

# Oracle Autonomous Database / SaaS Customer Panel

**ORACLE**  
Oracle Global Leaders Program



**Peter Merkert**  
Co-Founder & CTO  
**Retraced**



**Davorin Capan**  
CEO  
**NEOS**



**Péter Ilosvai**  
COO Radar Payments  
**BPC**





# Oracle Autonomous Database Customer Panel



**Peter Merkert**  
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# Building the future of sustainable fashion on OCI

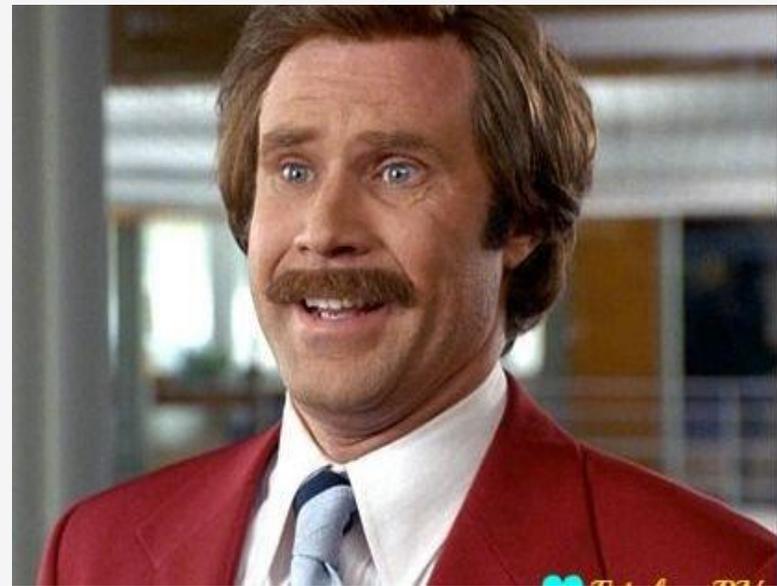
CEE Oracle Global Leaders Virtual Meeting 2021  
Oracle Autonomous Database | SaaS  
Peter Merkert, CTO & Co-Founder  
[retraced.co](https://retraced.co)



 retraced



Me, when I do shopping

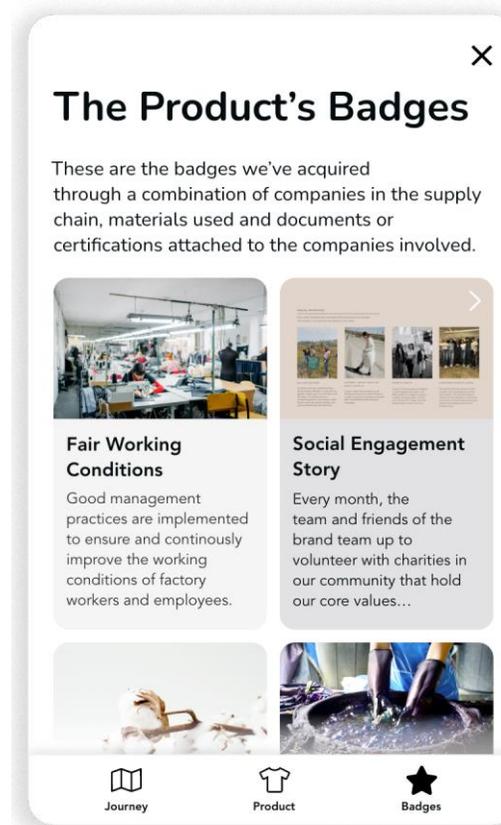
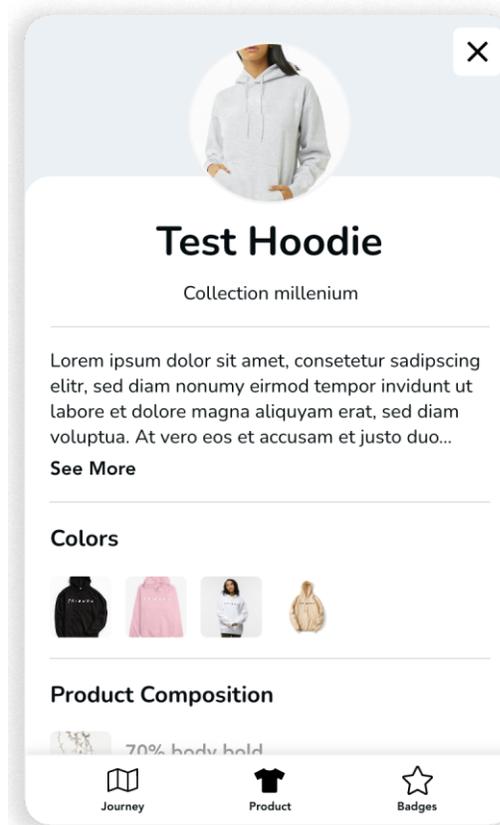
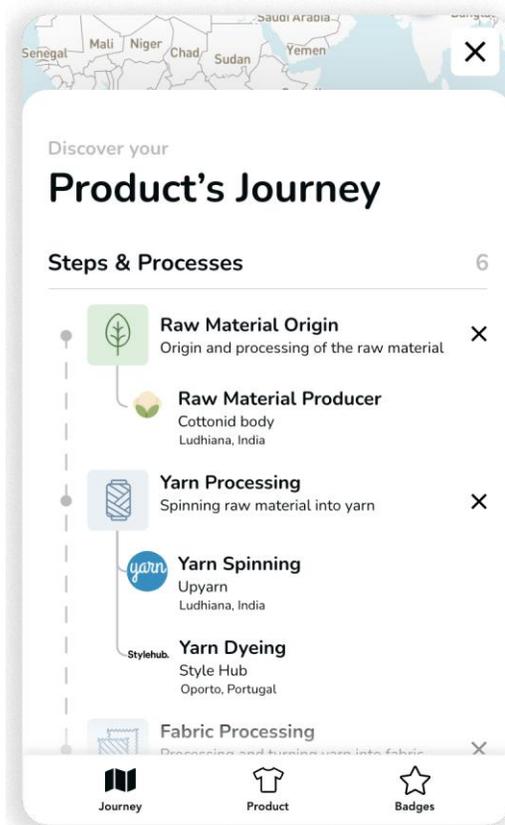
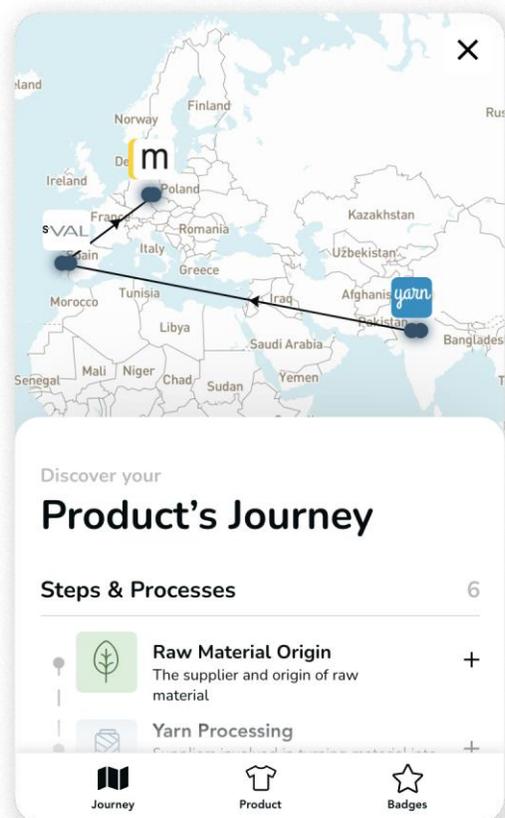


## The call for sustainability is getting louder all around the world.

*As a result, the pressure on fashion and textile companies and their supply chains constantly increases.*



# End-consumer communication



# Architecture targets



## Blockchain ready

Build next generation technology and being able to utilize the bleeding edge tech of the world.

## Developer flexibility

The idea is novel, the market is undigitized and non-standardized. This requires to keep any structure flexible.

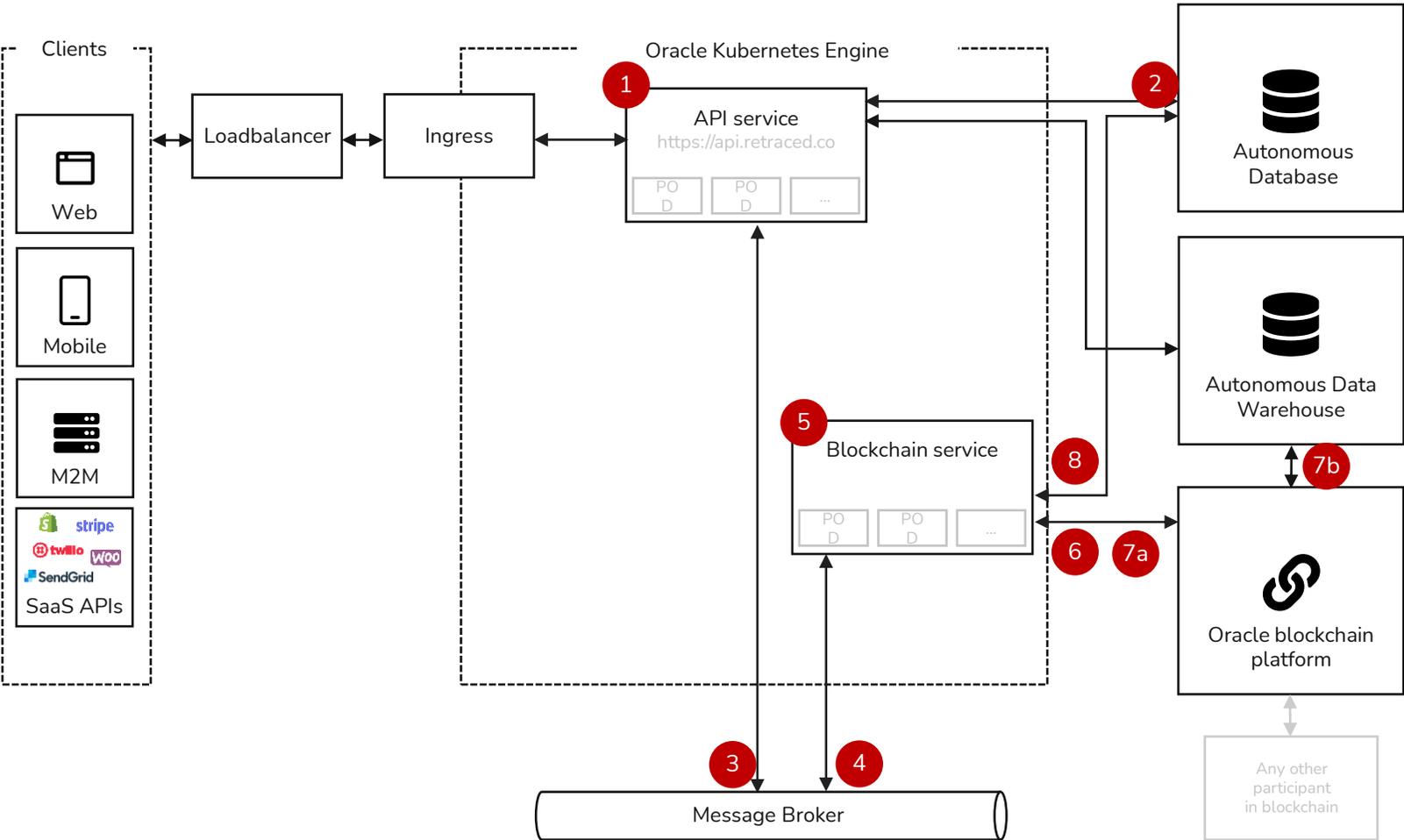
## Managed or autonomous

We want to care about the business value rather than maintenance.

## Flexible scaling

Seasonal production should allow cutting costs where possible.

# retraced microservice architecture



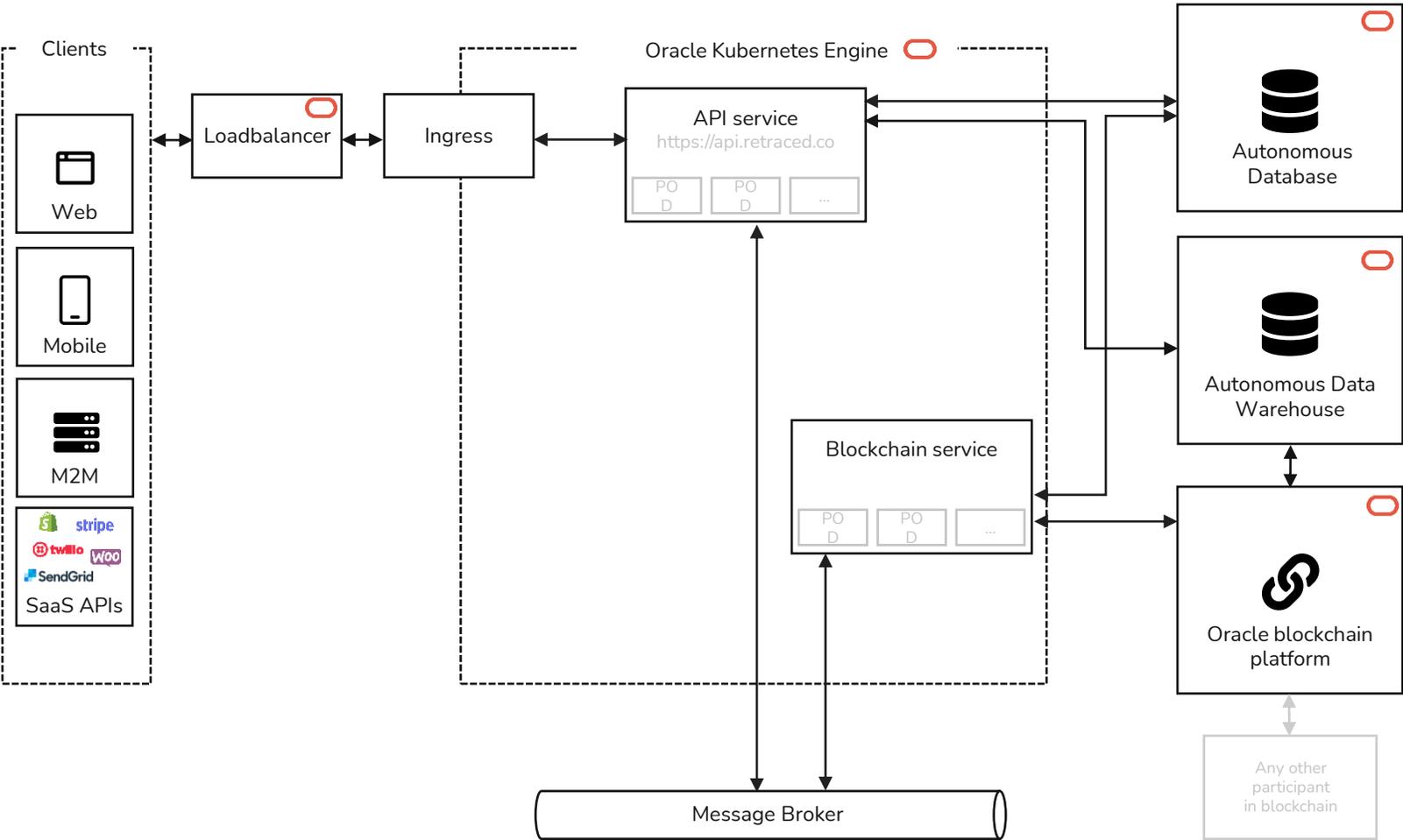
Blockchain ready 🏗️

Developer flexibility 🧪

Managed or autonomous 🏠

Flexible scaling 📈

# Architecture meets targets



### Blockchain ready 🏗️

The integrated blockchain technology allows us to utilize blockchain-only opportunity to ensure data validation with otherwise closed API certification authorities.

### Developer flexibility 🛠️

Keeping the **data structure easily extendable** and in mongo NoSQL style. Ensures that **developer focuses on functionality** rather than perfect normalized SQL forms.

### Managed or autonomous 🌳

Managed K8s, managed blockchain platform, autonomous database and autonomous data warehouse! Nothing to worry about!

### Flexible scaling 📈

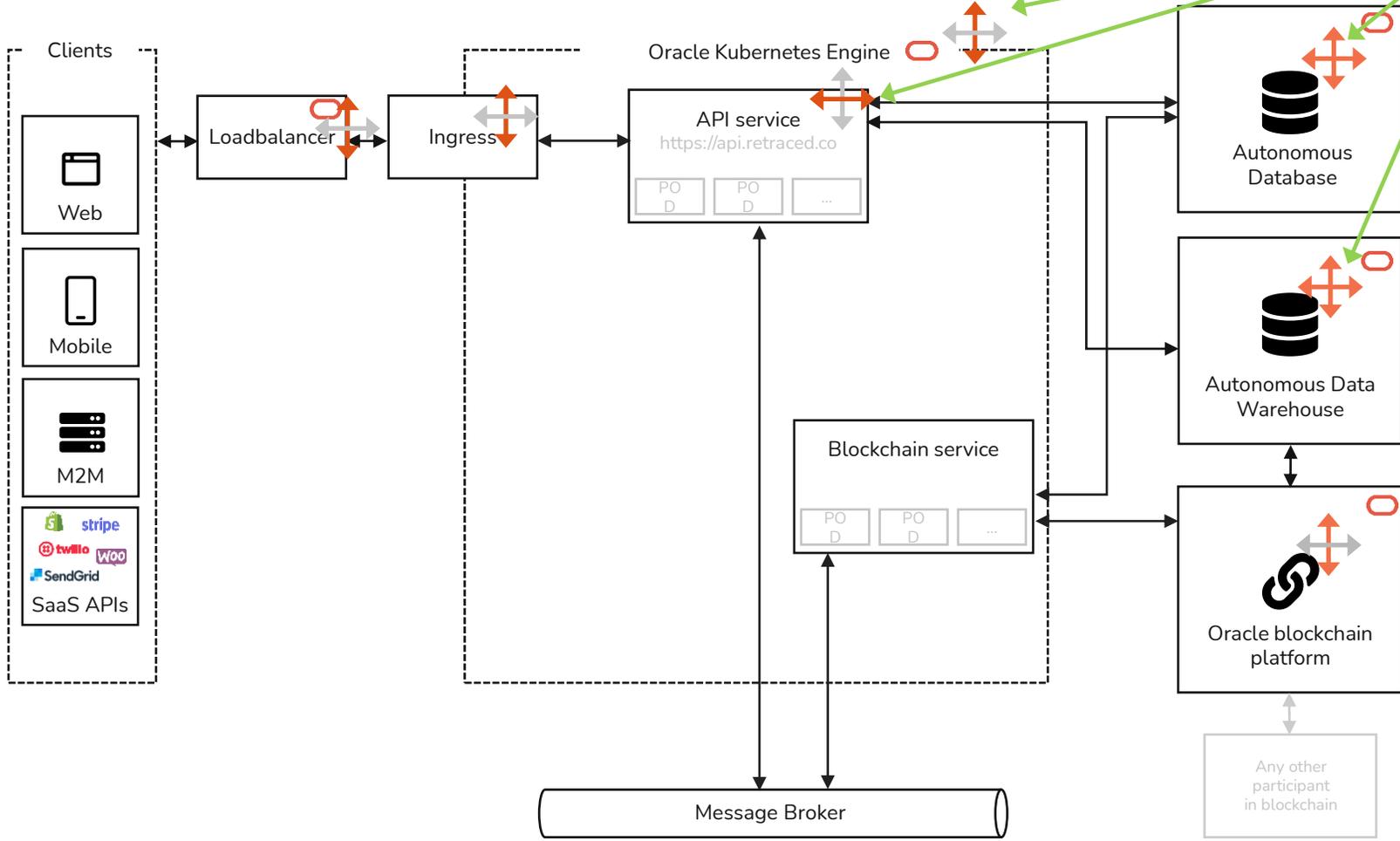
...? Possible?

↑ = Vertical scalable  
i.e. you add strength to a single machine

↔ = Horizontal scalable  
i.e. you add more machines

# Scalability

⊕ The PERFECT match! ⊕  
Scalability to infinity



## Blockchain ready

The integrated blockchain technology allows us to utilize blockchain-only opportunity to ensure validation with otherwise closed API certification authorities.



## Developer flexibility

Keeping the data structure easily extendable and in mongo NoSQL style. Ensures that developer focuses on functionality rather than perfect normalized SQL forms.



## Managed or autonomous

Managed K8s, managed blockchain platform, autonomous database and autonomous data warehouse!



## Flexible scaling

The whole (microservice) architectures is scalable both horizontally and vertically, allowing us to expand the solution to any number of customers very easily.



# Why autonomous?

## Super fast start

One click. There you go.

## No need to maintain infrastructure

Obviously a great one. Usually, no direct business value by hiring DevOps/Database administrators.

## Automatic daily backup

Automatic incremental backups. Without moving a finger. And recovery on a single click.

## Disaster recovery out of the box

Amazing out of the box feature. Usually, no time in early stages to protect against such problems.

## Simple billing

Autonomous is very straight forward and no unexpected pikes or accumulation of resources.

## Latest state

Always on latest state. Usually, gradual automatic or in worst case semi-manual updates with one click.

## No full control

Every slightly deeper investigations requires help from the support.

## Development replication difficult

Since autonomous means it is not managed by yourself, any local replication of “just” an Oracle DB is not *exactly* the same as the cloud database.

In our case the  
**benefits > deficits**  
by a lot

# Thanks



Seeing is believing.  
Scan this code with  
your phone camera to  
see a product journey.

 retraced  
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**We are hiring!** 🤖  
NodeJS and microservices on your  
breakfast plate? Let's chat!



Peter Merkert  
CTO & co-founder  
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# Oracle Autonomous Database Customer Panel



**Davorin Capan**  
CEO  
**NEOS**



CloudVane

ORACLE AUTONOMOUS DATABASE | SaaS

neos

# NEOS IN NUMBERS



# 20

YEARS OF EXPERIENCE



Cloud  
Build



Cloud  
Sell



Cloud  
Service

ORACLE

Partner



Licence &  
Hardware

## MULTICLOUD APPROACH



Google Cloud



# 300+

SUCCESSFUL PROJECTS

## AWARDS & RECOGNITION



# 100+

CERTIFIED CONSULTANTS



DATA  
ANALYTICS



APPLICATION  
DEVELOPMENT



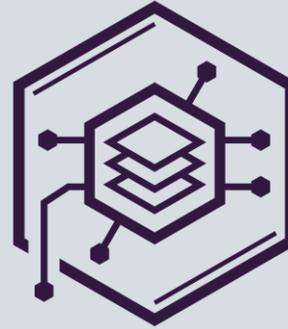
CLOUD & SYSTEM  
SOLUTIONS

## WHAT DO WE DO ?



### Analytics

We deliver complete enterprise analytics solutions including every stage from raw data extraction and integration, reporting and alerting to forecasting and prediction. We are enabling our clients to access relevant information which is timely, accurate, clean and unbiased.



### Applications

Design and implementation of custom software solutions based on specific business requirements. We are always striving to apply modern design principles and deliver tailored solutions using best technologies and design concepts such as cloud native and micro services oriented architecture.



### Cloud & Infra

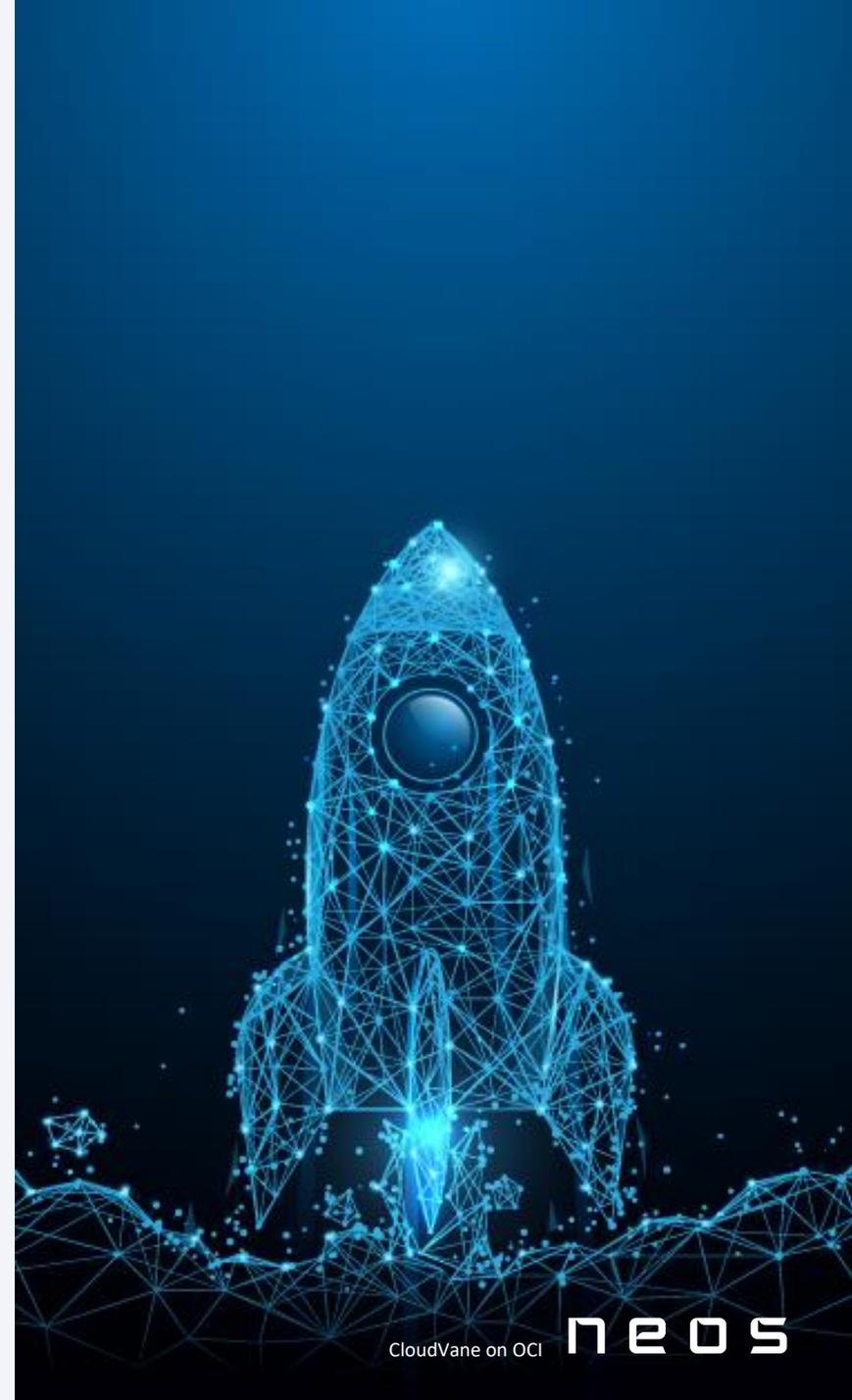
No matter whether you chose a hybrid, multi-cloud, or full lift-and-shift strategy, we can help you just by providing expert advice or by trusting us to plan and execute complete migration process. Let us take you to the cloud and focus on using new platform as baseline for faster time to market and reducing cost.

# OFFERINGS

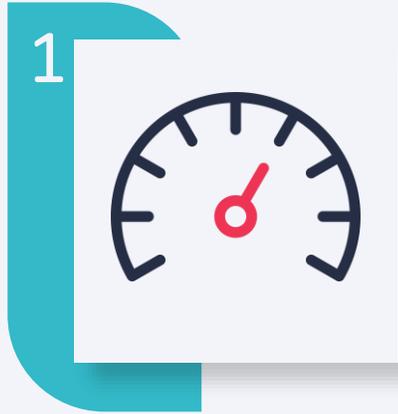
# CloudVane

- CloudVane Ltd. – Neos Spin-off
- Registered in London since November 2020
- Member of Oracle for Startups since the beginning of 2021

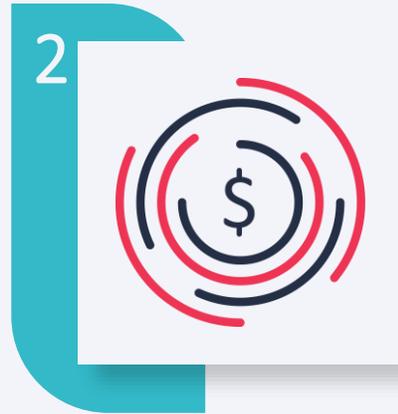
**ORACLE**  
for Startups



# Multi-Cloud Challenges



USER-DRIVEN  
CONSUMPTION



COMPLEX BILLING



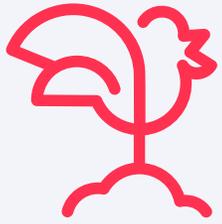
LACK OF  
OPTIMIZATION



SPECULATIVE COST  
ALLOCATION



COMPLEX CLOUD  
LANDSCAPE



cloudvane

**CLOUDVANE**

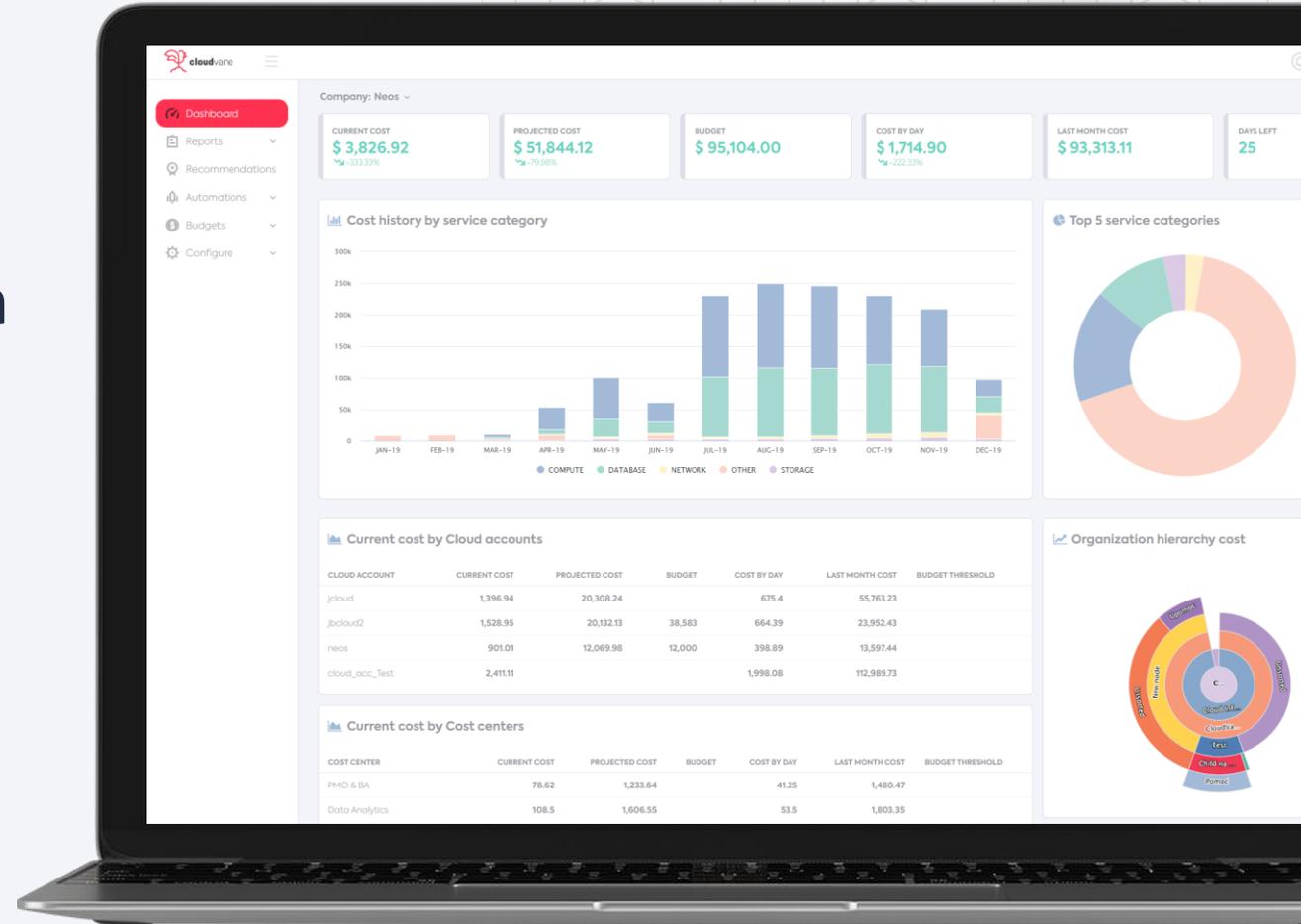
# Multicloud Cost Management and Automation solution built on FinOps standards



The simplest way to integrate FinOps into everyday operations



See through the multicloud.



# Among the first FinOps certified service providers in the world

- 3500+ members worldwide
- 1500+ companies worldwide
- 65%+ cloud/finance roles
- Promotes good cloud culture and supports investment into YOY cloud subscription



## FinOps Methodology



### INFORM

- Transparency
- Anomaly Detection
- Charge/Showback
- Budget & Forecast
- Container Allocations



### OPTIMIZE

- Reserved Instances
- Rightsizing
- Automation
- Workload Placement



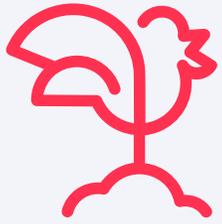
### OPERATE

- Culture
- Unit Economics
- Speed of Delivery
- Value to the Business

# Supported Cloud Providers



\*Supported providers and implementation dates are subject to change



**cloud**vane



Make cloud costs visible and transparent, with no manual intervention



Provide clear and indisputable showback and chargeback reports



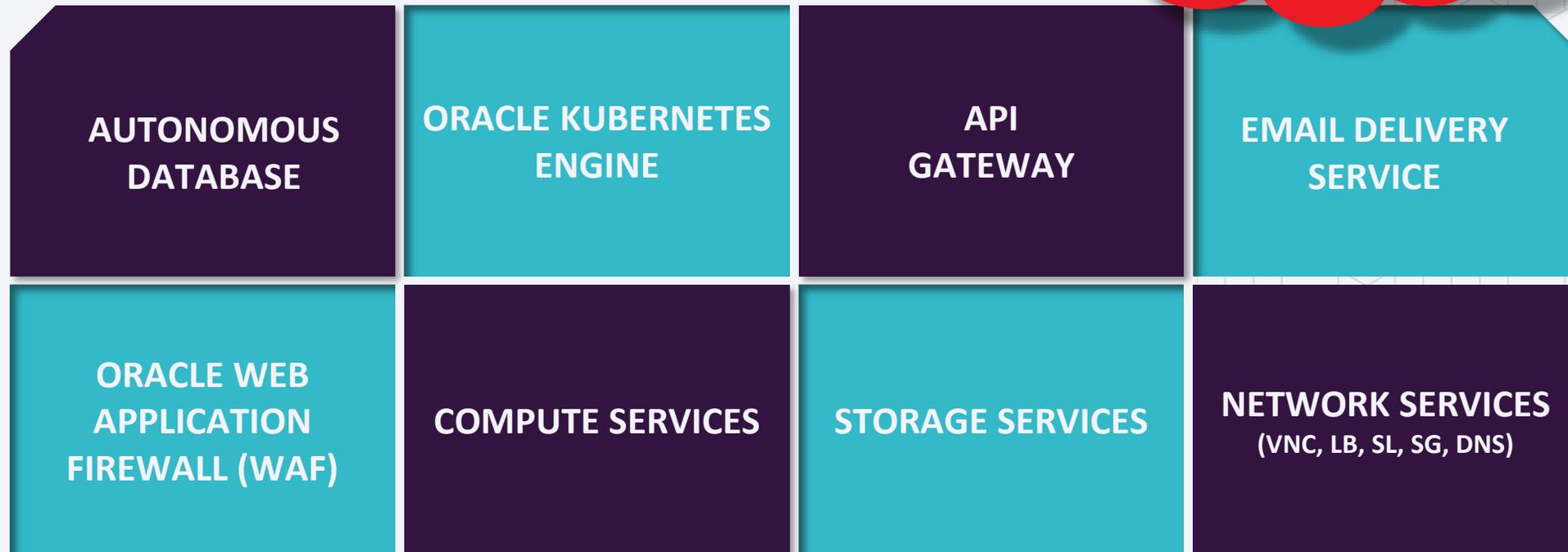
Automate policies and take actions to manage multiple companies and cloud accounts from a single console



Eliminate cloud waste and achieve between 10% and 40% savings

# Building on Oracle

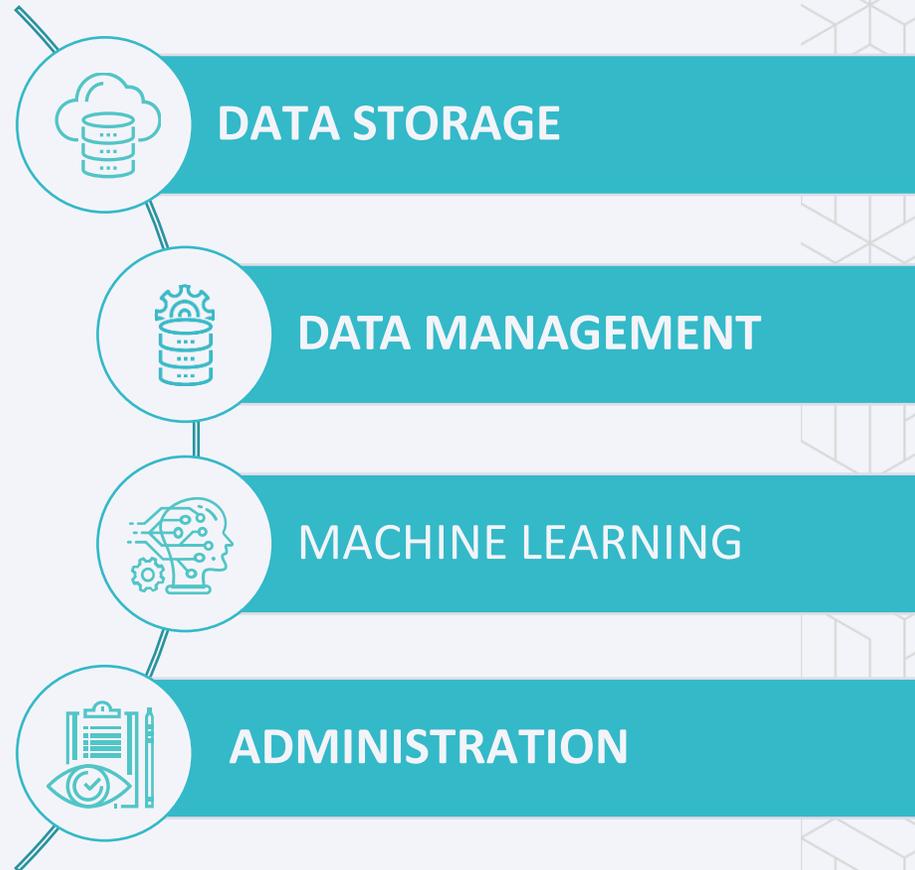
- Powerful computing
- Network performance
- “Comprehensive” service portfolio



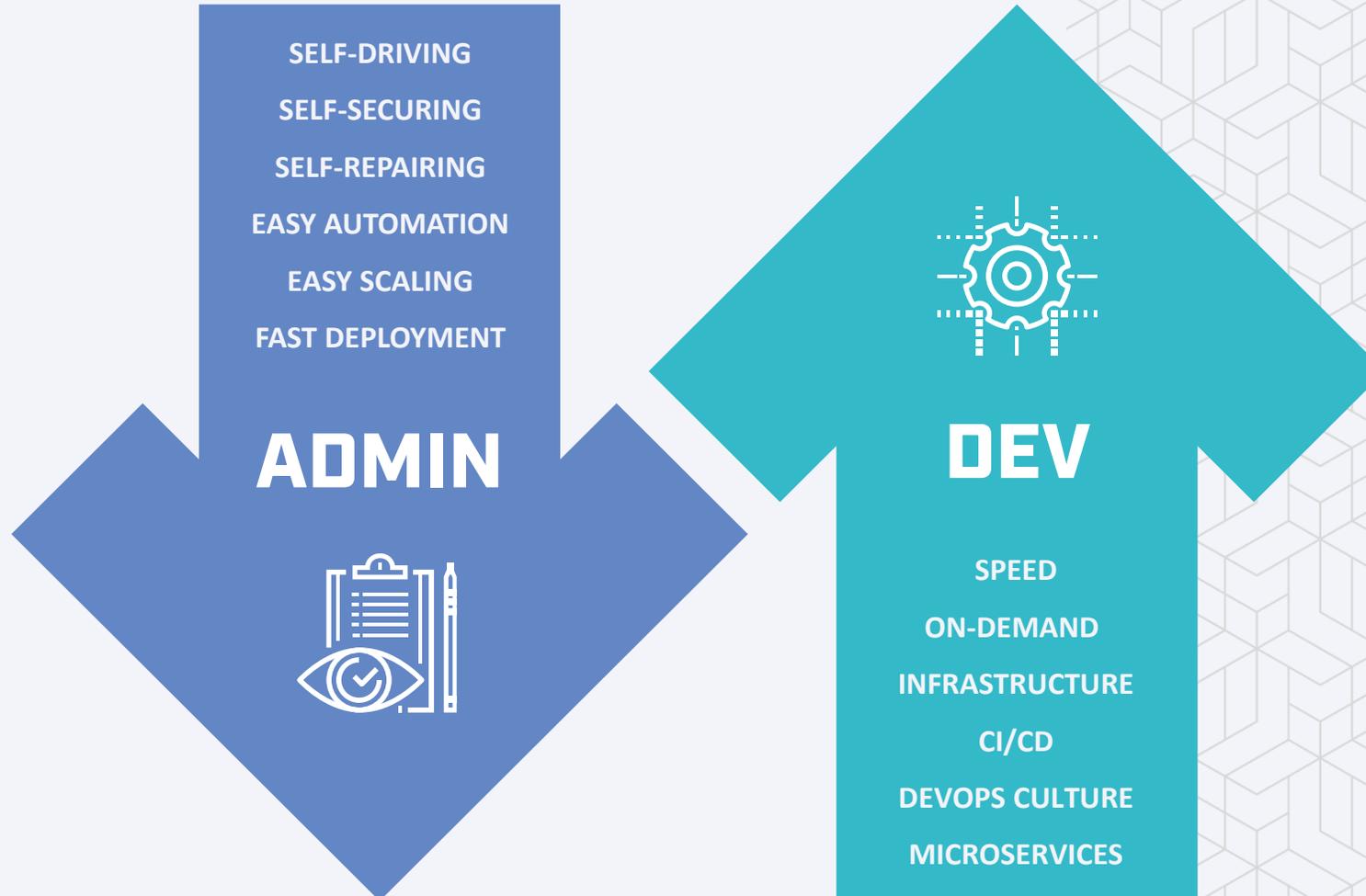
# USE OF AUTONOMOUS



ORACLE  
AUTONOMOUS  
DATABASE



# Business Perspective as an ISV



# OCI Impact





Take risks

Don't reinvent  
the wheel



Use network  
for support





**Davorin Capan**  
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# Oracle Autonomous Database Customer Panel



**Péter Ilosvai**  
COO Radar Payments  
**BPC**



banking • payments • context

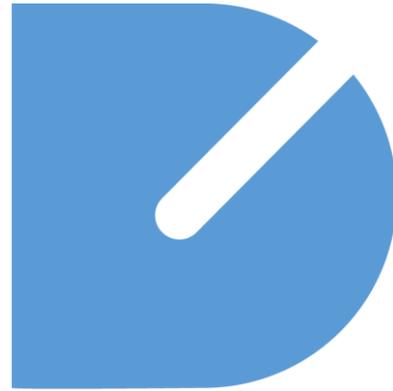
**RADAR**  
PAYMENTS



# Moving payment services to the Oracle cloud

BPC way

**Radar Payments**

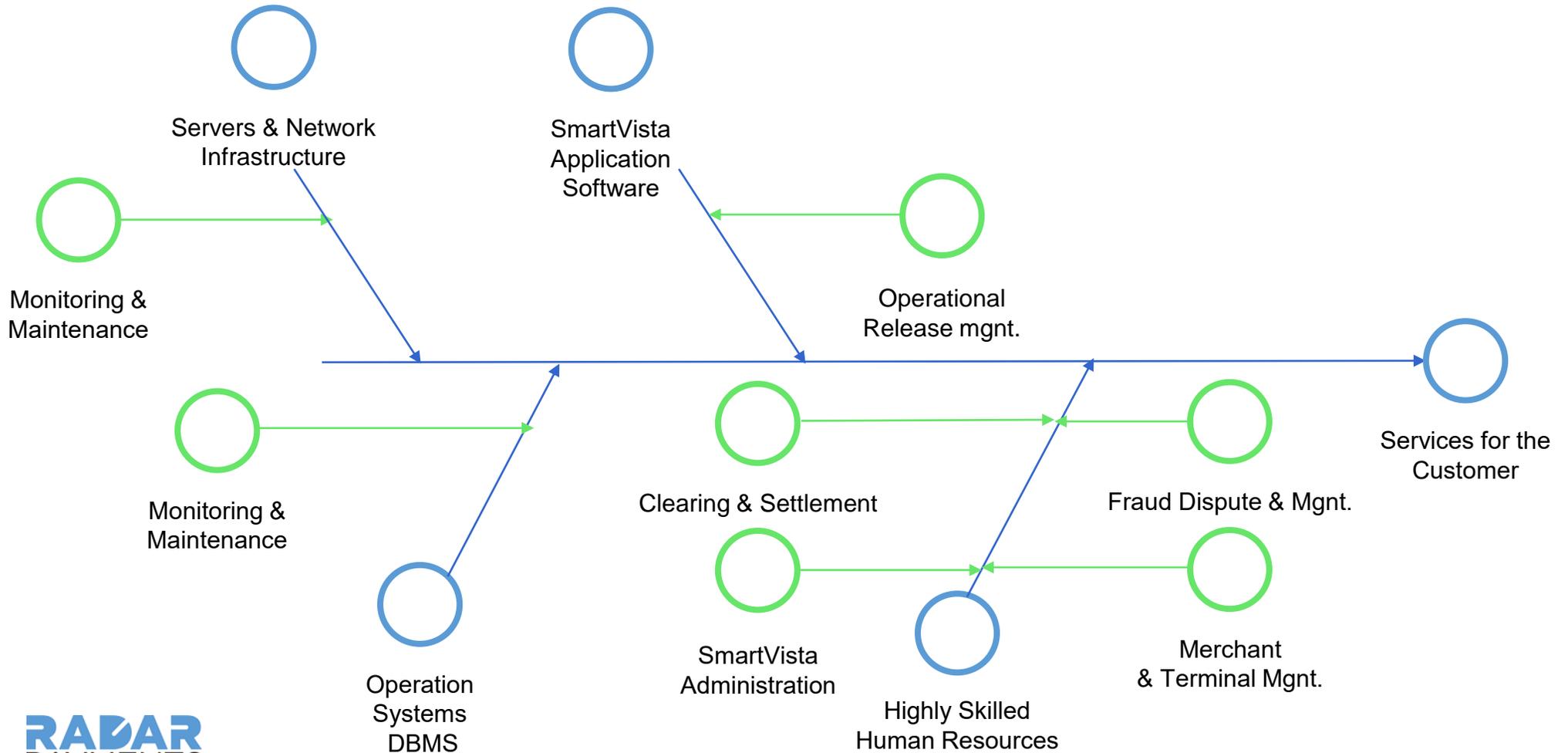


# We are RADAR

White label **payments** > **commerce** for banks and  
PSPs

A one-stop **white label** processing service that connects  
all payment ecosystem players from card schemes,  
alternative payment providers, issuing banks and  
acquiring banks to online payment gateways.

# Radar Payments managed services overview



BANKS



NEOBANKS



PSPs, ISOs  
&  
FINTECHS



# Solution before



# ➤ On-premises



## • **Negatives**

- **Mixture of server environment**
- **Additional contract with integrator company**
- **Additional hardware support efforts**
  - **Spare parts**
  - **Firmware updates**
- **Datacenter rent fee**
- **ISP and network infrastructure support efforts**

## • **Positives**

- **Full control on hardware**
- **Full control on confidential data**

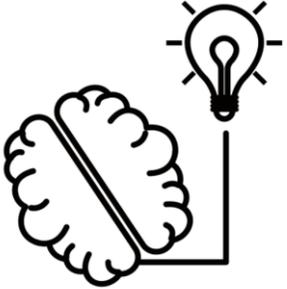


# Motivation to move to the Oracle cloud

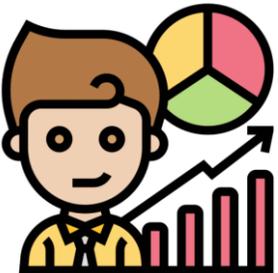




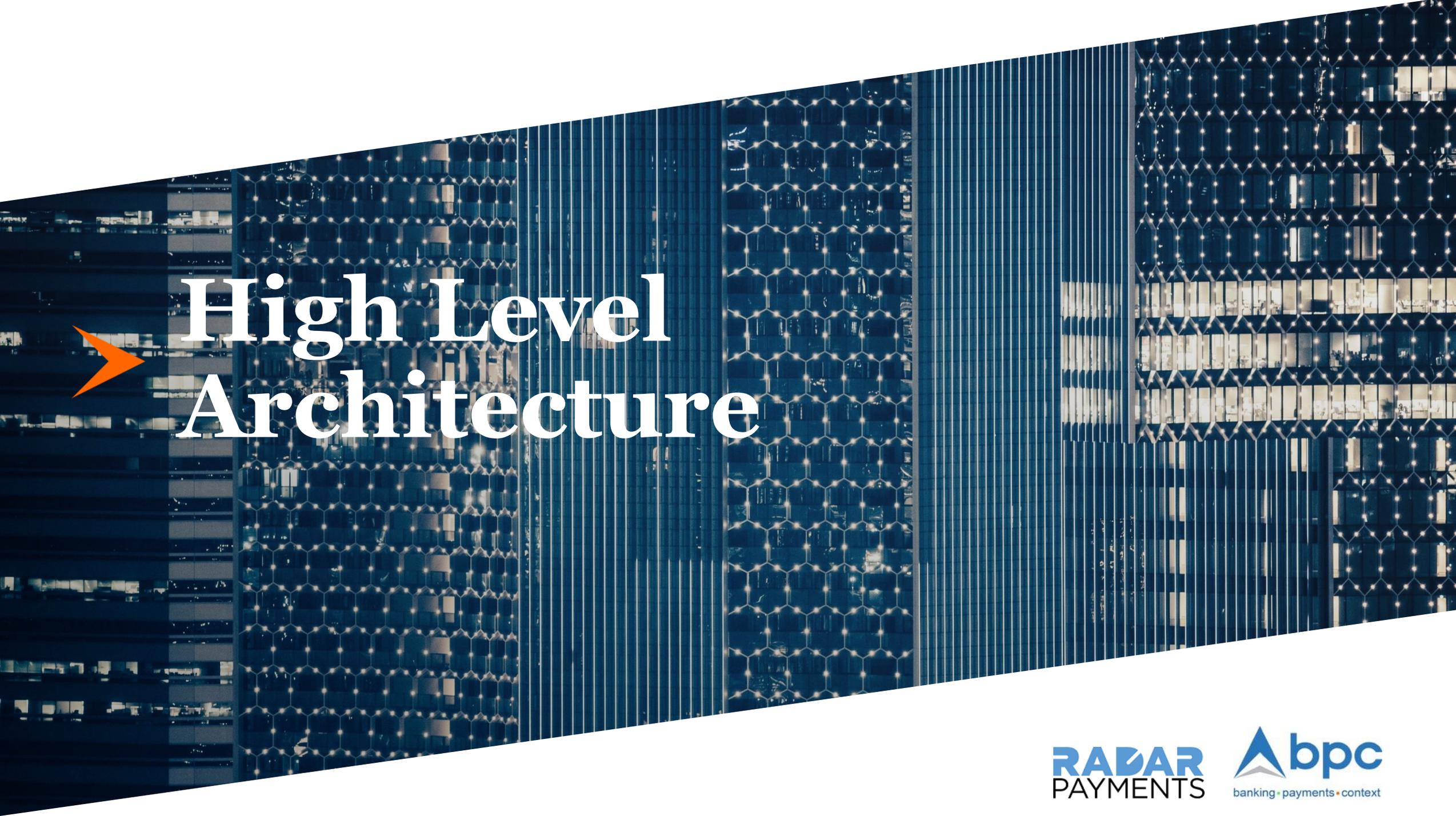
- **Fast business grow**
  - **Requirement for Fast provisioning**



- **TCO estimations**
  - **Oracle licenses costs**
  - **Hardware upgrade and support costs**
  - **Personnel costs**



- **Promissing PoC results**



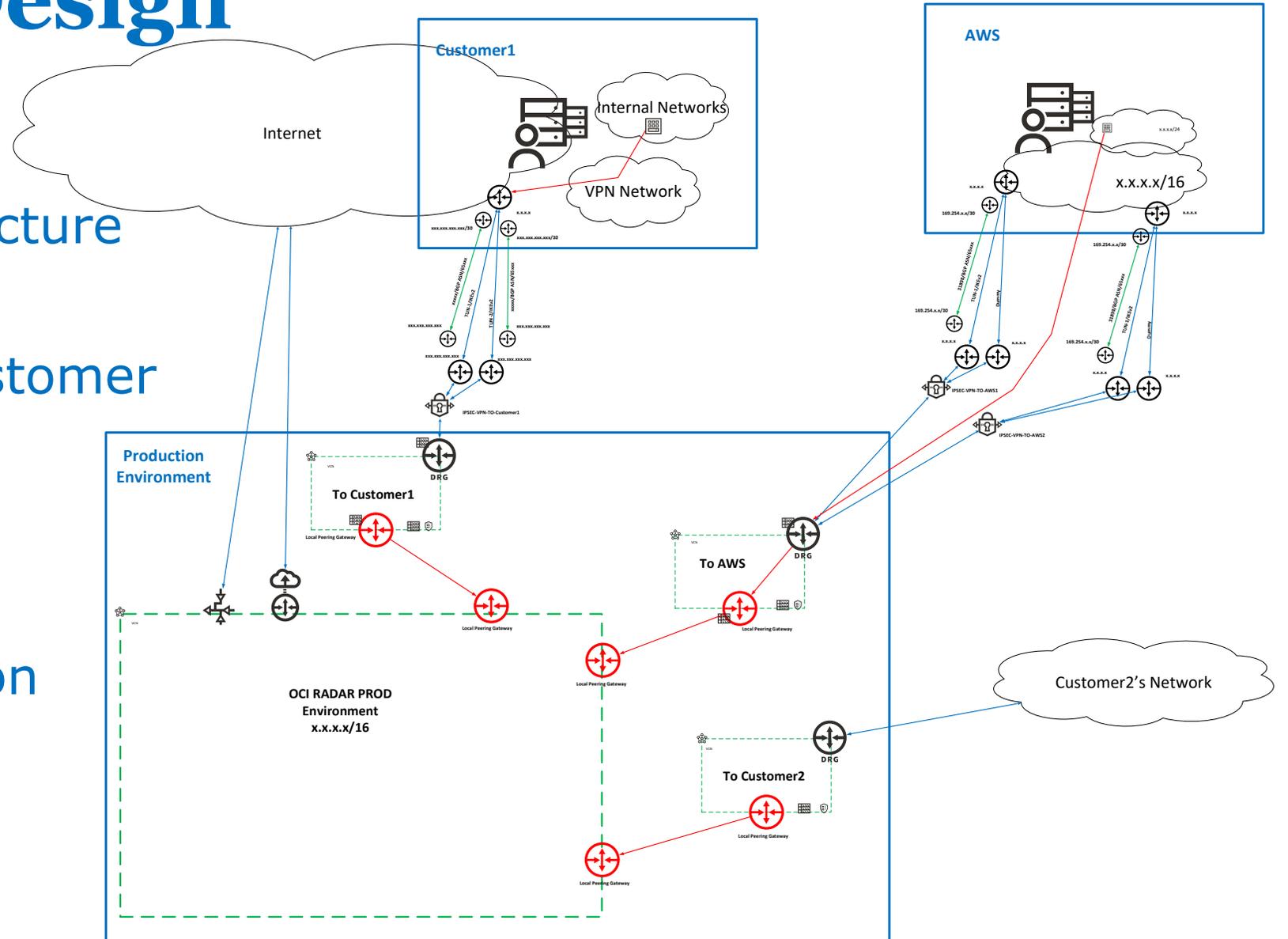
# ➤ High Level Architecture

# ➤ Frankfurt Region Based



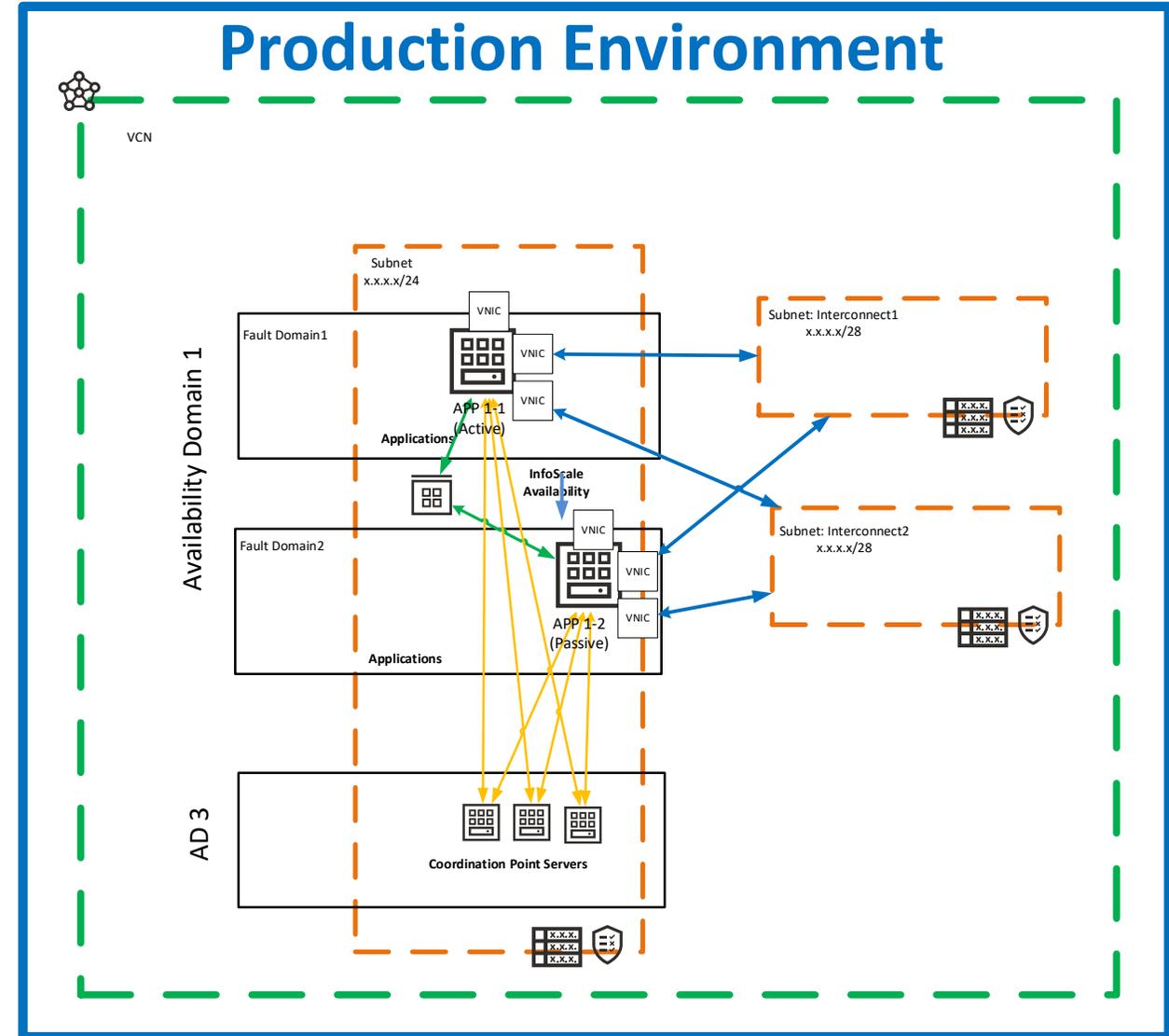
# Network Design

- Hub and spoke architecture
- OCI Transit Routing
- One OCI entity per customer
- Customer isolation
- Easy to connect a new customer
- Highly available solution
- OCI Service



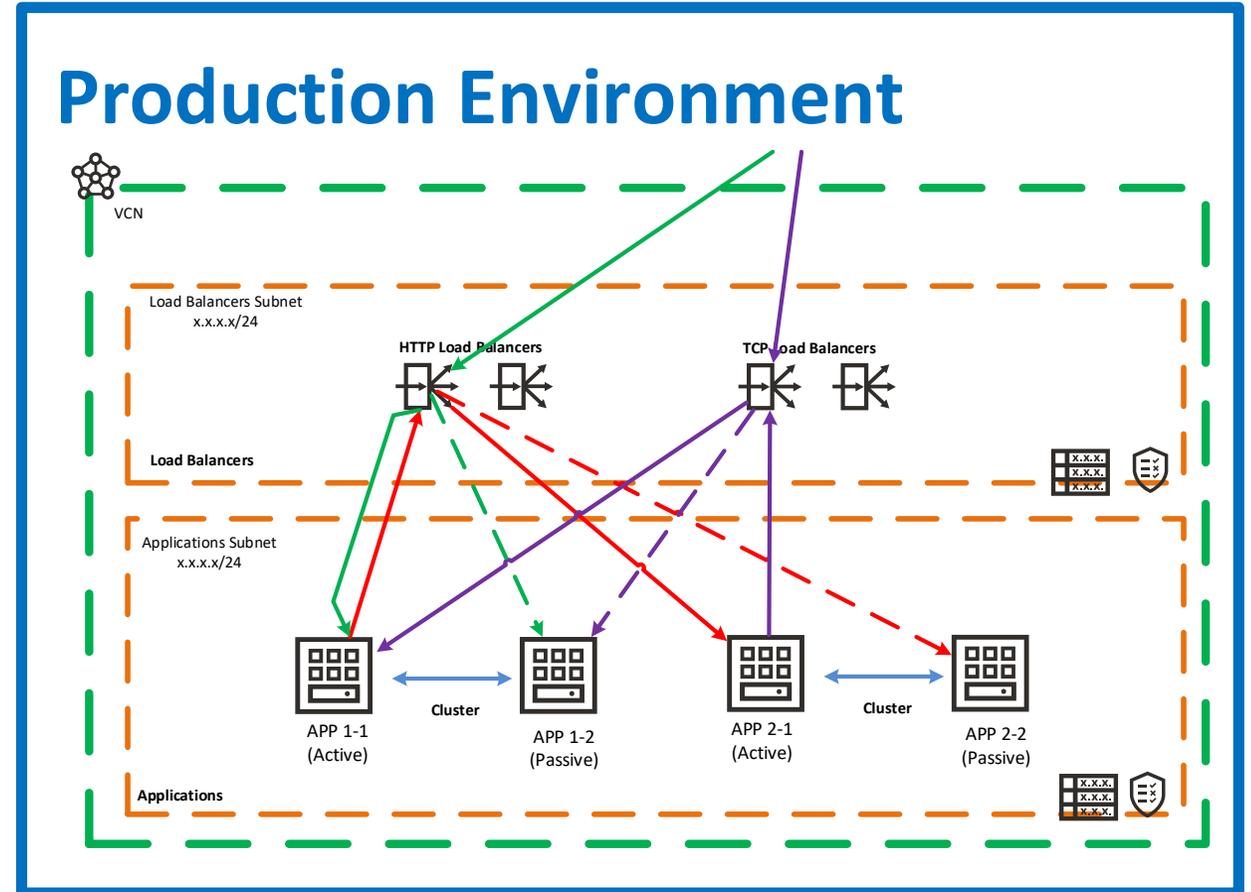
# Highly Available Design - Clustering

- Cluster nodes for each application are in different Fault Domains (in one AD).
- Active-Passive Mode protection
- Two VMs and two Operating Systems are up and running at the same time
- Fast application switchover ~ 1-5 minutes
- Minimizes patching downtime



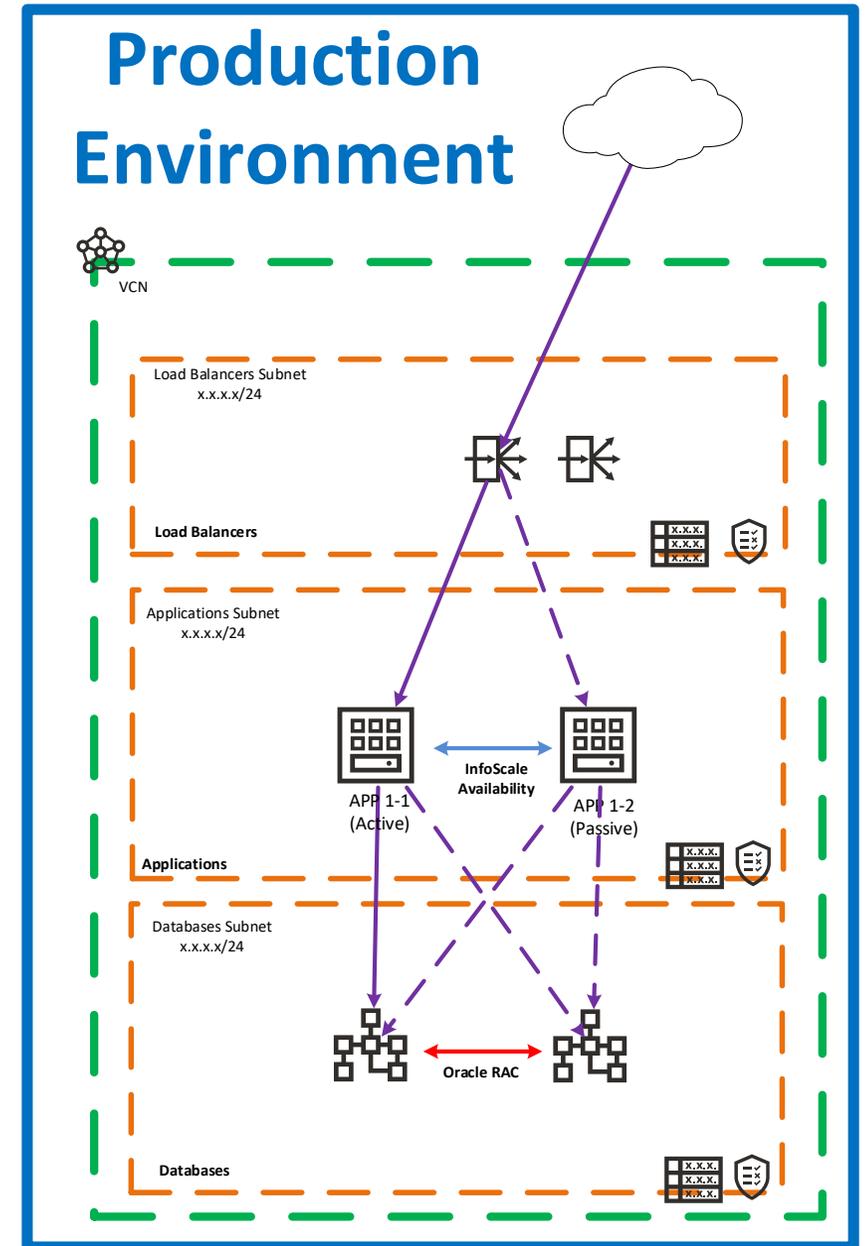
# HA Design – Load Balancers

- Application Single entry point
- HA support
- Fast connections switchover ~ 5 seconds
- OCI service



# ➤ HA Design – Databases RAC

- Active-Active Mode protection
- Rolling Patch Installation minimizes downtime
- Fast application switchover ~ 11 seconds
- OCI Virtual DB service



# Migration Project



## ➤ **Step 1. Analyzis**



• Proof of Concept



• Performance Tests



• TCO estimation

## ➤ Step 2. Design

- OCI Architecture Design

- Source infrastructure changes design

- Migration process design

## ➤ Step 3. Testing



• Test migration



• Regression tests



• Problems resolving

## ➤ **Step 4. Migration**



• Downtime planning



• Migration



• Monitoring

# ➤ Summary

Duration: 1 year

Downtime: < 1 hour

Tools: Oracle Golden Gate

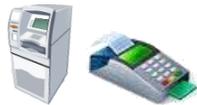
Numbers:

Merchants



> 30 000

Terminals



> 44 000

Cards



> 520 000

Transactions  
per Month



> 40 000 000

# ➤ Oracle Cloud Benefits



## ➤ Summary

Pay as you grow / Resources on demand

Automation: Terraform, ansible

IaaS (Infrastructure as a Service)

Down time decreased to **1,75 hours/year** (SLA 99,98)

Decreased Administrative efforts ~ 75%

# ➤ Next Steps

## Onboard new customers to the cloud



# THANK YOU

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