



Application Modernization with Microservices Architecture on Red Hat Openshift

Tiago Fonseca Sales Director Syone Celso Santos Solutions Architect Syone

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Introduction





Introduction

Who is Brandbassador?

Brandbassador is a social platform for people who wish to engage with great brands, and while doing so earn cash, get free products and join exclusive competitions and events. It also allows companies to develop a good relationship with the target market, having Brandbassadors represent a brand in a positive light and by doing so helping to increase brand awareness and sales.



BRANDBASSADOR





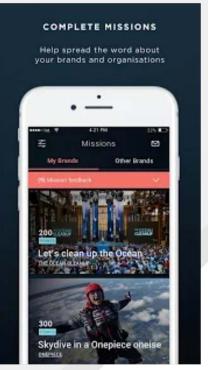
Introduction

The Scope?

One global project which delivered a Mobile 1st application and a back-office application to assist in management, administration, payments and auditing tasks.

The platform allowed Brandbassador.com to streamline Brands onboarding and management of campaigns on social networks, provide one mobile user experience to Brand Ambassadors, and capacity to create and manage advertising campaigns based on BB gamification whilst monitoring Brand Ambassador's performance and revenue.









Introduction



PACE OF BUSINESS

The ability to adapt is as important as the ability to plan



SOFTWARE AS A COMPETITIVE EDGE

Companies must have core competency in software development to compete



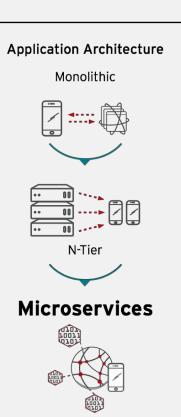
MODERN CUSTOMER EXPERIENCE

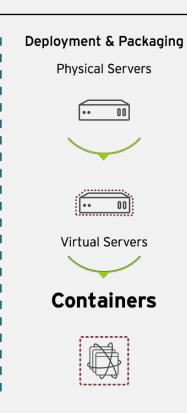
Customers expect your business to be as advanced & efficient as the latest consumer app

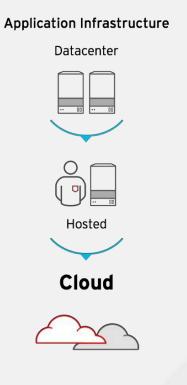


Introduction

Development Process Waterfall Agile **DevOps**









02. The Problem

Existing Platform





02. The Problem

Existing Platform











10K users

monolith

server

database

geo location





02. The Problem

Relational Databases

Traditional Challenges for RDBMS's







Inability to scale



Performance challenges



Cost







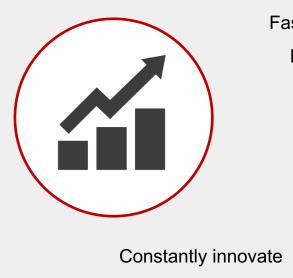
How to enable growth?

Always-On

Millions of users

Hundreds of Brands

Accessible <u>anywhere</u>, on <u>any device</u>, at <u>any time!</u>



Adapt quickly

Fast Development Cycles

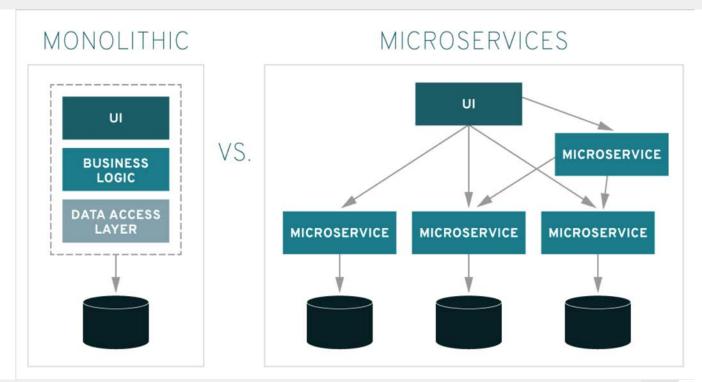
Fast Release Cycles







Monoliths vs Microservices



Source: https://www.redhat.com/en/topics/microservices/what-are-microservices





04. Challenge NoSQL



Scale as needed Able to handle any demand (operations, queries, data)



Responsive Consistent High-Performance



Adaptable Flexible schema



Secure
Device to cloud,
auditable, pluggable



Global
Data locality,
Geo-distributed,
Multi-Data Center



Always on
Fault Tolerant. Able to
continue operations
under failure conditions



Mobile experience Offline, sync'd, secure, low latency, personalized



Intelligent
Full Text Search, Real
Time Analytics, Big
Data enabled







Architecture

- Low Code Front End
- Microservices Architecture
- NoSQL Database
- Container Based
- Open source





Low Code Front End

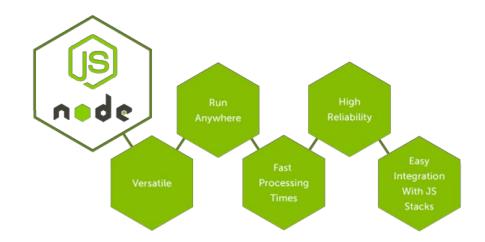
- One code for all
- Built on Angular
- Cordova plugins
- Big and helpful community
- Open source





Microservices

- Extremely fast
- I/O is Asynchronous & Event-Driven
- Single threaded
- Highly Scalable
- Open source





NoSQL Database

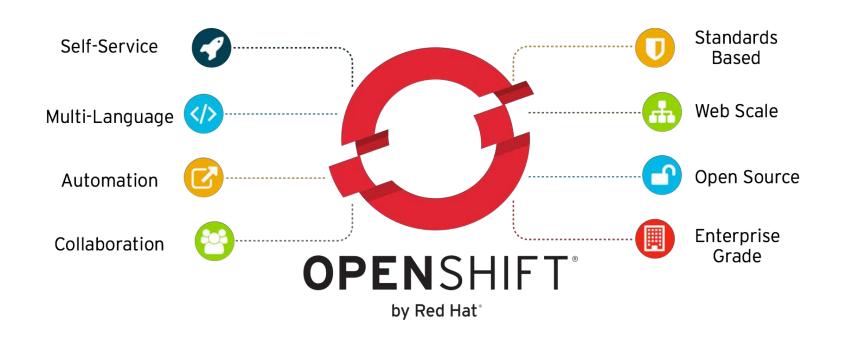
- Multi-language SDK
- Flexible data model
- Powerful query language
- Scalability
- Performance
- Simple administration
- High Availability
- Multiple Platforms and Devices





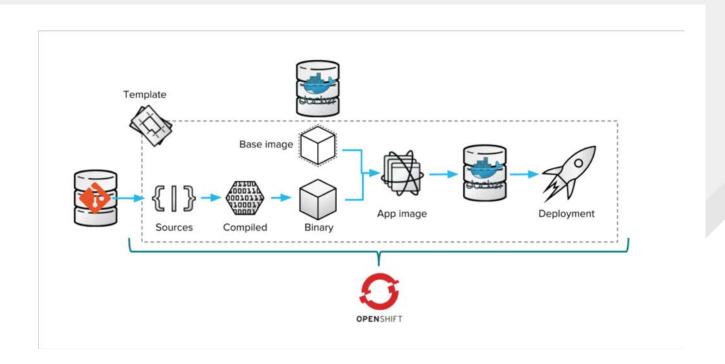


Container Orchestrator

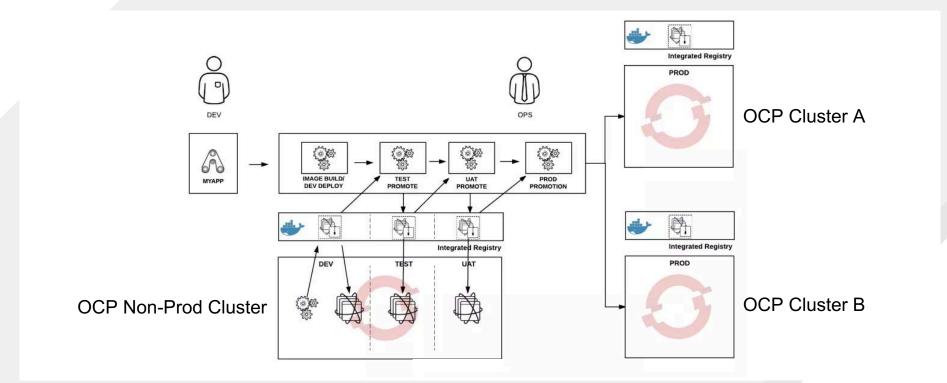














05. Benefits





O5. BenefitsDeploy More

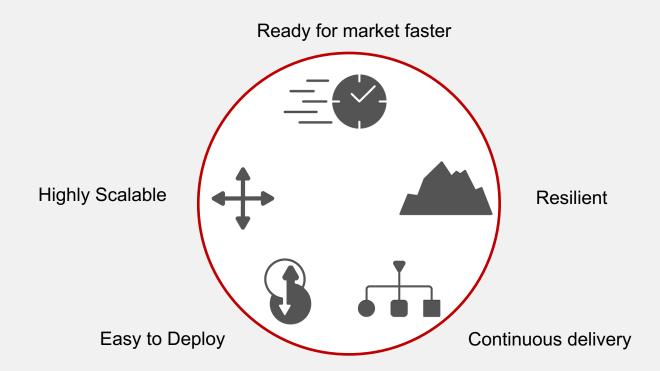
Measured In Terms Of I.T. Throughput & Stability
High-performing Organizations Deploy

200x

More Frequently Than Lower-performing Ones



04. Challenge Microservices





Containers

Portability: Build it once, run it anywhere!

Effective isolation and resource sharing



Applications:

start faster "Denser" Scalable

Consistency for developers

Cost savings on computing resources

Container environments have fewer configuration variables.







Muchas gracias

Tiago Fonseca Sales Director Syone Celso Santos Solutions Architect Syone