

A photograph of a modern, open-plan office space. In the foreground, a man in a blue t-shirt is sitting at a desk, working on a laptop. The desk is equipped with a green office chair. In the background, other employees are visible at their desks, some working on laptops. The office has a clean, minimalist aesthetic with wooden desks, blue and green accents, and large windows. A decorative arrangement of red and yellow flowers sits on a desk in the middle ground. The overall atmosphere is bright and professional.

Migrating South East Asia's Biggest Payment Company to Kubernetes

About Us

Akashdeep

(Product Engineer at Go-jek)

Abhishek

(Associate Software Developer at
Mavenhive Technologies)

Services Provided



GO  PAY

Scale

- 130 million internal api calls
- US \$6.3 billion of annualised gross transaction volume
- More than 300,000 online and offline merchants on the platform
- More than 50 % of Go-jek bookings are paid using Go-pay
- More than 100 million transactions in a month.
- As of 2018, GOJEK has completed 2 billion orders. (Annualised transaction volume).

Go-Pay Infrastructure

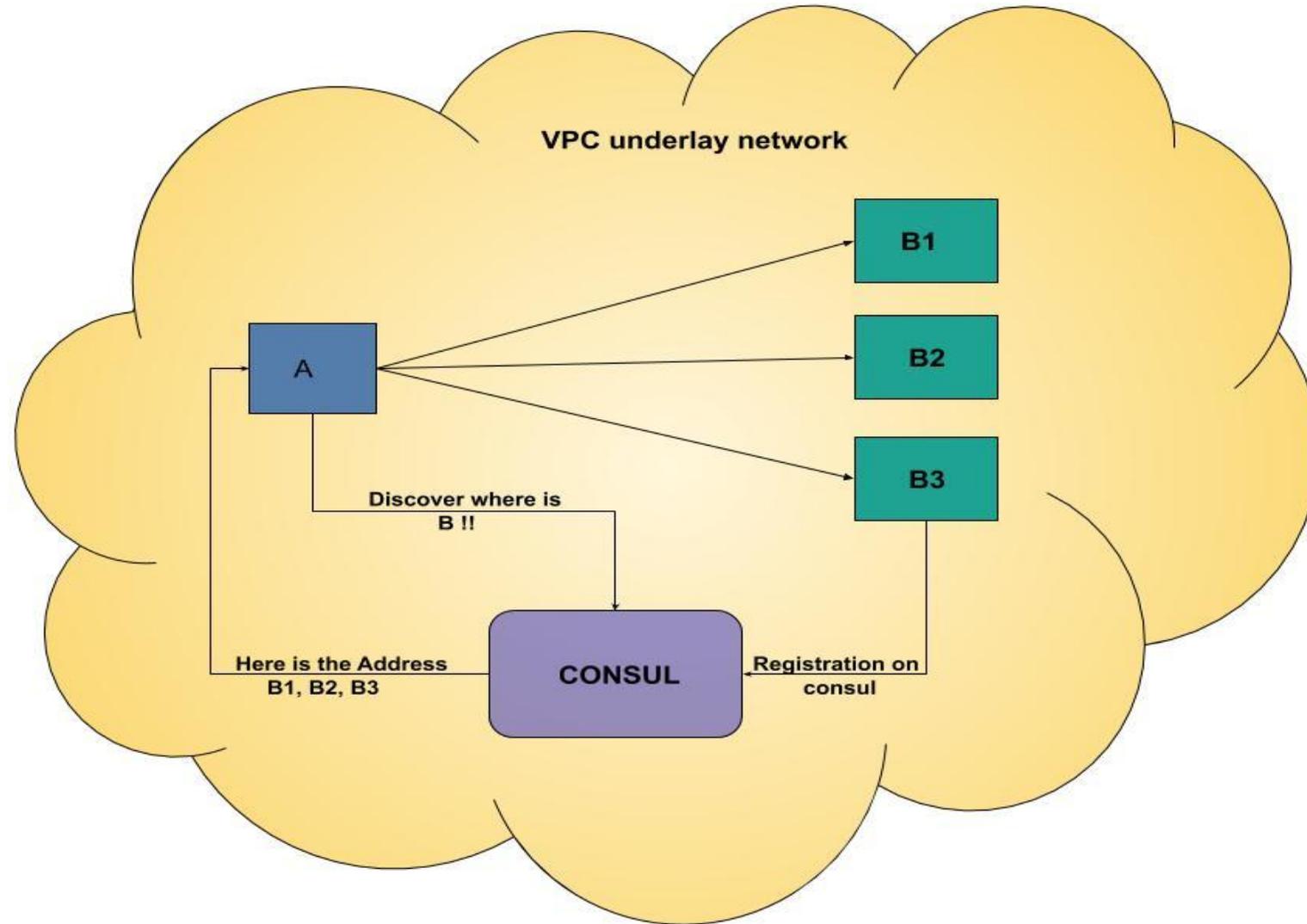
- Chef for configuration management
- More than 130 microservices
- 3 Environments
- Multicountry

Why Kubernetes ?

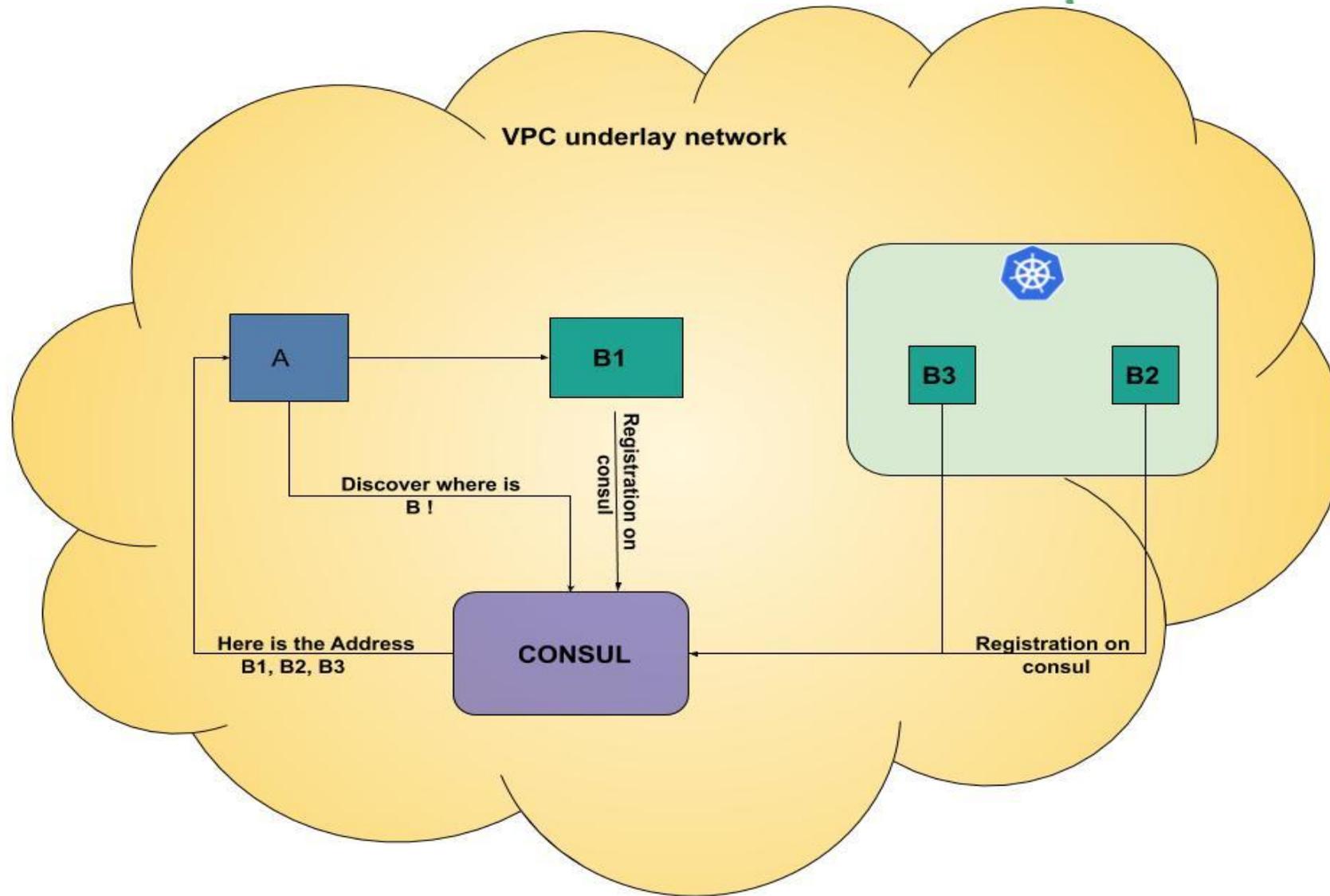
- Better Cluster Management
- Easier and faster cluster setup
- Faster deployments

Issues !!

Client Side Load Balancing



Service Discovery



1 Service at a time

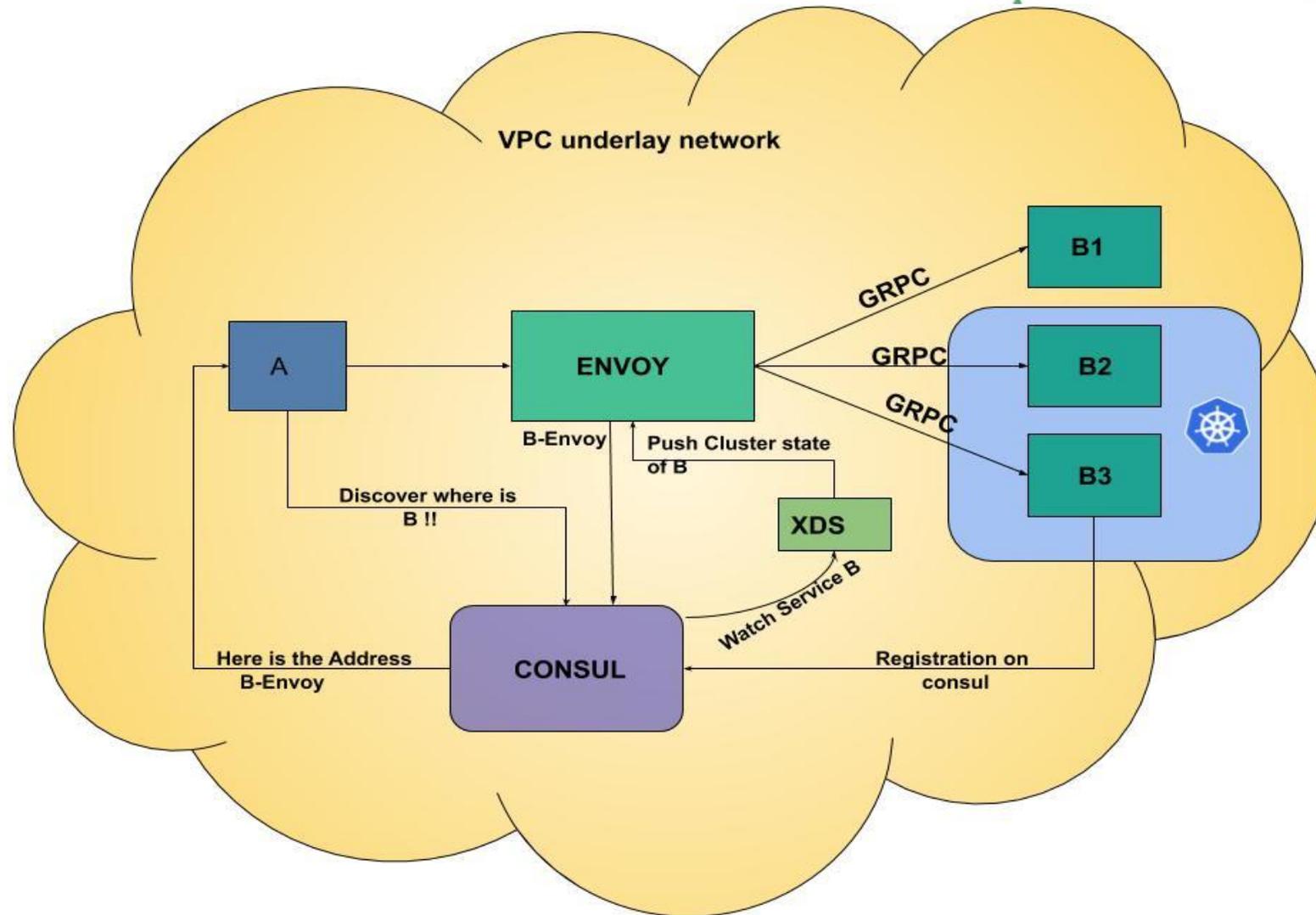
**That too running in hybrid mode
parallely both on VM and k8s.**

CNI

CNI

- Assigns underlay network IP to the pods
- Gives flexibility for ingress and egress

New Architecture



Current State

We have migrated more than 80% of our infrastructure to kubernetes without any downtime.

More than 106 microservices currently running on kubernetes

Achieved in less than 3 months

Future Plans

Service Mesh

