Swiss Insurance Agency Deploys Applications **2x Faster** on Oracle Cloud Infrastructure (OCI)
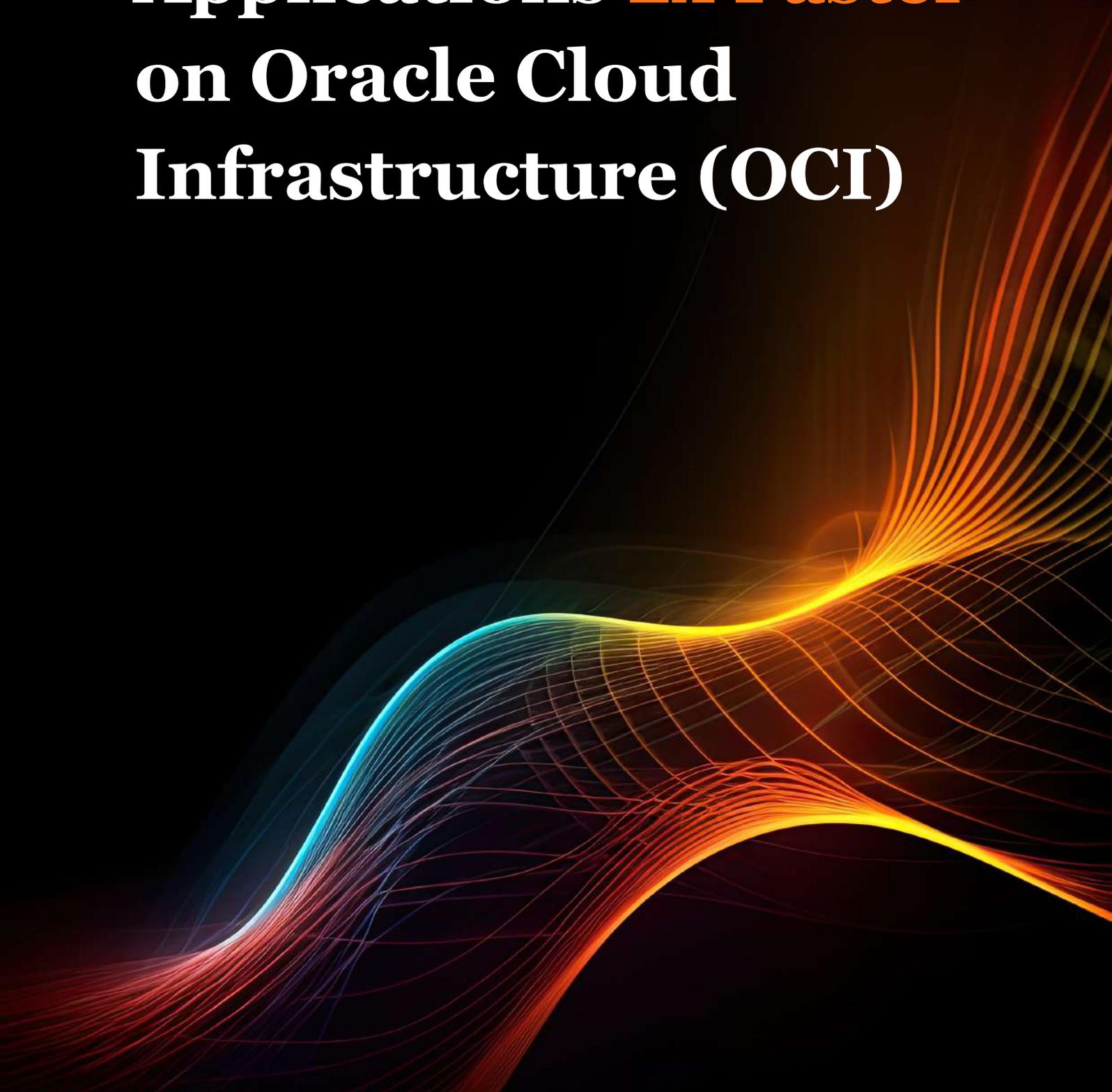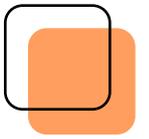
Manual App Deployment of Kubernetes Clusters Leading to Rising Operational Overheads

Swiss Insurance Agency, a leading provider of auto, property, and personal liability insurance services, was manually deploying and managing application-aware Kubernetes Clusters on Oracle Cloud Infrastructure (OCI). But like many established institutions, its operations had become burdened by traditional processes, hindering its agility and efficiency. One such area was application deployment, a time-consuming and error-prone manual process.

This cumbersome approach resulted in lengthy deployment cycles, slowing down innovation and responsiveness. The frustration was obvious, and the agency knew it needed a change.

Recognizing the agency's challenges, Xgrid proposed a bold solution: automate the entire Kubernetes deployment process using Terraform, an open-source infrastructure as code (IaC) tool. This shift, once implemented, would allow the agency to:

- **Spin up Kubernetes clusters in minutes, not days.**
  This dramatic reduction in deployment time would significantly accelerate application development cycles, enabling the agency to
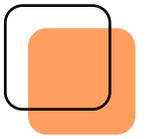
respond to market demands and customer needs with unprecedented speed.

- **Eliminate manual errors and inconsistencies.**
Xgrid's expert team would meticulously design and implement Terraform configurations, eliminating the risk of human error and ensuring consistent, reliable deployments.

- **Reduce operational costs.**
By automating repetitive tasks, Xgrid would free valuable time and resources from the agency's IT staff, allowing them to focus on strategic initiatives and core competencies.

- **Improve collaboration and communication.**
Terraform's declarative nature would facilitate seamless communication between developers and IT operations, leading to a more streamlined and efficient workflow.

Multiple Deployment Steps for Kubernetes Clusters:

The manual deployment of Kubernetes Clusters involved multiple steps:

Setting up network configurations

Provisioning a load balancer

1   2   3   4   5

Creating an OCI account

Installing and configuring WordPress Helm

Configuring DNS settings.
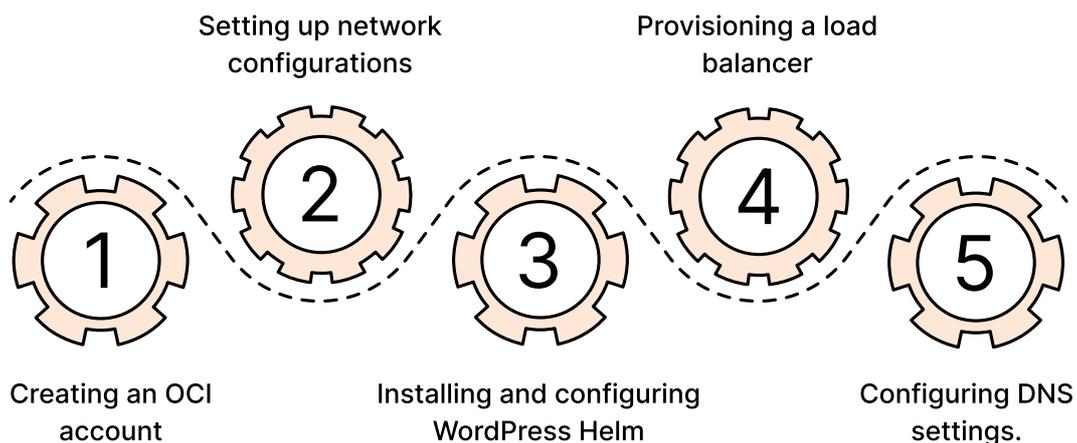
The lack of consistency in the deployment process resulted in **variations in infrastructure configurations**, making it difficult to **manage and troubleshoot issues.**
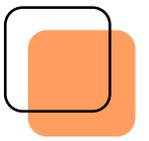
Solution Automated 4 Key tasks, allowed for consistent provisioning of infra components, and made troubleshooting easy.

Swiss Insurance Agency implemented an Infra as Code (IaC) solution using Terraform to automate the deployment of Kubernetes Clusters on OCI.

Terraform allows for the definition of infrastructure resources in a declarative manner, enabling consistent and repeatable provisioning of infrastructure components. The solution automated the following tasks:

- **Account preparation:**
  Creates an OCI account, assigns IAM roles, and configures networking settings.

- **WordPress Helm deployment:**
  Installs and configures WordPress Helm, a package manager for Kubernetes.

- **Load balancer provisioning:**
  Provisions an OCI load balancer to distribute traffic across the WordPress application.

- **DNS configuration:**
  Configures DNS settings to route traffic to the load balancer.

Minimized risk, reduced time to deploy Kubernetes Cluster from hours to minutes, and fastened delivery of new features using Terraform
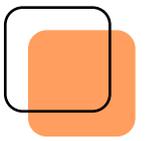
The implementation of the Terraform-based IaC solution has resulted in significant benefits for Swiss Insurance Agency, including:

- **Reduced deployment time:**
  The time required to deploy a Kubernetes Cluster has been reduced by over [Statistical Figure], from hours to minutes.

- **Improved operational efficiency:**
  The automated deployment process has eliminated the need for manual intervention, **reducing operational overhead and improving efficiency.**

- **Consistent infrastructure provisioning:**
  The IaC solution ensures consistent and repeatable infrastructure provisioning, minimizing the risk of errors and making it easier to manage and troubleshoot issues.

- **Streamlined application deployment:**
  The automated deployment of Kubernetes Clusters has streamlined the deployment of web applications on OCI, enabling faster delivery of new features and bug fixes.

Did You Know?

Swiss Insurance Agency's successful implementation of Terraform-based IaC for automating Kubernetes Cluster deployment demonstrates the power of IaC in streamlining infrastructure provisioning and application deployment processes. The IaC solution has enabled the company to reduce deployment time, improve operational efficiency, ensure consistent infrastructure provisioning, and streamline application deployment, ultimately leading to improved business agility and a competitive advantage.