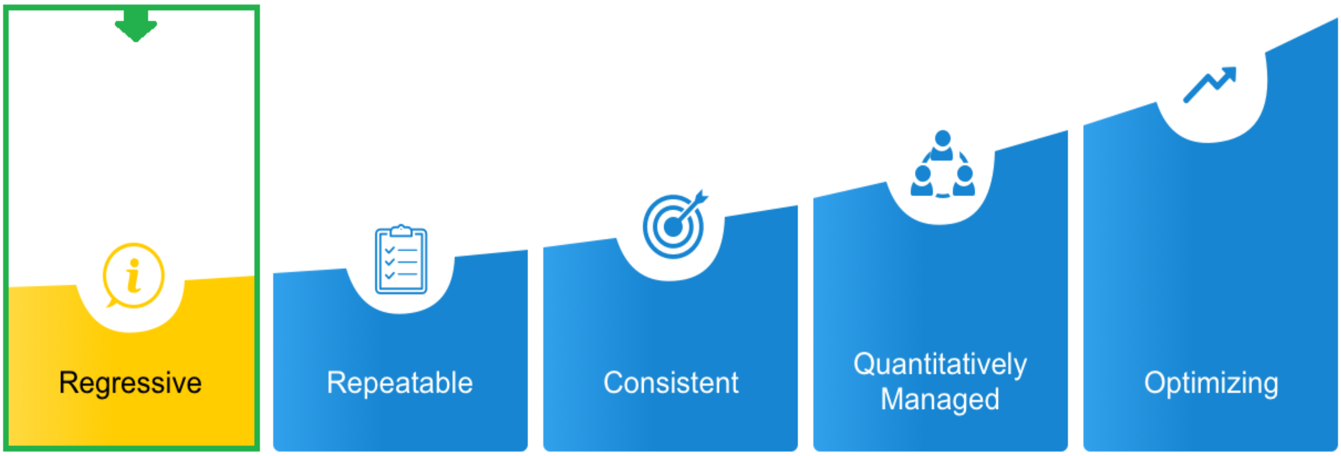
It is great that you have implemented build automated deployment. You are able to recreate any build from source control. You have defined process to deploy build on any target environment. It is great that you have integrated automated smoke tests with the build. It is great that you take build failure seriously, identify and address the root cause.

What you can do better:

Industry best practices recommend performing local commit level tests before checking in code. Please consider implementing this best practice. Checking in code to trunk and main line weekly can introduce a risk of losing precious development effort. We recommend checking in daily as a good practice. It is a great practice to bring up build and integration issues in retrospective meetings and take corrective and preventive measures on them. You may consider implementing this as a process.

Environments and deployment

You are at level 1



What you are doing well:

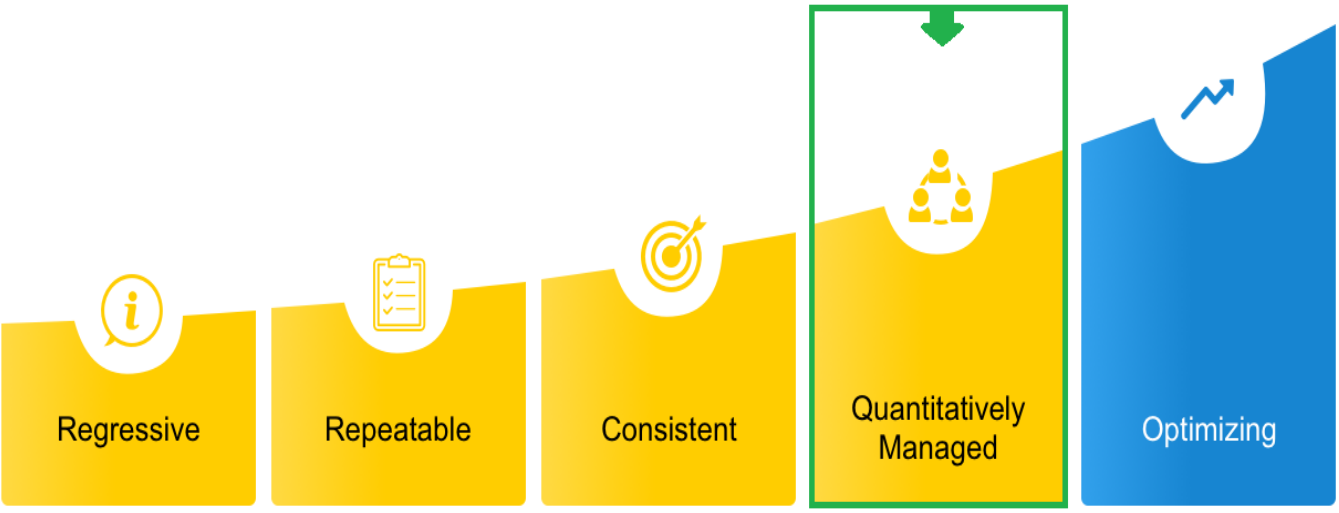
Well, it seems like you really need to focus in this particular area within your Continuous Integration / Continuous Delivery process maturity. Please go through the list of what you can do better.

What you can do better:

It is recommended that as per industry best practices, automated deployments should be done for all environments so that human error is minimal. It is highly recommended that in order to avoid manual error in provisioning, and to provision environments fast and consistently, you should use infrastructure management through code. It is highly recommended that the environment or application configurations scripts are put under version control. This will enable traceability and also you will be able to revert to an old working version quickly in case something changes or stops working due to new changes. You can leverage Continuous Delivery tools to orchestrate the deployments across multiple environments. This will not only save time but ensure consistency in deployment process and monitoring. You may consider utilizing environment virtualization to provide a controlled and fully repeatable deployment and release process.

Release management and compliance

You are at level 4



What you are doing well:

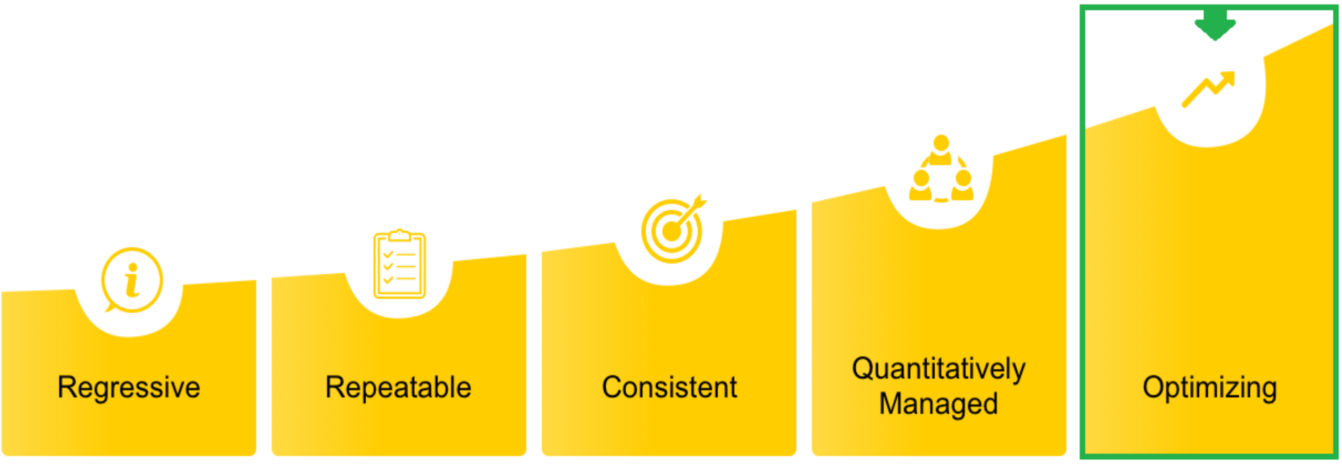
Having frequent, short and reliable releases is a great thing! You have done great by establishing traceability between releases and requirements. You are conforming to the regulatory norms for change management and approval processes. Keep it up! Your delivery and operations teams are collaborating regularly with one common goal of managing and reducing cycle/ release times. This is great!

What you can do better:

You should start documenting and enforcing the monitoring needs as part of release plan. This is an indication of having matured processes. Also, this can give you heads-up in terms of potential issues lurking within the system.

Testing

You are at level 5



What you are doing well:

You have done the right thing by automating majority of the tests. You are either already reaping the benefits of automation or you will soon get it! Well done! You are automating fast executing unit tests at commit level. With good test coverage, this will definitely help in reducing number of defects found during further tests. If you are having automated acceptance tests integrated with your continuous delivery process, and they are triggered automatically, that is really a great thing to have. You can execute tests without manual supervision and it can assure improved feedback time. You have futuristic vision of increasing efficiency of automated tests and hence you have automated non-functional tests like security and capacity tests. Way to go! You have done a great job by defining quality gates that are enforced throughout different phases of continuous delivery process.

What you can do better:

It is highly likely that your business, test and development teams are not always in sync. By adapting to the ATDD and BDD approaches your business, development and testing teams will be more in sync. You may consider introducing these to the team.

Methodology

This survey is based on a maturity model recommended in “Continuous Delivery” by Jez Humble and David Farley. The best practices for different practices such as 1. Build management and continuous integration 2. Environments and deployment 3. Release Management and compliance 4. Testing have been identified and mapped to the maturity levels against these practices. Based on your current state of practice for these areas, the DIY assessment ascertains your current level of maturity and makes a recommendation for reaching progressively to the next higher level for each of the areas.

Assumptions

This survey is not intended to perform an in-depth CI/CD maturity gap assessment. This is intended for the practitioners to understand their current practices across different areas and map them to a maturity level. The practitioner(s) who are taking the survey are already initiated into Agile, CI/CD environments. The practitioner(s) who are taking this survey are consulting with their counterparts in other departments to ascertain the practices. This will help to arrive at a more realistic assessment.

Our senior consultants can help get a more cutomized gap analysis report for you based on study lot more factors. Please reach out to us so that one of our senior consultants can talk to you.

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