



# MAINTAINING BUSINESS EDGE BY MODERNIZING LEASING APPLICATION

Colombian large bank eliminates business risks associated with EOL technology - Oracle Forms



## AT A GLANCE

### Industry

Financial Services

### Headquarters

Bogotá, Colombia

### Challenge

Needed to discontinue legacy and its inefficiencies, and move to micro services, while retaining 100% business parity

### Solution

IONATE™ APPDATE offers legacy to micro services conversion using AI / ML

### Results

- Cost savings
- Future readiness
- Faster time to market

The third largest bank in Colombia, Davivienda aims to improve its overall enterprise efficiency. To continue staying competitive, the bank needed to prioritize IT transformation in key projects such as their leasing application. Built and powered by over 1600 Oracle Forms, the system posed some serious business risks.

Davivienda approached various companies, but all front-runners such as IBM, TCS, Sonda, etc. could only offer a lift-and-shift strategy. It would take 5 years to convert 1600 Forms and 500 Reports, and they would still not work with the latest version of Oracle on cloud. Ionate was the only company promising true modernization in under 6 months.

According to **SCC** generated report for a sub-project, it would have taken 31 engineers a period of 36 months to hand-code what IONATE™ APPDATE did in under 6 months.

## IONATE™ APPDATE solution has worked out of the box as legacy to micro services conversion for the financial services leader.

### Legacy Stack (Source)

Oracle Forms  
Oracle Reports

### Modern Stack (Target)

Java Springboot  
REST APIs  
AngularJS

## CHALLENGE

### Quick and future-proof IT transformation to eliminate risks associated with EOL technologies

As one of the largest banks in Colombia, maintaining competitive edge was paramount, especially in the wake of digital-only incumbents entering the Financial arena. To grow in the face of the new age competition, the bank needed to rethink processes and toolsets, and find opportunities to save running legacy costs.

For instance, not having a CI / CD process going forward, would bring down the overall efficiency and quality of their licensing ecosystem.

Other factors hurting the business:

- Maintenance (desktop clients)
- Vulnerability to data breaches and cyber attacks
- Feasibility of cloud (Oracle Forms are impossible to be made to work on cloud)
- Other risks of using legacy technologies EOL (end-of-life), such as talent retention, integration, compliance, etc.

Davivienda's licensing application legacy stack consisted of:

- Oracle Forms 6i
- Oracle Reports 6i
- Oracle DB 11g

The challenge of taking the route of lift-and-shift aside from the huge timeframe, was in lack of integration with cloud. For instance, Oracle DB can be run on cloud but only on the latest version: 19c. Even if the Forms and Reports are converted, they will stop working, as they only work with 11g and lower versions. Another major limitation is the user experience of Oracle Forms.

## SOLUTION

### Modernizing legacy applications to cloud-native micro services and enabling CI / CD pipeline

Summary of modern components:

- Java Springboot with Spring Data Modernization
- Angular Typescript as modern Frontend MVC
- Test automation and security
- Fully managed CI / CD powered by **IONATE™ KUBERNETES** enabled with AISecurity and AIOps

Case Study

Industry

Davivienda

Financial Services

# SUCCESS METRICS

Time to Market

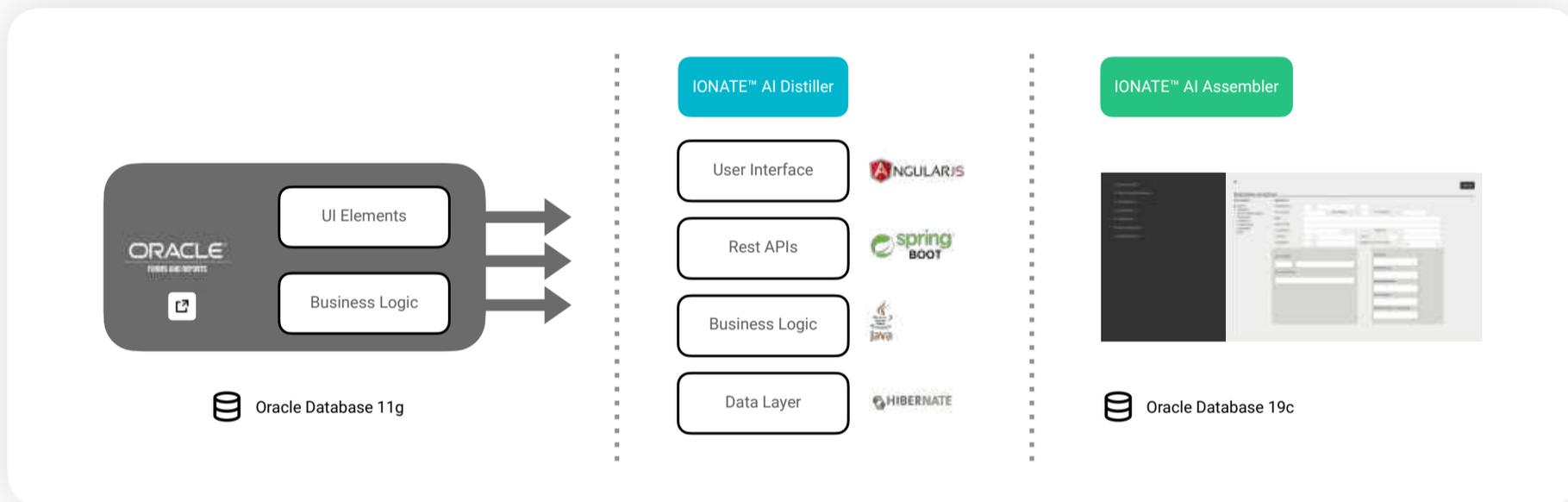
Up to 80%

Annual Cost Savings

Up to 60%

## THE TRANSFORMATION PROCESS

Legacy to modern stack conversion is orchestrated by Ionate's proprietary technologies



## BENEFITS



Cost savings



Future readiness



Faster time to market

## SCC REPORT

What you see is project statistics. It would take **31 engineers, 36 months** to write the same code that IONATE™ APPDATE did in under **6 months**.

Language	Files	Lines	Blanks	Comments	Code Complexity
Java	2422	243855	80977	13898	258088
TypeScript	291	229735	15651	17788	80378
PL/SQL	270	29781	2434	1188	26183
HTML	125	34876	2763	0	11312
JSON	9	12538	0	0	12538
XML	0	58	0	1	51
Properties File	4	58	8	18	26
XML	4	128	26	1	293
SwaggerFile	1	24	10	0	34
gitignore	1	80	11	13	56
JavaScript	2	64	3	0	33
Markdown	2	45	20	0	25
YAML	2	27	1	0	26
<b>Total</b>	<b>3228</b>	<b>558853</b>	<b>91812</b>	<b>142717</b>	<b>853814</b>

Estimated Cost to Develop \$32,489,843  
 Estimated Schedule Effort 36,342251 months  
 Estimated People Required 31,518887  
 Processor 22872980 bytes, 21,870 megabyte CS15



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### About Ionate

Ionate accelerates Digital Transformation by modernizing legacy systems using a proprietary AI/ML engine in under 6 months, while maintaining 100% business parity. Our end-to-end platform enables you with a high-performing infrastructure, to scale your business, with security, predictive forecasting, and data protection.

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