



A Year of Innovation

Cloud Foundry Lessons Learned

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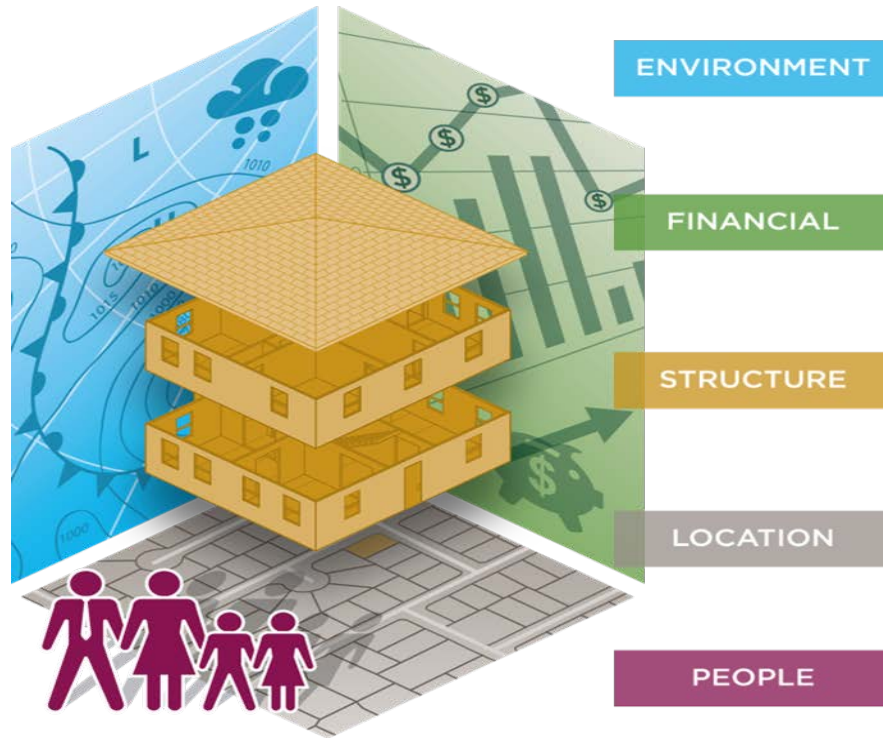
A large graphic of a hand in a suit sleeve holding a glowing cityscape at night. The city lights are reflected on the hand and the suit sleeve, creating a sense of depth and integration. The background is a light blue gradient.

Our Vision

Deliver unique property-level insights
that power the global real estate economy.

Differentiated by superior data, analytics and data-enabled solutions.

CoreLogic Vision



- Economic Housing Market Data
- Catastrophe Models
- Weather Forensics
- Construction Cost Trends
- Environmental Hazard Data

- Mortgage Financing and HELOCs
- Liens and encumbrances
- Home Equity Loans
- Auto Loans
- Valuation and Due Diligence

- Building Characteristics
- Reconstruction Costs
- Imagery and 3-D Wireframe
- Structural Risks
- Condition Information

- Parcel Boundary
- Locational Accuracy
- Fire Protection
- Location Intelligence

- Occupant Risks
- Contents Risks
- Property Maintenance
- Home Business Activities

The CoreLogic Landscape

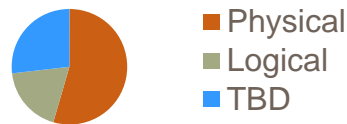
540+ Products and 5000+ applications, components, services, and tools identified across CoreLogic

Business Criticality	Users & Use Cases	Life Cycle Stage	Technology
80% of Applications are Mission Critical or Important	2M+ professional users Sub-second to multi-day transactions	48% of Applications in Maintain or in Maintain w/enhancements stage	63% of Applications utilize JAVA (42%) or .NET (21%)

330 - Applications



3681 - Components



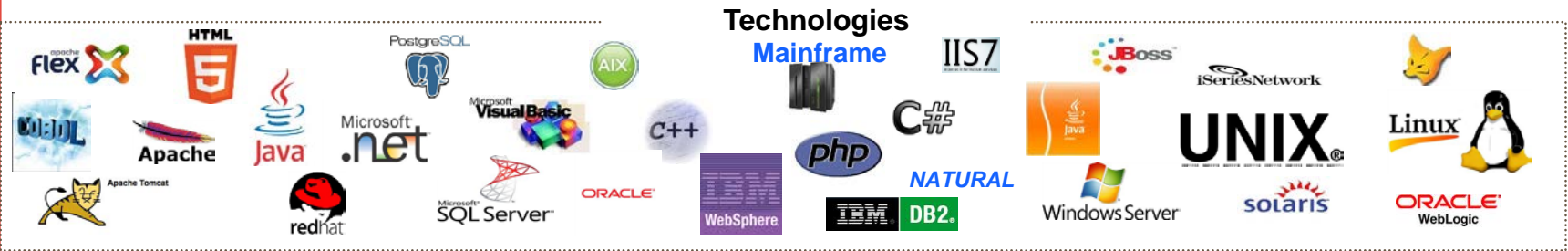
1009 - Data Stores



832 - Other

- 532 - Tools
- 300 - Externals

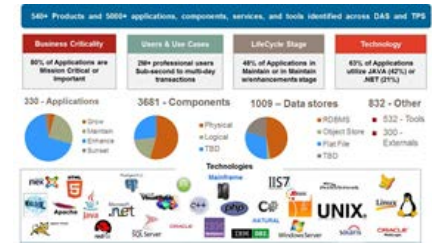
Technologies



Fundamentals

- Today’s technologies are radically different from the past ...
 - Mobility, Voice & Social Networks – Engagement norm
 - “*Platform as a Service*” – Operating System norm
 - “*Infrastructure as a Service*” – Compute & Processing norm
 - “*Data as a Service*” – emerging ways of handling “big data”
 - “*Development as a Service*” – Application build and deploy

- Real opportunity to change what we do & how we do it!

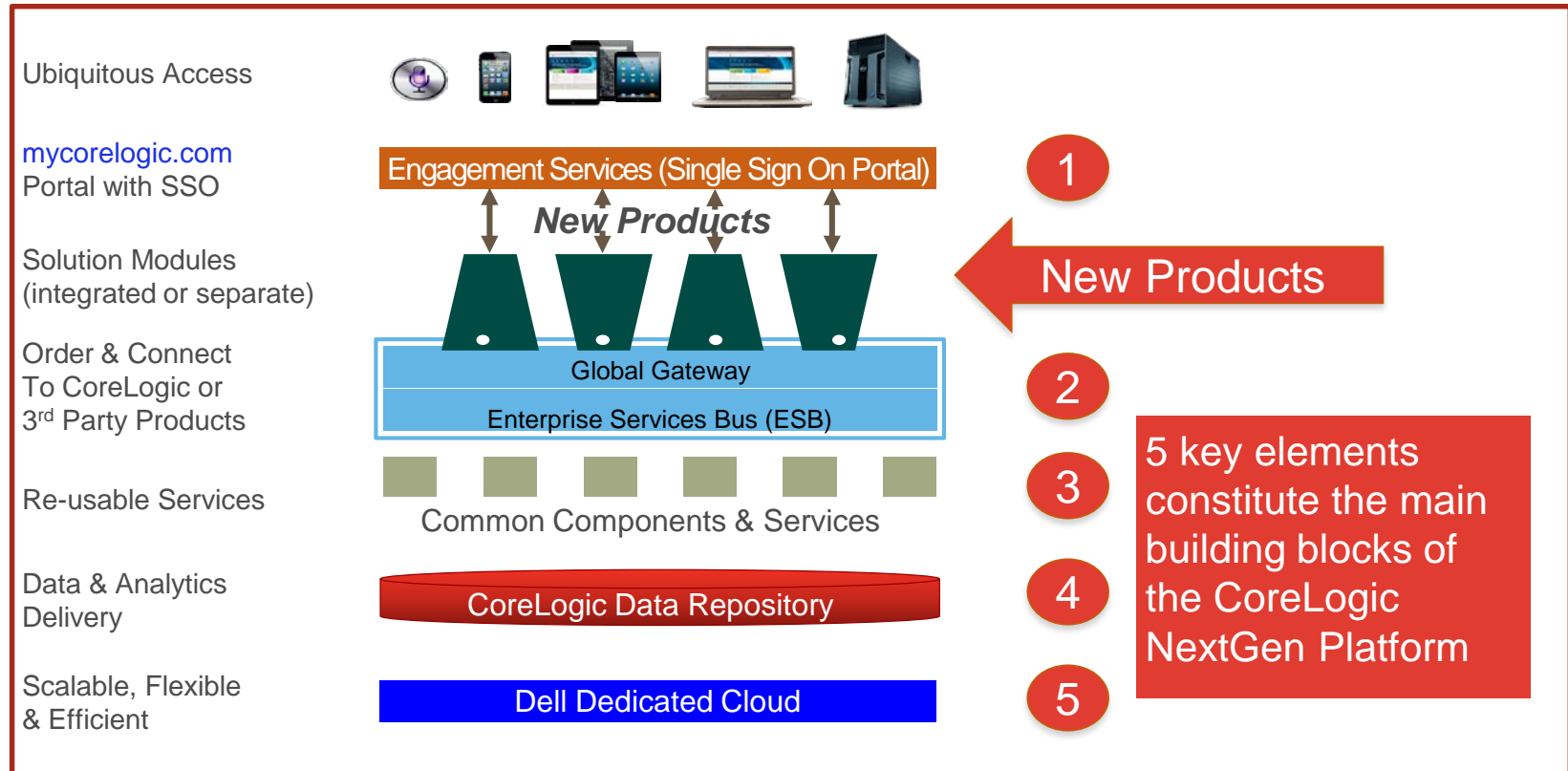


CoreLogic Platform Design Principles

1. Developers focused on developing products, not managing tech stacks
2. Standard UI frameworks & style guidelines to speed up development
3. Components separated from applications allowing independent upgrading
4. Resource flexibility enabled by standard technologies
5. Reusable services with built-in high availability, DR & elastic scalability
6. Deploy on multiple Infrastructure as a Service (IaaS) environments including public and private clouds

CoreLogic Platform

NextGen Technology Platform To Support “Everything as a Service”



Engaging Technology Experts

Working sessions conducted with best-in-class technology leaders

Oracle	Google	SalesForce	Amazon	Pivotal	Red Hat
Oracle Suite	App Engine	Force.com	AWS	Cloud Foundry	OpenShift

Conducted mini-POCs to assess capabilities

Evaluation Criteria: Results of mini-POC plus following considerations:

- Development as a Service capability
- Data as a Service capabilities
- Online transaction processing management
- Scalability & Resiliency
- Architectural Agility
- SDLC integration
- Scope of build out required
- Market adoption
- Support/operations
- Engagement model
- Vendor lock-in concerns
- Costs

Pivotal Cloud Foundry

Provides 'Open' PaaS + Big Data Suite + Unique Development Methodology

Pivotal™



- Open Source Standard
- Hybrid IaaS Support
- Technically Sound
- High Industry Adoption



Pivotal™

BIG
DATA
SUITE

- State-of-Art Data & Analytics Tools
- Strong Data Science Team

Pivotal™

LABS

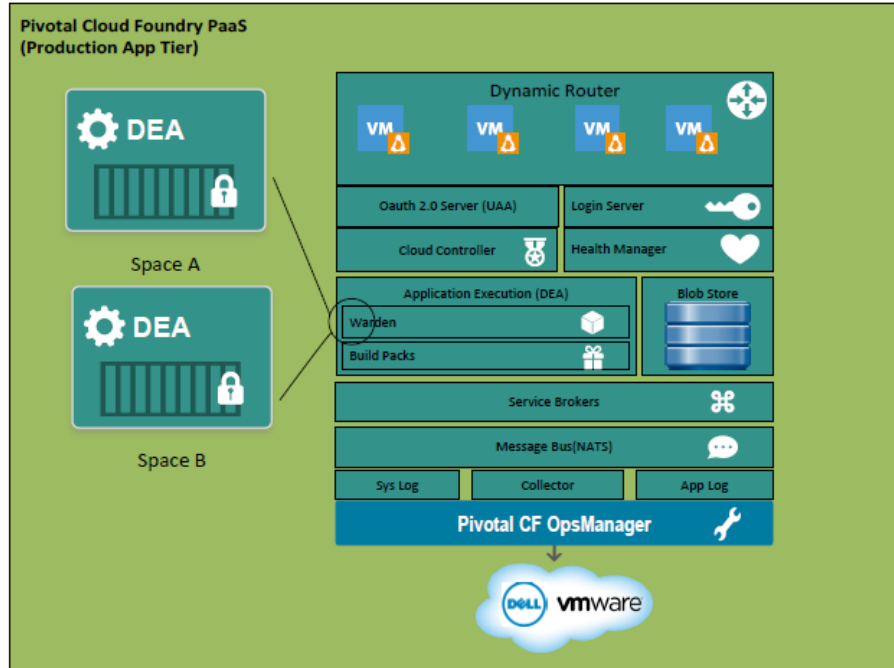
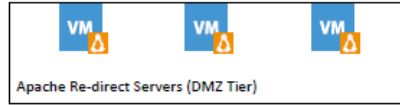


- Extreme Agile Development
- Pair Programming
- Test Driven Development
- Experienced

Cloud Foundry Implementations

- 2014 Products Developed & Deployed on Cloud Foundry
 - CondoSafe
 - Leasing Manager
 - LoanSafe Connect

- 2015 In Development on Cloud Foundry
 - 2 New Products
 - MyCoreLogic Portal
 - CoreLogic Global Gateway



Cloud Foundry Architecture Overview

Cloud Foundry Lessons Learned

Positives

1. Ease of application deployment and scaling
2. Support for configurability and variety of frameworks both “pre-packaged” and “roll your own” through Buildpacks
3. Pivotal support has been very good and has responded quickly (Including Ghost, Poodle, etc...)
4. Platform upgrades are push button, and have been straight forward
5. Easy integration with tools like Splunk and AppDynamics
6. Easy to look at apps logs. Right away with no need to searching. As simple as running “cf logs myapp”.

Areas for Improvement

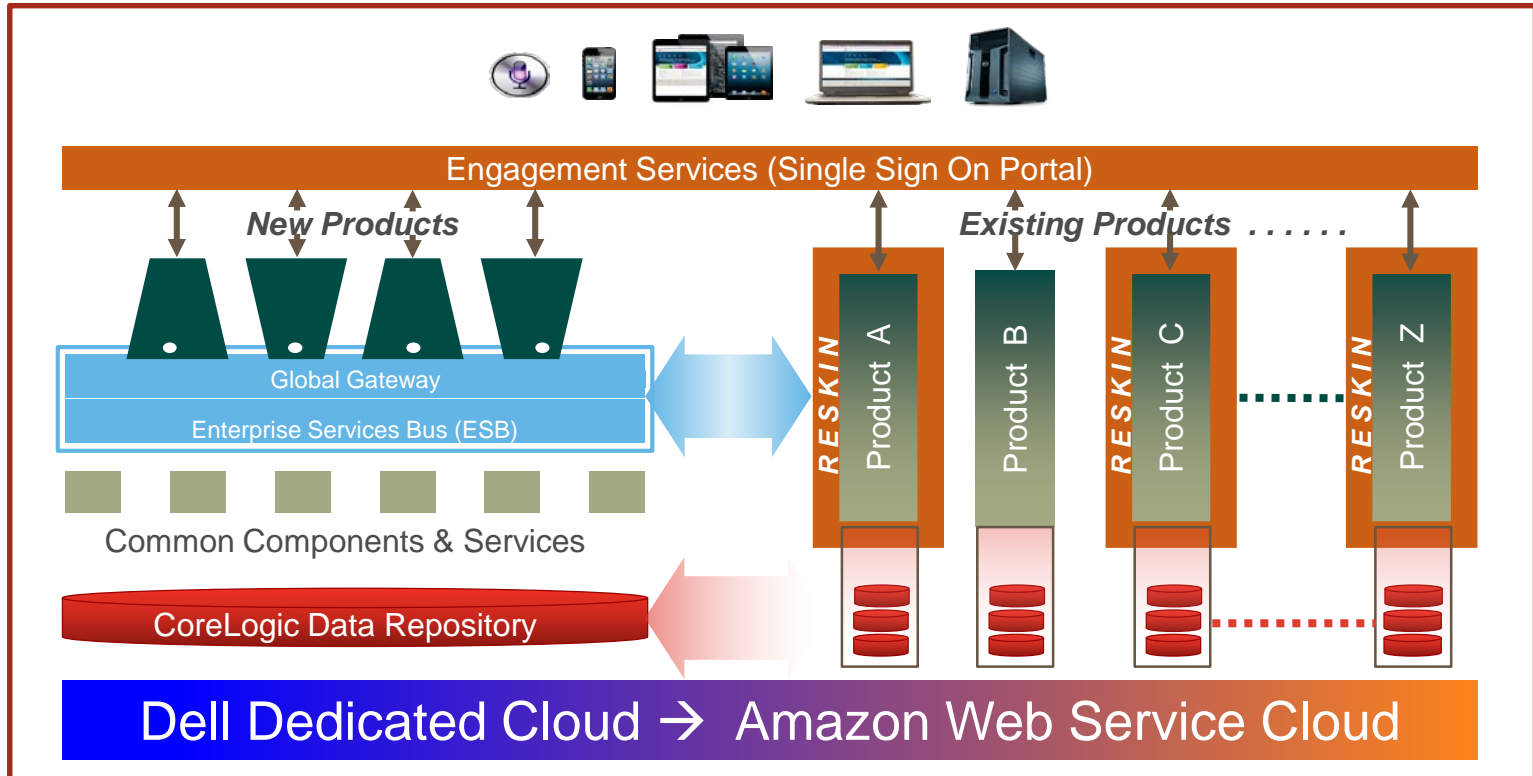
1. Resiliency / recoverability very good but not perfect yet
2. Health dashboard, with trending of overall system underlying the IaaS
3. Need more DevOps tools and components to support operational efficiency
4. Backups are manual, and yet documentation says to backup frequently
5. Need finer grain role based controls
6. Credentials that are stored in environment variables may show up in 3rd party tools & integrations

Areas of Interest

1. Balancing enterprise standards and compliance with agile continuous deployment
2. Calculating allocation costs for future application business cases is a challenge
3. DNS planning very important if you have separate foundations, or when blending wildcards and static routes
4. Managing multiple foundations from one central source was not as straight forward as expected
5. Managing customized Buildpacks is powerful but requires maintenance with future updates

CoreLogic Platform

Integrating Existing Products & Evolving in a Hybrid Cloud



What's Next?

A few bumps on the journey, but we're making great progress ...

- CoreLogic Platform
 - New product development ongoing on Cloud Foundry
 - Additional common components and services being built
 - Ongoing automation and improvements to DevOps. Integration with new monitoring tools and better integration with the existing IT Service Management processes
- 2015 Onward
 - Review possible migration of existing applications to Cloud Foundry
 - Data as a Service in first development in 2015
 - Hybrid Cloud management, deployment and tools being researched to allow for seamless management and DevOps for products across Dell Private Cloud and public cloud providers



Questions & Answers

