Embracing the next generation in digital transformation

The journey to the cloud for most enterprise organizations started several years ago through the advent of virtualization in a multi-tenant environment located in a dedicated data center. That rapidly evolved into a multitude of service provider clouds and eventually the public cloud leaders including AWS, Azure, and GCP. Legacy applications were slightly tweaked and then migrated through a “lift and shift” exercise to a pooled resource environment for compute, storage, network, and other IaaS components.

With the advancement of automation, containerization, orchestration, and digital disruption organizations can vastly improve application development cycles, time to market with updated capabilities, and practically eliminate downtime through scripting and resource allocation. But to get to this advanced state it takes a bit more work at the application layer to ensure they are built to operate in a cloud native environment and requires a deeper overhaul through refactoring and modernization.

Successful companies are investing the time and resources to get to the next level of application, infrastructure, and a DevOps-oriented environment but it can be hard to know where to start, what success looks like, and how to get there.

Refactoring applications and modernization

At the infrastructure layer, containers enable software to run reliably when moved from one computing environment to another and greatly assist in creating an efficient DevOps environment. However, to truly realize the benefits of next generation delivery we need to look at the application layer and ensure it is built for cloud native operations.

Applications that are built net-new have capabilities that are designed for resiliency and scale, and can be deployed on public cloud infrastructure for a very nimble and efficient delivery model. This can greatly accelerate application deployment through a true DevOps experience leveraging containers. Developers can cut the time it takes to deliver a release or update functionality already in production. This can also include adoption of agile and DevOps processes.
Why containerize your environment?

Containers enable software to run reliably when moved from one computing environment to another and greatly assist in creating an efficient DevOps environment.

- Containerization greatly improves application developer’s ability and time to deploy and configure Kill-rebuild production application environments.
- Containerization also allow you to run any platform with its own configuration on top of your infrastructure without the overhead of a virtual machine (VM).
- Containers allow developers to achieve next-generation efficiency in software delivery or allow product managers to save time and resources by settling many of the challenges that they face with traditional virtualization.
- Kubernetes (Helmsman of a Ship) Container Orchestration deploys and manages clusters of containers.

DevOps and cloud native continuous delivery

Cloud native refers to the culture of high performing organizations delivering software faster, consistently, and reliably on a large scale. Continuous delivery, DevOps, and Microservices label the why, how, and what of the cloud natives. These concepts, at their most advanced state, become so interwoven as to become one, and essentially inseparable.

- Automated repeatable IT tasks
- Scripted, automated, and instantaneous
- Zero defect workloads are spun up based on scripted code and cloud native tools
- Orchestrate and automate entire IT ecosystem

Outcome: Developers are spending 95% of their time creating business value from application development = positive revenue impact.

How it Works

Enabling digital transformation requires and evolution in:

**Applications**
New ways of developing, delivering, and integrating applications.

**Platform**
Modernize existing, and build new cloud-based infrastructure.

**Process**
More agile process across both IT and the business divisions.

CBTS is your trusted partner to help you get to the next generation of cloud native application and infrastructure delivery so that you can vastly improve your time to market, eliminate downtime, and leverage automation for ease of ongoing management.