
*Building the next generation e-commerce
platform for India's largest Steel
Manufacturer*

*Industry:
Steel, Cement – Manufacturing*

*Location:
India*

AT A GLANCE

ABOUT THE CLIENT

The company was created to leverage distribution, supply chain, and product synergies across both the steel and cement businesses. The client aims to alter the way they market their products to customers. They already have a strong presence through various businesses in eastern India, which will be leveraged to quickly scale up and combine the offerings in this region.

The manufacturer is a one-stop solution for the consumer's home-building requirements as well as benefits from the advantages of customer overlaps within the different businesses.

USE CASE

Building & maintaining an infrastructure for their e-commerce Applications powered by Google Cloud Platform

CHALLENGE

The challenge was to have a scalable, reliable, secure infrastructure with great performance & high availability

SOLUTION

- Royal Cyber was tasked with setting up the B2B commerce application that will enable them to operationally run its entire business digitally and efficiently*
- Royal Cyber built the platform using Google Cloud native & third party services*
- Infrastructure as a service (IaaS): GCP services like Google Kubernetes Engine (GKE), Compute Engine (GCE), Cloud Deployment Manager, Cloud Run, Cloud Build, Cloud SQL, Terraform & Jenkins*
- Each independent application & microservice was deployed using infrastructure as code, the policy as code with Terraform*
- Automating the code & infra deployments with the policies into all environments (test, prod & staging) along with continuous integration & continuous deployment was done using Jenkins & Cloud Build*
- Best practices of DevOps & DevSecOps was used by the team of Google Cloud Certified Cloud Architects and Cloud Engineers*

THE PROCESS

BUSINESS CHALLENGES

Capability to build a stable, secure, and innovative infrastructure platform to provide a disruptive cloud-native solution

Create a platform to monitor its production-to-delivery transaction flow for every order and customer

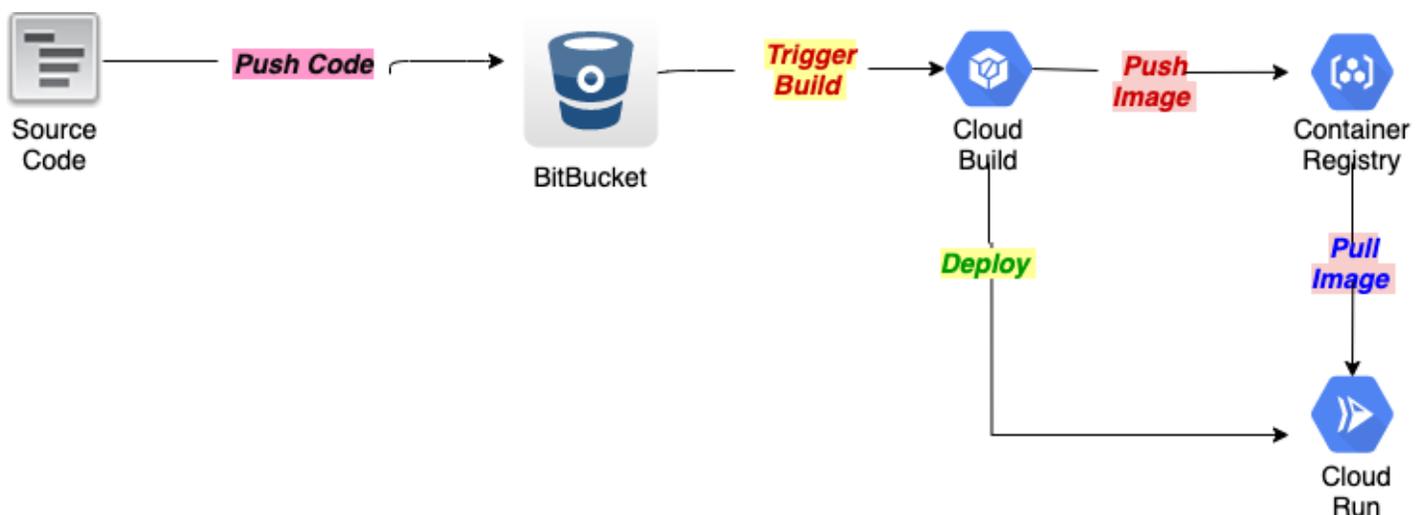
Provide agility and flexibility in an increasingly competitive market

OUR APPROACH

Royal Cyber helped the client in modernization & integration across diverse applications and numerous platforms. Following are the key components used in the implementation:

- Built a platform using GCP products and services to add new processes across multiple stages*
- Created three environments for the platform – Development, Production and Staging*
- All pipelines are maintained in BitBucket repository*
- Developer checks in the source code to a Version Control system such as bitbucket repository*
- Bitbucket triggers a post-commit hook to Cloud Build*
- Cloud Build builds the container image and pushes it to the Container Registry*
- Cloud Build then notifies Cloud Run to redeploy*
- Cloud Run pulls the latest image from the Container Registry and runs it*

Thus, we helped the client to achieve complete automation in deployment



THE OUTCOME

KEY TAKEAWAYS

- *Agile development is used in the DevOps architecture so that integration & delivery can be continuous*
- *Increased productivity*
- *Automated infrastructure as code & deployment process*
- *Reduction of IT maintenance and costs*

RESULTS

- *Ensured a robust infrastructure platform to ensure the data is secure & systems are reliable without any downtime*
- *Deployed a new infrastructure for every microservice featuring Google's cloud services*
- *Provided a Digital Transformation set-up with a complete and holistic cloud-native approach*
- *Enabled the company to focus on new features and product development, instead of production problems*
- *Grew business by leveraging a reliable and scalable platform to deliver greater value*
- *Ensured an increase in sales using multiple channels*
- *This resulted in a cost-effective and scalable platform, resulting in lower latency and high throughput*

SIMPLIFYING IT FOR CUSTOMERS AND PARTNERS

Headquartered in Naperville, IL, Royal Cyber is a leading software organization that provides services ranging from application development to training and consultancy.

We commenced operations in 2002 as a specialized technology provider striding in as a software deployment service provider, assisting clients to meet the standards and demands of doing business in a rapidly changing marketplace.