

This is  BoatyardX



We partner with clients to  
**design, build, launch** and  
**grow** exceptional  
products leveraging  
leading edge cloud tech.

Shipyard

We are part of  
Shipyard Technology Ventures

GLOBAL SOLUTIONS  
TEAM

vyze

n.AVI  
DIGITAL

mastercard

ISM  
INSTITUTE FOR SUPPLY MANAGEMENT

DEFAULT  
REVEAL

CULTURE  
TECH

AUTUMN

REALTIME  
IT Recruitment Experts

AUTOPORT

VINTRO

CHACHING

Trimble

NEXALA

# Our service offerings

- **Product architecting / planning**
- **Full-stack development capabilities**
- **UI/UX Design**
- **Reference Cloud Architecture deployment**
- **Data Engineering / Data Science**
- **DevOps**
- **Lifecycle management**



# Global reach Joint purpose

Our version of a great workplace is a team in pursuit of ambitious common goals. In this team, collaboration and trust work well together because our team are exceptionally skilled at what they do and work well with others.

**Success is about being effective**, not just working hard. Our model works best for people who are delivery oriented and who highly value consistent excellence in their colleagues.



# Our Leadership Team



**Brian Barter**  
BoatyardX MD



**Suzanne McGloughlin**  
Director of Customer  
and Delivery



**Robert Drysdale**  
Director of  
Technology and Data



**John O'Shea**  
Head of Business  
Development



**Kathryn Desmond**  
Customer  
Engagement



**Sorin Bob**  
General Manager,  
Romania



**Jesus Zambrano**  
General Manager,  
Columbia



**Karolina Coates**  
Head of Design



**Paul Quinn**  
Head of Technology  
Services

“We **design** and **develop** new products for new ventures with technology at their core and work with established organisations to redevelop and **evolve applications** into the cloud.”



### **The Factory – our cloud native reference architecture**

BoatyardX Reference Architecture provides our clients with leading edge cloud tooling to quickly deliver secure and scalable products.



### **Great People - Integrated Teams**

Our People are the foundation of everything. We are constantly recruiting and developing top talent and when we work with clients, we go the extra mile to really understand their objectives and ensure our team know the end goal not just the task.



### **Cloud Specialists**

We are cloud native, cloud provider agnostic specialists and we are developing our people, tooling and assets to support clients building on and migrating to the cloud.



### **Data, Analytics and Automation**

We are deeply focused on using data and analytics to automate software development and in applying data and analytics to a client's business problems.

# Engagement Model

Reference Architecture

Reference Customers



# Integrated Team Approach

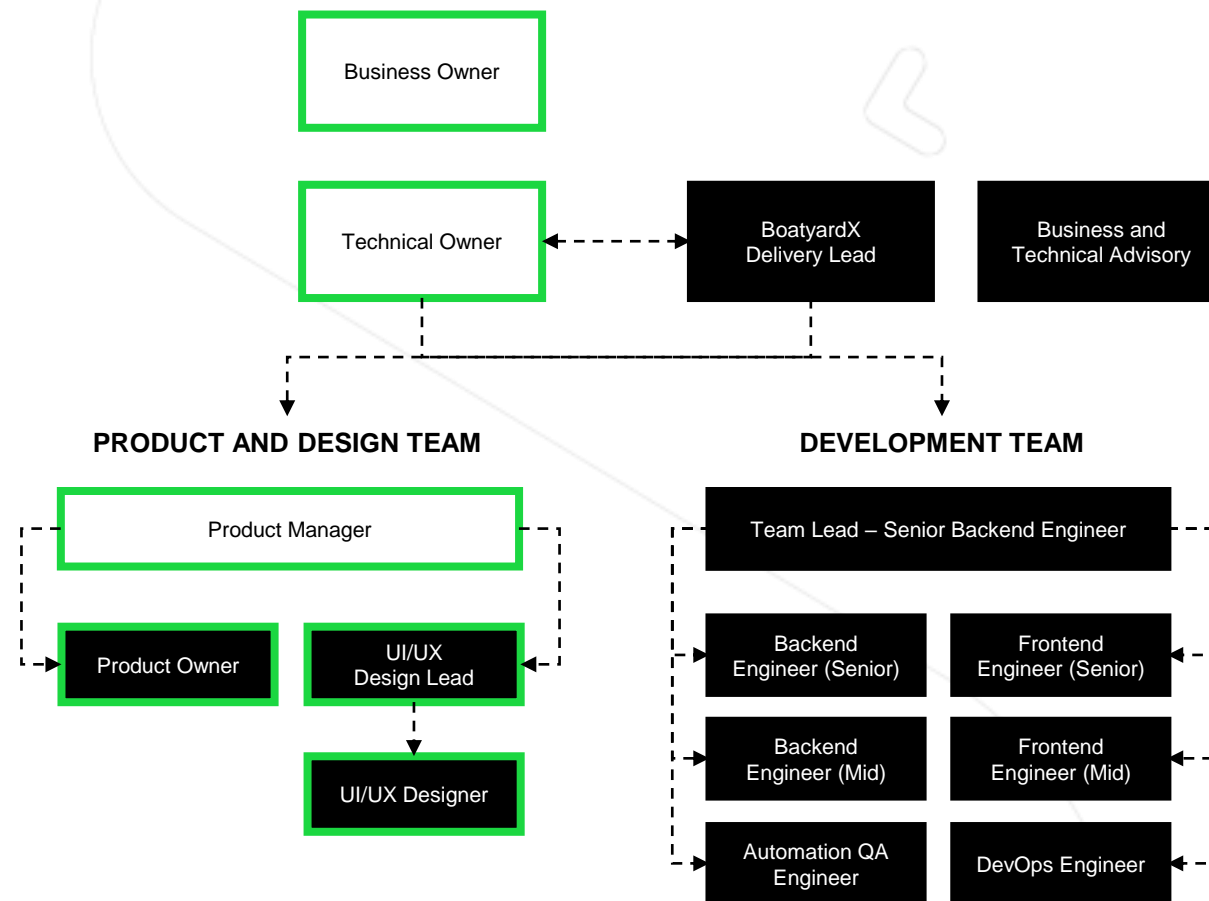
Creating teams combining product, design and technical expertise to deliver at pace

Our approach is to provide all or part of the team in a fully integrated agile setup which matures over time, aligned with our clients' changing needs. Roles and responsibilities are clear from the outset.

Our team are experienced in working across geographies and timelines and we use frequent daily meetings to maintain maximum cohesion and collaboration in the team

At no additional cost to our clients, we provide:

- Business and Technology strategy support through our Business and Technical Advisory team
- Delivery lead support



Client Role



Client or BoatyardX Role



BoatyardX Role



# Where do we excel?

We can take a new concept or an existing product through a full lifecycle

Discovery  
and Design

Architecture  
and Planning

Agile  
Delivery

Support  
and Run

1

2

3

4

... and accelerate all stages

# Managing Development

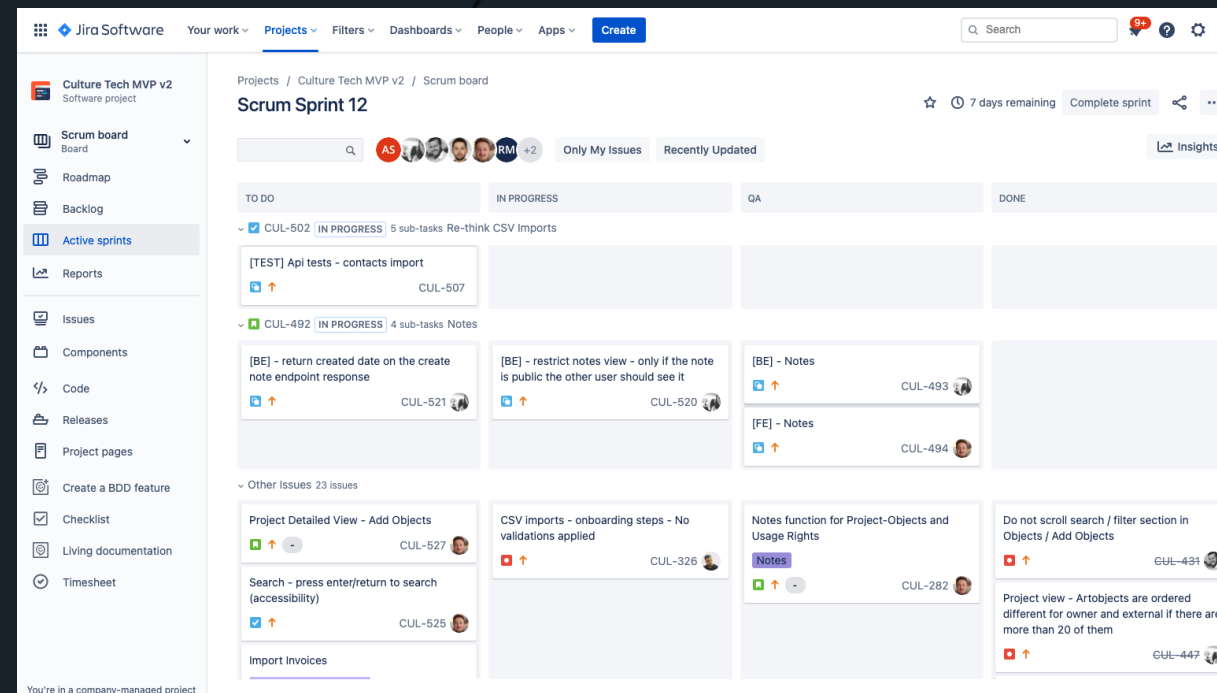
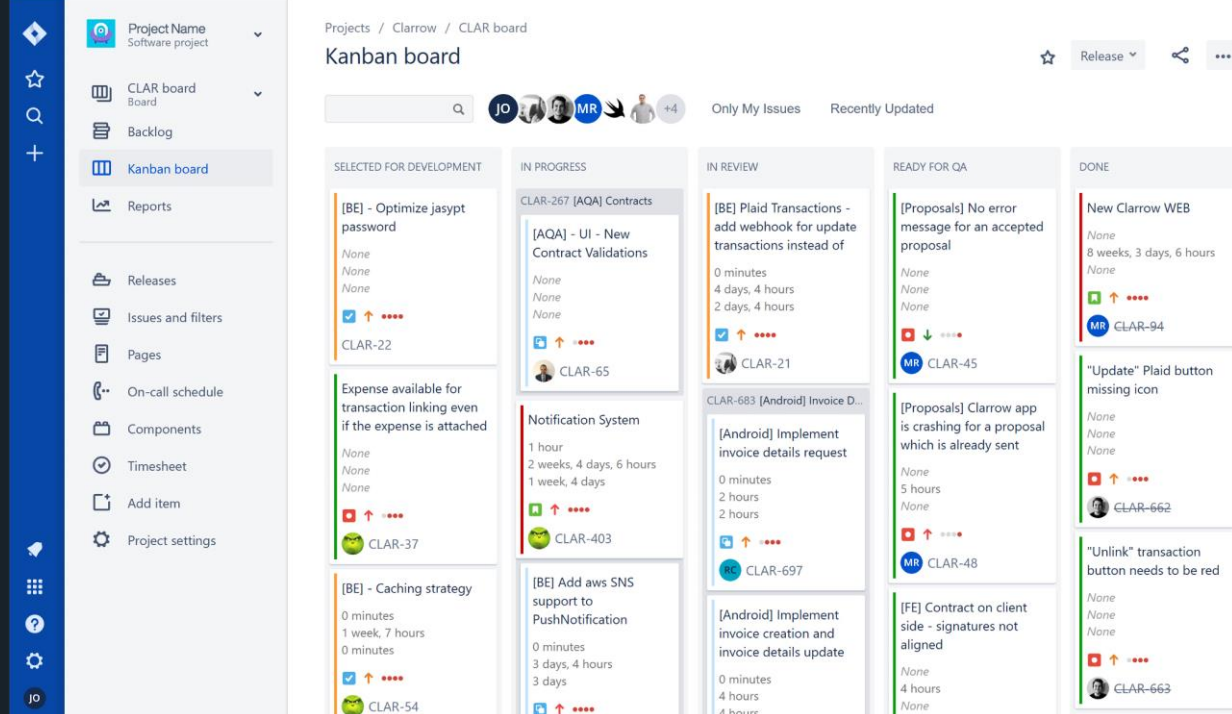
Example of Kanban and Agile boards to organise and prioritise development tasks

## Key routines

Daily stand-ups  
Weekly reviews  
Frequent releases

## Benefits

BoatyardX manages the team  
Quality of team assured  
Ongoing investment in training and education

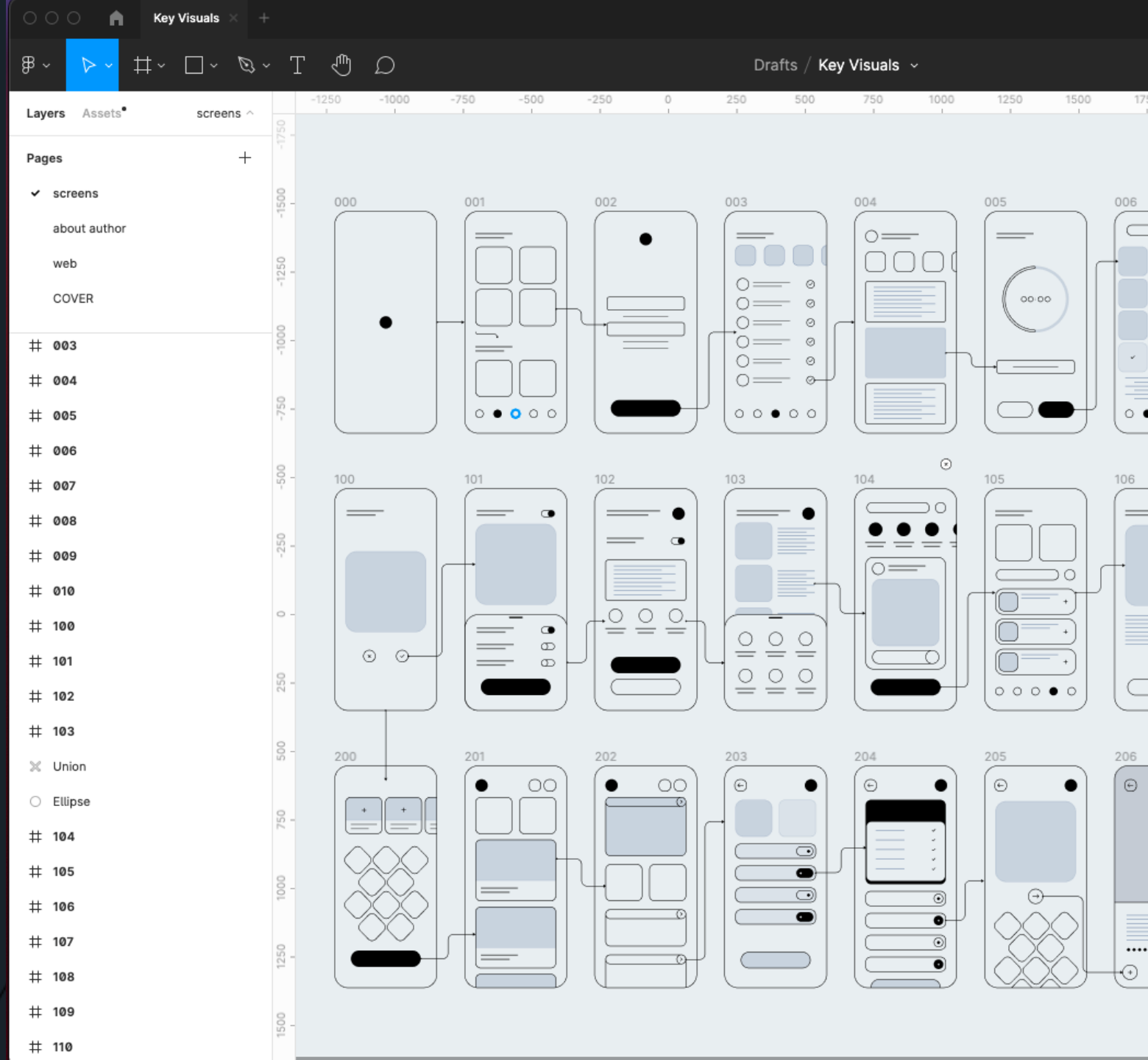


# Examples of key visuals

Low-fidelity representation of key screens to gather feedback and firm up requirements

## Note:

- Used to gather feedback on functionality
- No-code
- Not interactive
- Simple design – no branding



# Engagement Model

# Reference Architecture

## Reference Customers

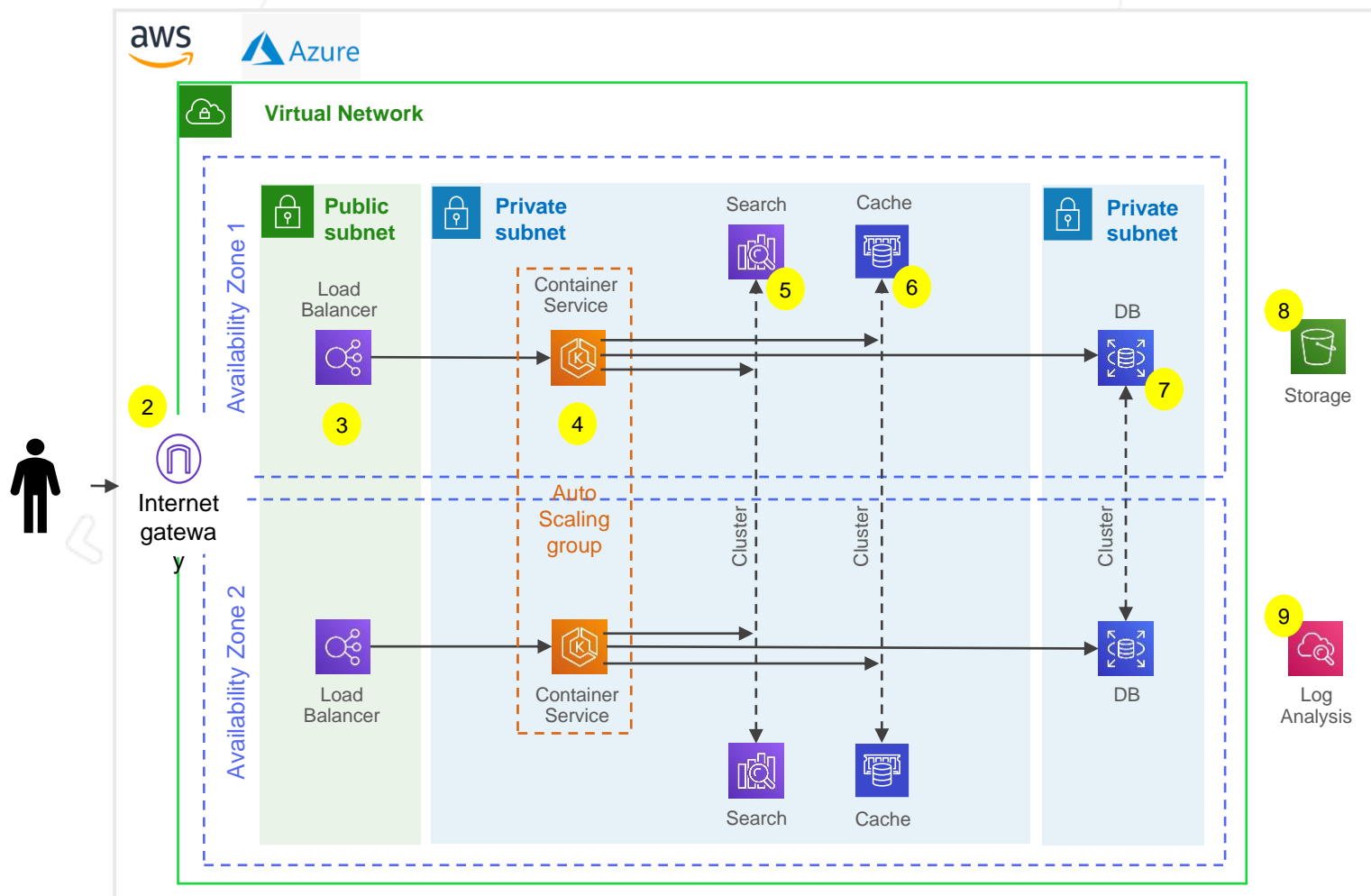


# BoatyardX Reference Architecture

Our view of best-of-breed Cloud tooling to quickly deliver secure and scalable products

- Our focus at BoatyardX is to work in **partnership with our clients to develop new greenfield products** and support their transition to the cloud.
- Our Reference Architecture is **cloud-native, cloud-agnostic, open source and secure**, and is underpinned by a set of technology principles.
- Our Reference Architecture **is tried and tested** and has been developed and further refined through the delivery of successful client engagements and also the implementation of our own internal technology landscape. We can tailor our Reference Architecture and principles to align to our clients' own technology landscape and preferences.
- **Our experience** is that a Reference Architecture is fundamental to the successful and rapid delivery of new products and services and we would like to share our experience and learnings with you as part of our service offering.

# Our Reference Architecture



## Key Components

- 1 Dedicated Virtual Network offers complete network isolation between environments with a dedicated Virtual Network for each environment (production, test environments & development).
- 2 All internet traffic is routed through a single internet gateway with only HTTP & HTTPS exposed and deployed by default across two Availability Zones within a single region providing clustering and failover capabilities equivalent to two data centers.
- 3 External internet traffic is terminated at load balancers in a public subnet and routed to the private subnet.
- 4 All services are deployed to a managed Kubernetes Cluster configured with autoscaling. Kubernetes hosts all the microservices.
- 5 Clustered Search platform used for searching across data stores
- 6 To enhance performance a Redis Cache is used for storing and quick retrieval of data for the services
- 7 All transactional data is stored and hosted on a managed database cluster.
- 8 A storage service is used to store unstructured, blob data.
- 9 Log Analysis for providing operational support and error diagnosis.

Our reference model includes a separate tooling VPC which hosts a preconfigured suite of opensource DevOps tooling including Jenkins, Gitlab, Sonarqube and Automated Testing.

# Architecture Principles

A set of guidelines that reflect the values, principles and ambition of the organisation

These principles underpin our reference architecture and guide how we implement it. Each principle is further de-composed, and a detailed example of our Security Controls is available on the next slide.

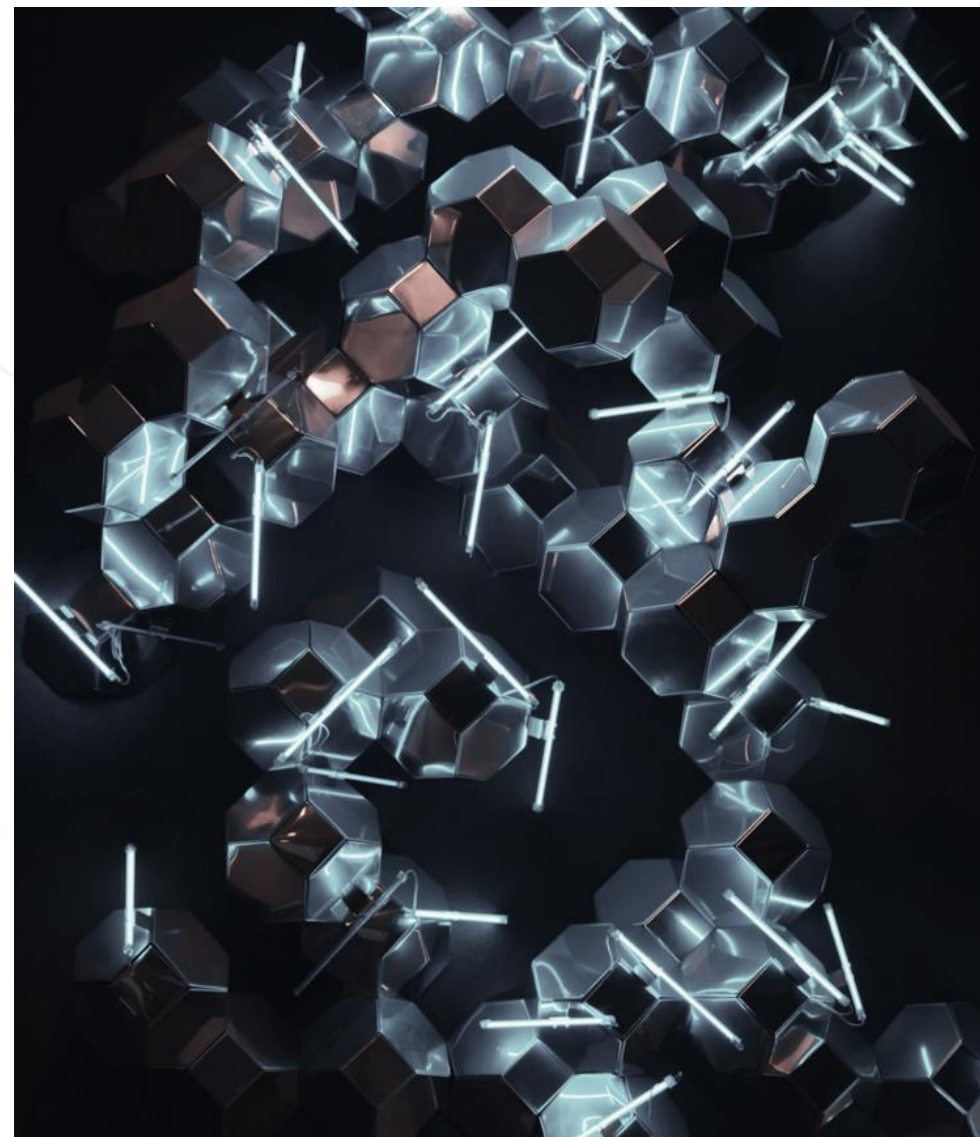
## Architecture Principles

- **Secure** – we build security into the design from the ground up rather than retrofit afterwards
- **Cloud Native** – we believe cloud is the future and in order to leverage the best of Cloud Capabilities we build our systems to be cloud native
- **Cloud Agnostic** - we believe that a cloud provider should be a utility and that the technology coupling should be minimised
- **Open Source** – we believe the use of open source should be the default where available to minimise costs and vendor lock in
- **Reusable through Smart Services** – we aspire to use smart services that are reusable across applications to accelerate delivery and reduce complexity
- **Continuous Delivery** - Our development processes are optimised to reduce the cost of change enabling a consistent and high frequency of deployment
- **Automate Everything** – we believe investing in automation in order to reduce the future costs associated with support and enhancements
- **Scalable** – our approach to scalability is to monitor and balance the service requirements with underlying infrastructure
- **Resilient & Self-Healing** – we build resilience into our designs through the use of metrics which trigger automated restoration functions

# Security Controls

## Enterprise Security Controls

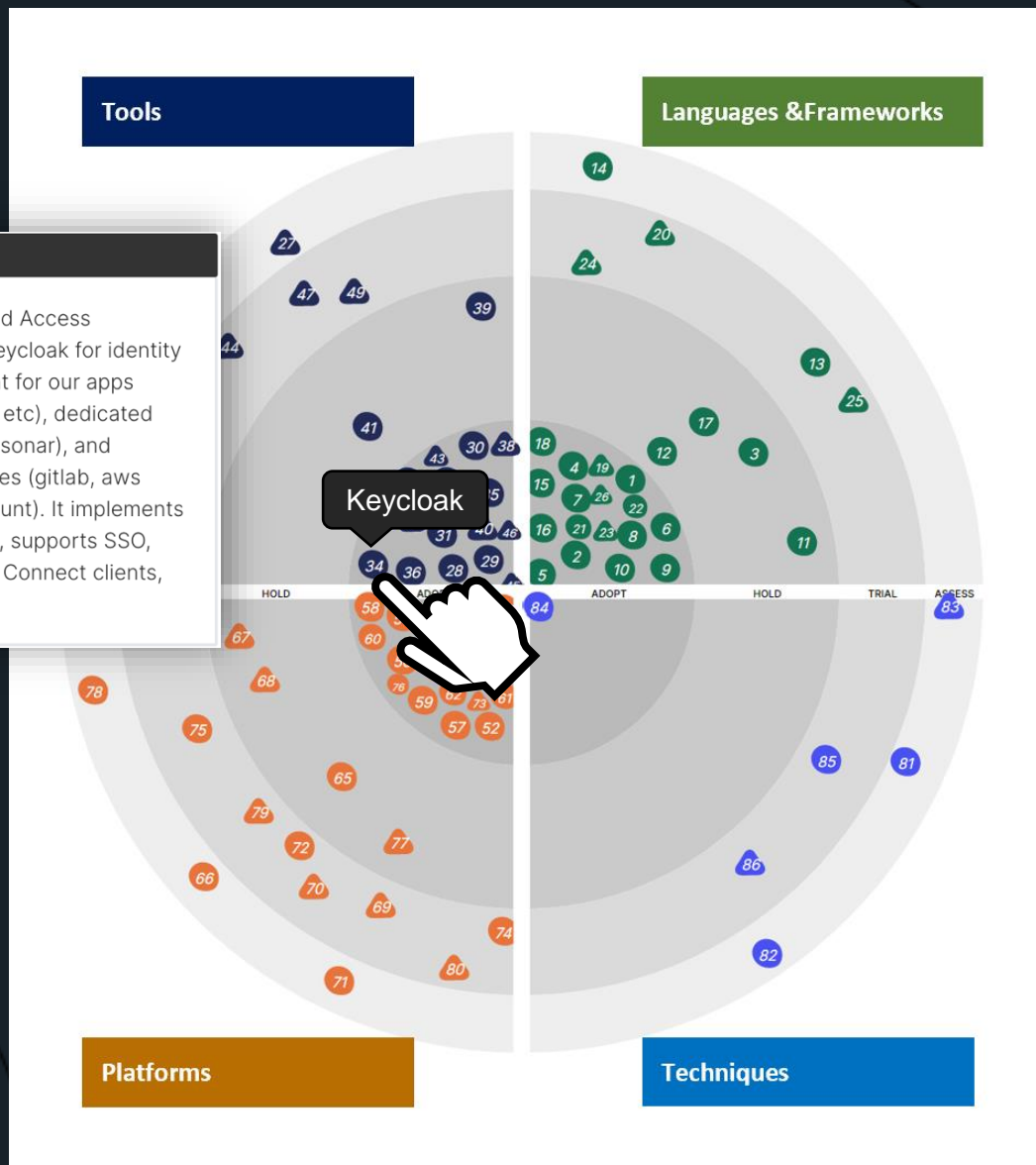
- All network connections encrypted using HTTPS 3.0
- Follow OWASP guidelines
- All software is deployed to private networks within a Virtual Network
- All databases and disks are encrypted at rest
- All containers go through security verification scanning
- Source Code scanned during CI process using SonarQube - SAST
- Scan dependencies using OWASP dependency check - SCA
- Annual security audit with – Penetration Testing
- All endpoints secured by default and require authenticated user for access
- CORS and CSRF protections build into services





### 34. Keycloak

Open Source Identity and Access Management. We use Keycloak for identity and access management for our apps (sylon platform, clarrow, etc), dedicated company tools (jenkins, sonar), and shipyard shared resources (gitlab, aws federation on main account). It implements OAuth, OpenID Connect, supports SSO, MFA, SAML and OpenID Connect clients, etc.



# Radar

## Technology Strategy

The Shipyard Technology Radar is our tool for managing technology strategy. Every quarter we review all the technologies we use across the Shipyard companies and evaluate their usage against a simple criteria of

- **Access**
- **Trial**
- **Adopt**
- **Hold**

The radar gives a framework for decentralised management providing ground up insights.

Engagement Model  
Reference Architecture

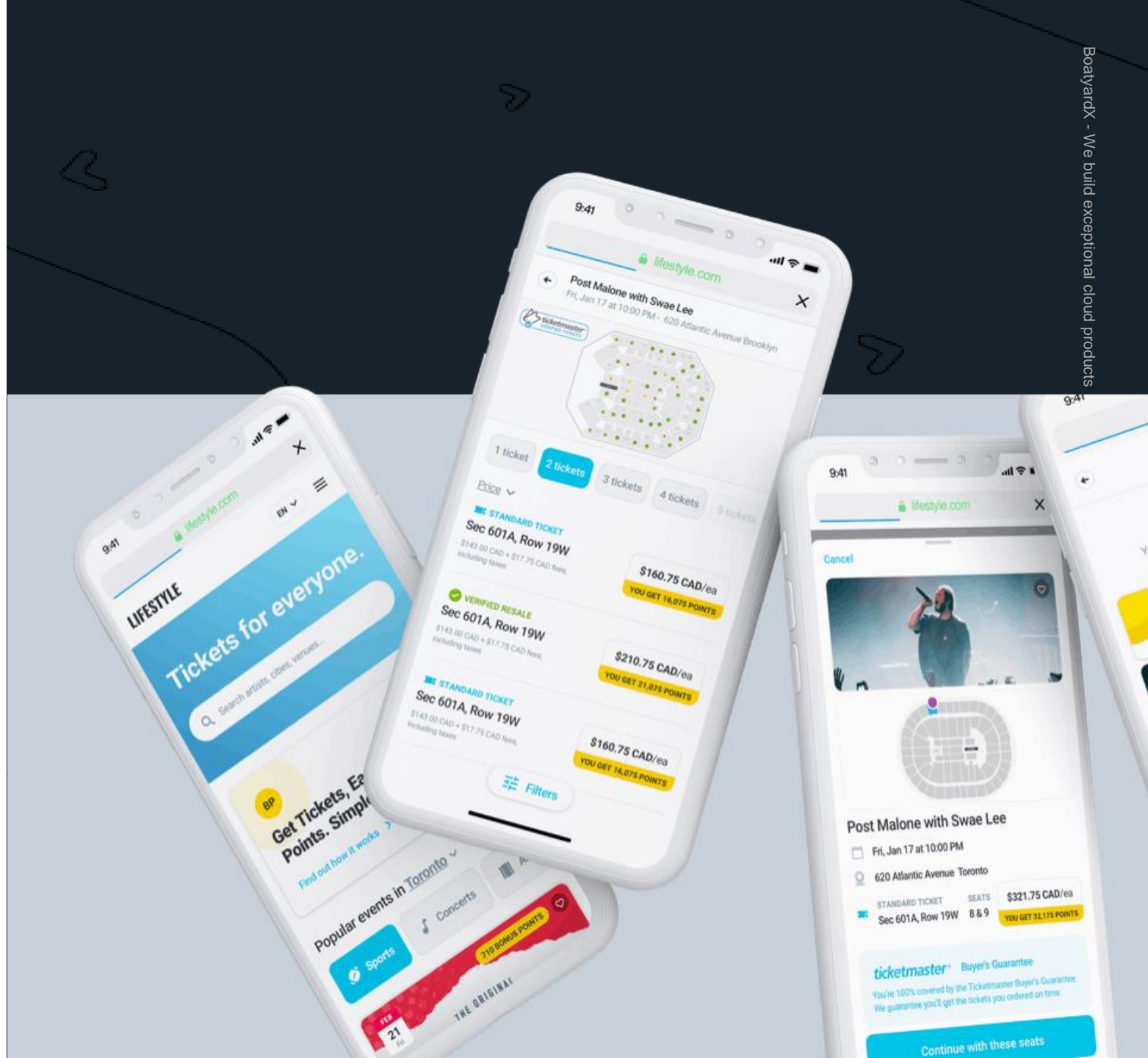
# Reference Customers

# GST

## The future of loyalty

A start-up looking to integrate Ticketmaster's inventory system with major brands' loyalty points, GST chose BoatyardX to design and develop the solution.

The project has involved extensive UI and UX design, integration with complex systems and a scalable architecture.







# Vyze

## Next-gen in-store financing solutions

Vyze allows merchants to provide convenient financing to customers with varying credit ratings by connecting to multiple lenders.

Recently acquired by Mastercard, Vyze wanted to accelerate integrations using a Service Provider Interface (SPI) to instruct new merchants and lenders on conforming.

BoatyardX undertook the design and development of the VYZE SPI, which has rolled out to a suite of partners.



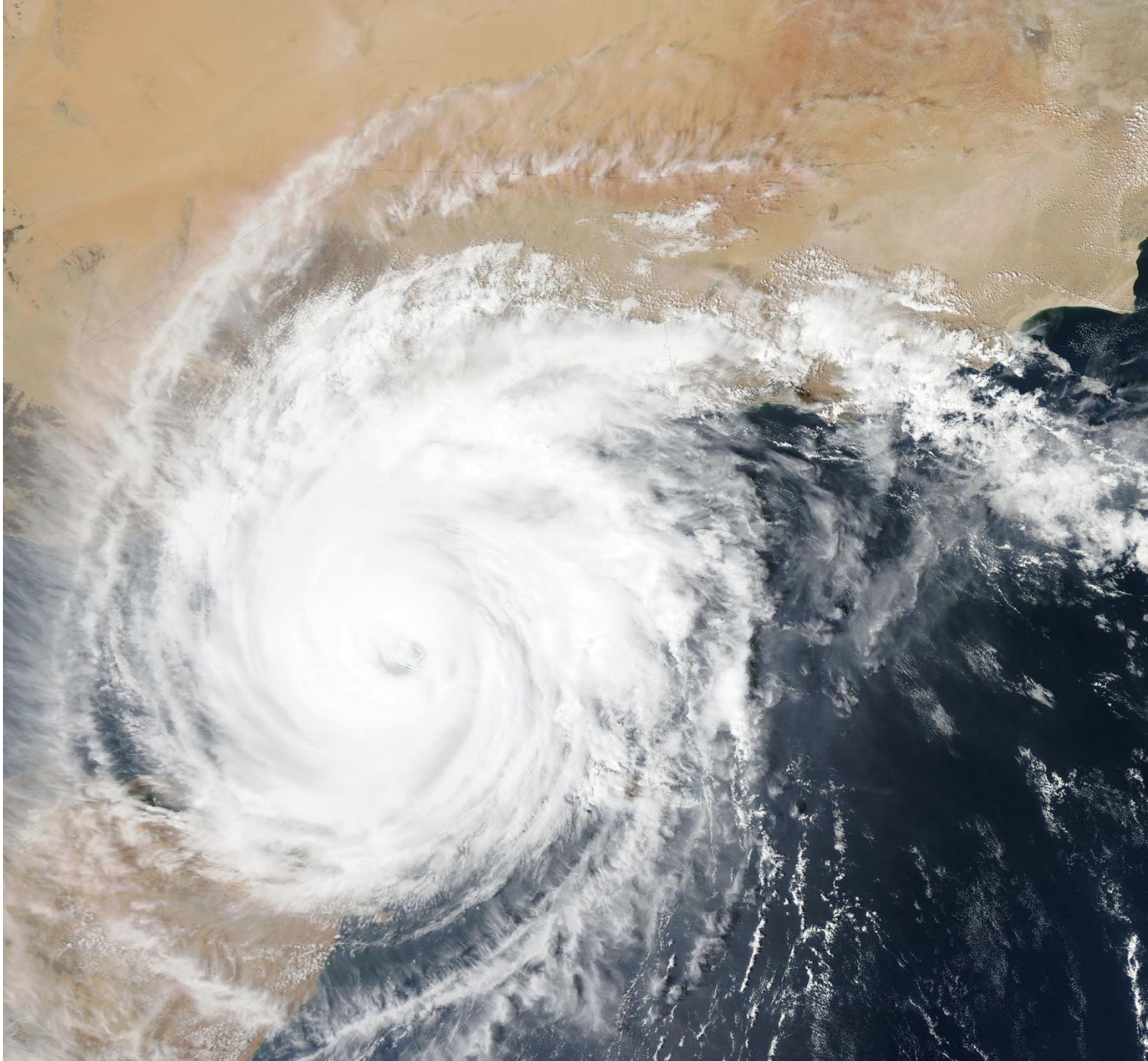
# Exante

Peace of mind delivered

A company looking to launch the concept of Predictive Parametric Insurance, which pays a lump sum to a policy holder in anticipation of a loss, Exante chose BoatyardX to design and develop the solution.

Combining multiple data sources to predict storms, with a simple onboarding and payment solution for thousands of users, Exante is now in-test in Florida.

[www.exante.io](http://www.exante.io)





# ISM

Institute of Supply Management  
Leading Change

A global organisation, based in Arizona, dedicated to improving practices in supply chain management and compiling the monthly market-moving PMI report, ISM has chosen BoatyardX to develop a new learning product and to overhaul its technology infrastructure.

[www.ismworld.org](http://www.ismworld.org)



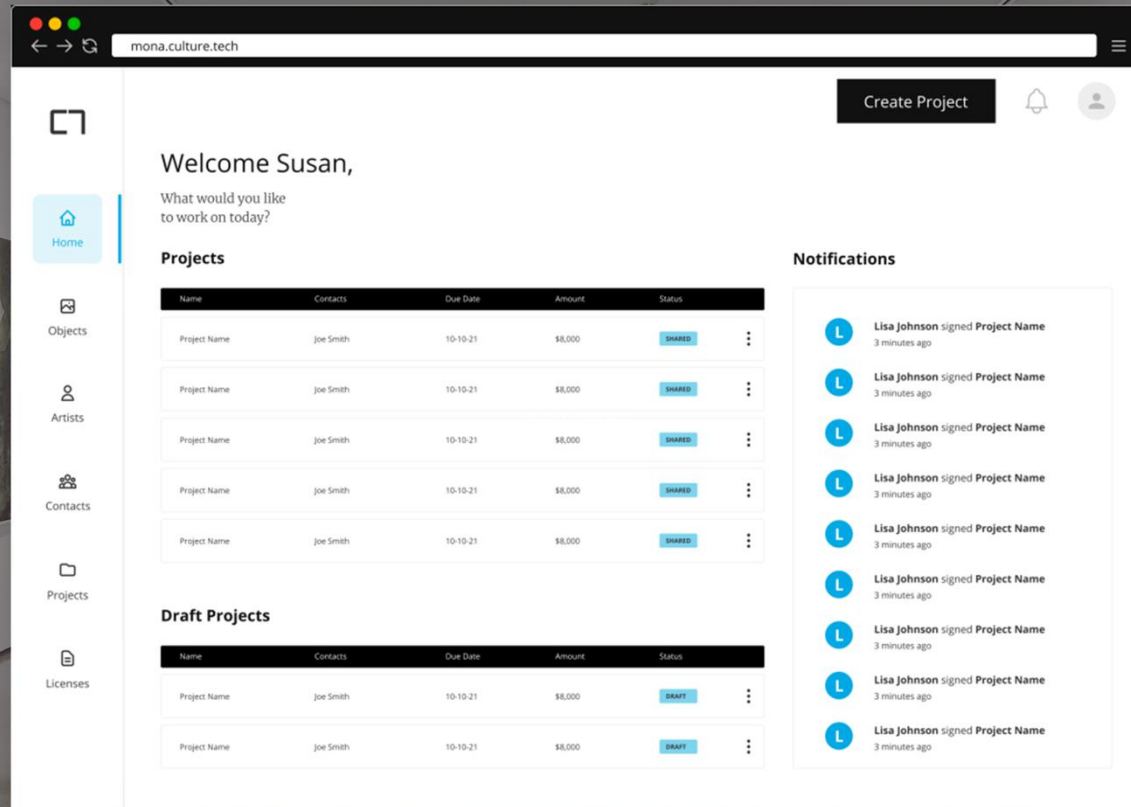
# CultureTech

## Opening up Art

The process of obtaining art copyright for use in books, catalogues, websites and promotional materials is a repetitive labour-intensive exercise which discourages licencing.

CultureTech engaged BoatyardX to bring a product concept through design and into production, vastly simplifying the licencing of artwork, opening up museums' art for use in new media and promotional materials.

[www.culture.tech](http://www.culture.tech)





# Trimble Nexala

Intelligent rail asset management solutions.

Trimble Nexala provides a range of on-board and wayside condition monitoring solutions, designed to provide efficiencies in train operation and management.

BoatyardX is working with Nexala to migrate the solution to a multi-tenant cloud environment to enable a ramp—up in customer numbers and fleet sizes.

Actively deploying production environment, where scale will be ramped up over time, with an expected capacity of 10,000 units and 10 PB of data per day.





# Why BoatyardX?

## Benefits of partnership with BoatyardX:

- ✓ Guarantee of expertise
- ✓ Acceleration of product build
- ✓ Ability to scale up and down teams on demand
- ✓ Cost-benefits

## Product-building expertise enabled by:



Deep cloud, software and business experience



Combination of Dublin-based solution architecting and PM with near-shore software development skills



Reference architecture to accelerate deployment and guarantee security and scalability



# Thank you

[www.boatyardx.com](https://www.boatyardx.com)

letsgettowork@boatyardx.com