

# ORACLE

Oracle Global Leaders Program

December 3 - 13.45 SGT

## Oracle Global Leaders Meeting APAC 2020

### Oracle Autonomous Database Panel



Pawarit Ruengsuksilp (Taa)  
Project Consultant  
Forth Smart – Thailand



Andrew Paynter  
Group CEO  
Impos - Australia



Wei Min Zeng  
Head of IT  
CWT Globelink - Singapore



Clark Kho  
Senior Technology Architect  
Accenture - Philippines

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# HOW DATA WAREHOUSE AND DATA MINING MAKE FINTECH MARKETING MORE EFFECTIVE

Pawarit Ruengsuksilp  
Project Consultant  
FORTH CORPORATION PCL  
Dec 2020



# Speaker Biography



## Responsibility and Experience

- Building a control room to minimize the downtime of 120,000 online vending machines
- Using Machine Learning Algorithms to do market segmentation and targeted ads
- Made more than 50 working dashboards with Oracle Analytics Cloud
- Automating and improving the quality and integrity of Management Meeting's reports
- Co-ordinating with international vendors to bring about the Smart Grid solution to improve Bangkok's electricity infrastructure

# Agenda

- Company Introduction
- Business Objectives
- Use Case 1: Agent Service Team
- Classification Models
- Data Warehouse Architecture
- Experience of using ADW/OAC/OML
- Q&A

# Forth Smart Service Corporation

- Established in 2008
- Around 300 employees
- Head Office based in Bangkok, Thailand
- Operating more than 120,000 vending machines throughout Thailand
- Provides topping up prepaid mobile phones, bank transfers and utility bills payment services
- Expanded into snacks, drinks and coffee



# Business Objectives



- **Marketing** team wants to increase the number of services that customers use



- **Marketing** team wants to get higher conversion for their advertising campaigns



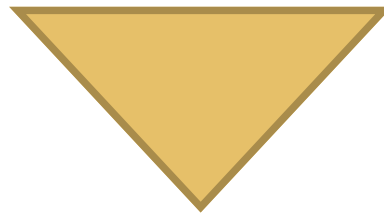
- **Agent Service** team wants to minimize machine downtime



- **Finance** team wants to minimize the number of machines with full credits

- **Business Development** team wants to keep business partners engaged

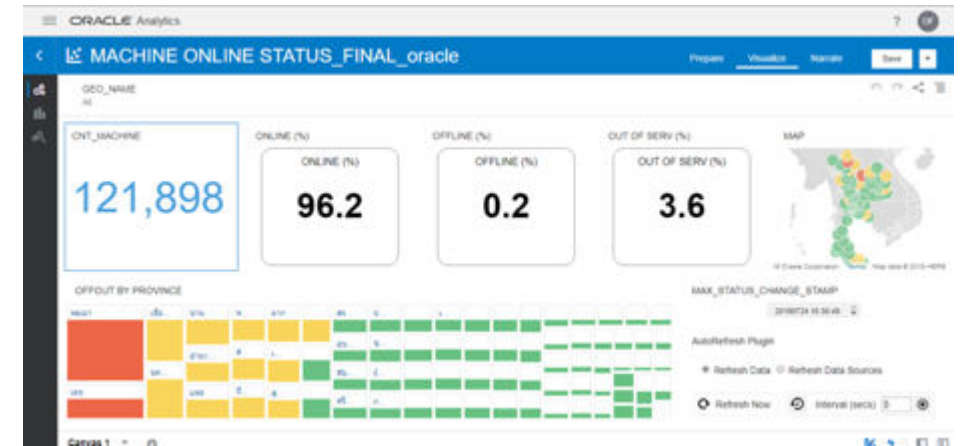
- **Sales** team wants to automate optimization jobs done manually



- We looked into **Machine Learning** as part of our answers to these problems

# Agent Service

- First point of contact for agents
- Provide maintenance advice to agents
- Solve machine robbery issues
- Troubleshooting alarms
- Keep the system of machines disturbance free





# Classification Model I

**Objective:** Working out which customers are likely to be our Line Sticker customers

- 12 mn potential customers reached
- Query the customers with rules obtained
- Give the marketing team a set of cellphone numbers to do targeted advertising
- Facebook Audience used as a comparison channel to SMS

## Results:

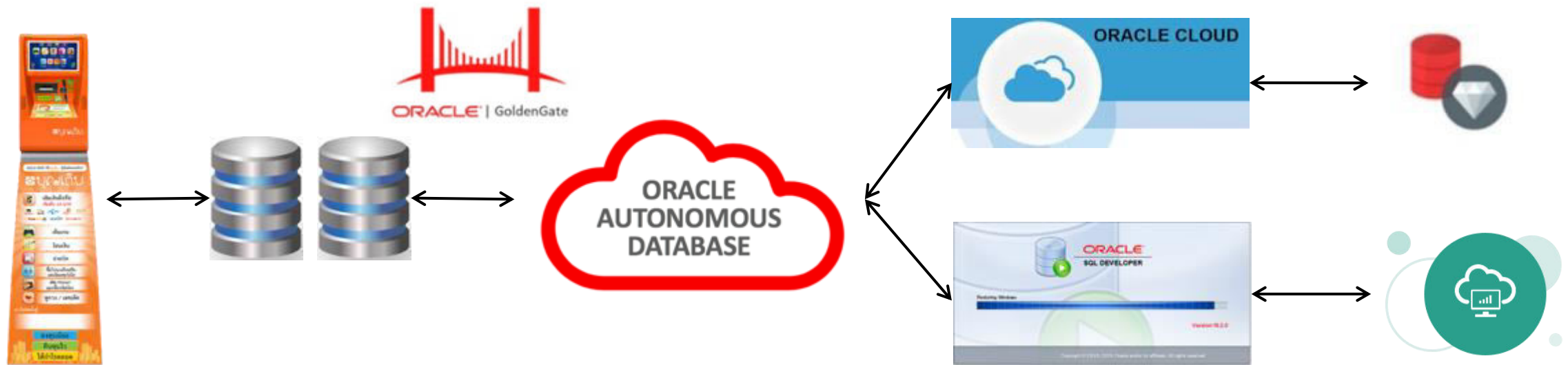
- 3x Conversion Rates due to Classification
- 6x Conversion Rates due to Facebook Audience



Copyright © LINE Corporation

Rule	Surrogates	Target Values
Node Rule:		
If CNT_SERVICE_USED isIn ( "3" "4" "5" "6" )		
And SUM_SERV_AMT_TOPUP <= 55		
And CNT_TRANSACTION > 6.5		
Then YES		
Confidence	0.518993839835729	
Support	0.002971913283598029	

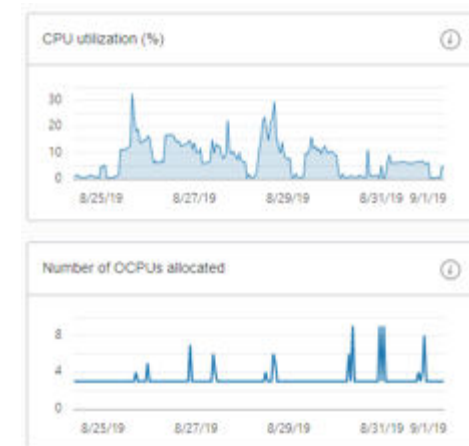
# Database Architecture



# Experience of Using Autonomous Database

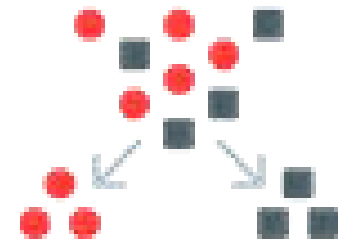


- 2 years into using ADW
- Auto-Scaling: Allocate more resources when needed
- Data Encryption: Less prone to cyber attacks
- Faster: More frequent refreshes makes data closer to real-time
- User-friendly GUI: Less downtime as there is no need to wait for the DBA to reset the database



# Facts and Benefits of ML in the Cloud

- Seamless integration with ADW
- Adding value to your data
- Variety of powerful graphing techniques
- Keep improving all the time
- Drag and Drop Experience
- Perform Market Basket Analysis and Classifications Models
- Providing numerical conclusions, not graphs



# Questions & Answers

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# Impos Solutions International Pty Ltd

Impos + Oracle = Better Together

December 2020



## Impos Snapshot

Leading provider of point of sale software, hardware and Software as a Service (“SaaS”) to the Australian Hospitality Industry

-  Offices in Melbourne and Sydney as well as an offshore office in Manila, Philippines
-  ~8,500 POS terminals
-  Customer base of 2,700 venues
-  ~40 employees Australia wide + offshore support
-  24/7/365 POS system support



Real-time, cloud-based analytics for single and multi-store venues



Technology and POS solutions are developed in-house and owned by Impos



Integrated with doshii.io enabling any 3<sup>rd</sup> party app to connect with multiple POS providers



SaaS recurring revenue business model supports ongoing financial growth



Fully-featured POS system with a range of hardware options to suit the different needs of hospitality venues



Offshore Manila office enhances the ability to provide ongoing after hour service to a growing customer base





# The Impos Solution



## Impos Plus

- Offers a complete premium POS feature to suit all business needs as well as Impos Analytics
- Has a complete range of quality POS equipment to help venues run smoothly



## Impos Enterprise

- Offers larger customers the option of custom development
- Streamline business reporting with Impos' powerful multi-site business intelligence tool
- Deep integration with market leading applications such as Xero, MYOB, Deputy and more



## Impos Analytics

- Transactions are synchronised as they happen from the local server database to the cloud
- Allows users to monitor their business effectively in one personalised real-time dashboard as well as high-quality animated graphs and charts
- Customizable reports to match different businesses' needs, available on any desktop, tablet or mobile



## POS System Support

- Provides business hours or 24/7/365 support to suit different businesses
- POS technicians with an average of more than 9 years' hospitality experience
- Online support portal access to product information, training manuals, integration details, video tutorials and step-by-step guides



# High value diversified client base

<b>Cafes</b> 							
<b>Restaurants</b> 							
<b>Bars &amp; Clubs</b> 							
<b>Pubs &amp; Hotels</b> 							
<b>Wineries</b> 							
<b>Other</b>							



## Challenges

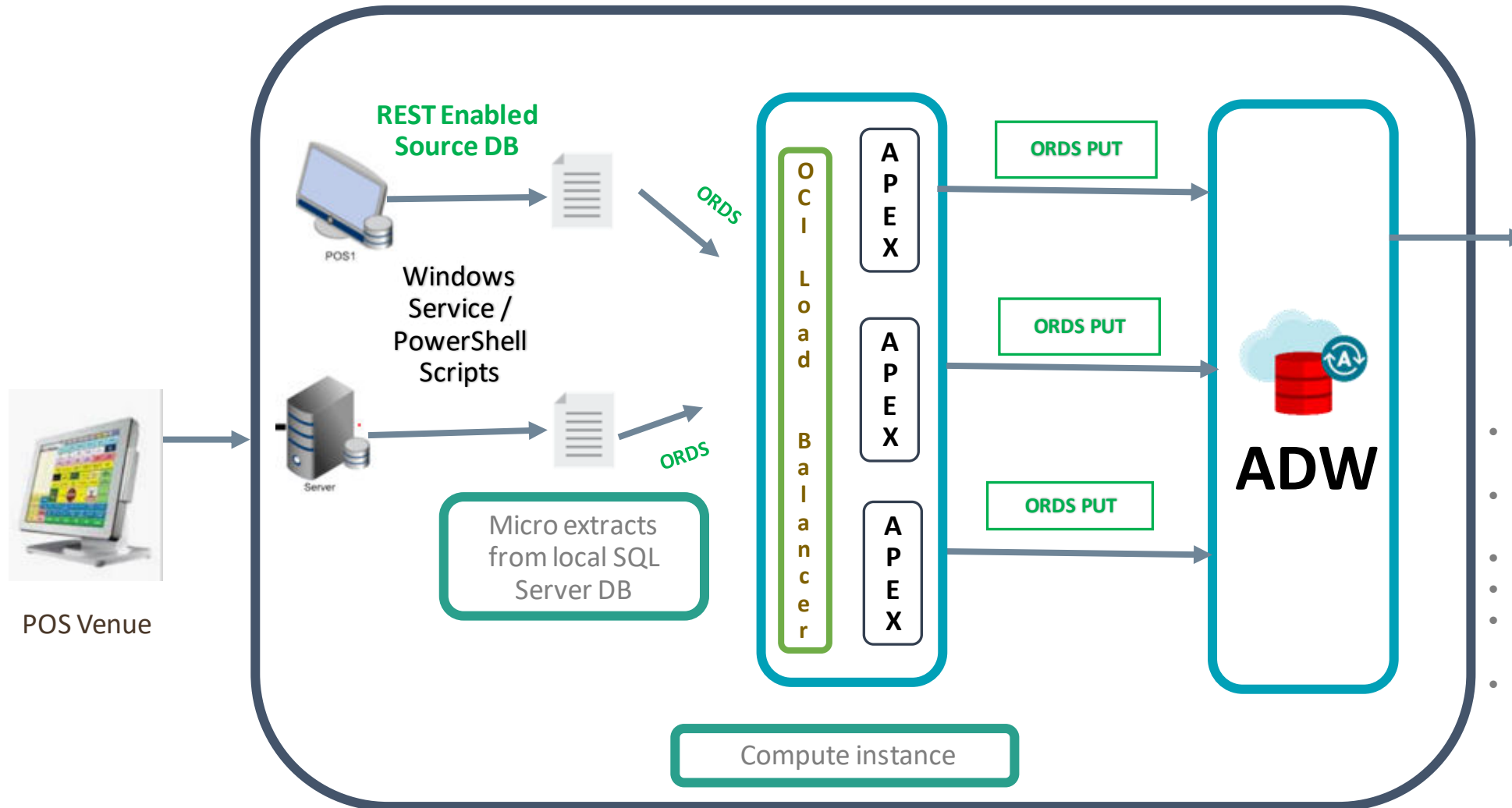
- **High and escalating cloud costs private & AWS**
- **Movement of data**
- **Multiple solutions for data movement**
- **Analytics performance**

## How Oracle helped

- **IaaS**
- **Autonomous Data Warehouse**



# Architecture



## Impos Customer Analytics



- Windows service scheduled
- Extracts from local DB using scripts
- Frequency : 10mins
- File : json/ csv
- REST enabled source DB
- Concurrent write to ADW using ORDS (Oracle REST Data Services ) hosted on APEX

## Outcomes

- **Reduced cloud costs by 80%**
- **Automated movement of data**
- **Provided a single solution**
- **Self-healing, self-managing, and self-patching**
- **Improved Analytics performance by 90%**
- **The ability to scale, with speed**
- **Delivering us the capability to provide new products for our market:**
  - Analytics
  - Back-up as a Service
  - IaaS



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# CWT Globelink



- Formed in 1988 to provide international freight forwarding services.
- A leading Non-Vessel Operating Common Carrier (NVOCC) operator in Asia.
- Headquarters in Singapore
- Network of more than 100 offices in 31 countries covering all major ports of the world.

# Zeng Weimin

- Join CWT in 1993
- OCP on 2001.
- Has more than 20 years working experience on Oracle Database and development tools
- Transfer to CWT Globelink as project manager on 2004, building FMS (Freight Management System)
- Head of IT in CWT Globelink



# FMS

## Freight Management System

- A common platform used by all offices in GL group
- Covered Operation, CFS & Finance
- Developer 2000 (Client/Service model)
- Designed in 2003
- Developed in 2004
- First Implemented in Singapore in 2005



## CWT GLOBELINK - FMS

### FMS MODULES

#### EXPORT

- Schedule Mgmt
- Booking Mgmt
- Consol Planning
- Documentation Mgmt
- Payment and Billing
- Job P&L Analysis

#### IMPORT

- Documentation Mgmt
- Transshipment Mgmt
- Payment and Billing
- Job P&L Analysis

#### Master Setup

- Company Master
- Trader Master
- Port Master
- Port Setting
- Port Mapping
- Vessel Master

#### CFS

- Support CFS activities
- Tally Sheet
- Load Plan

#### System Administration

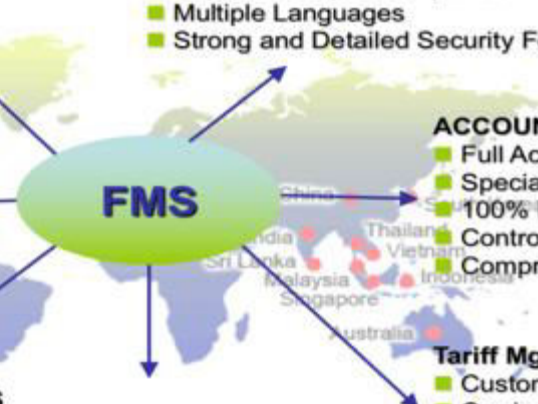
- Support Multiple Companies in concurrently
- Multiple Languages
- Strong and Detailed Security Features

#### ACCOUNTS / FINANCE

- Full Account Package
- Specialize in NVOCC
- 100% Integrated with OP
- Control OP from AC's view
- Comprehensive Reports

#### Tariff Mgmt

- Customer Rate Mgmt
- Carrier Rates Mgmt
- Supplier Rate Mgmt
- Agents Rates Mgmt

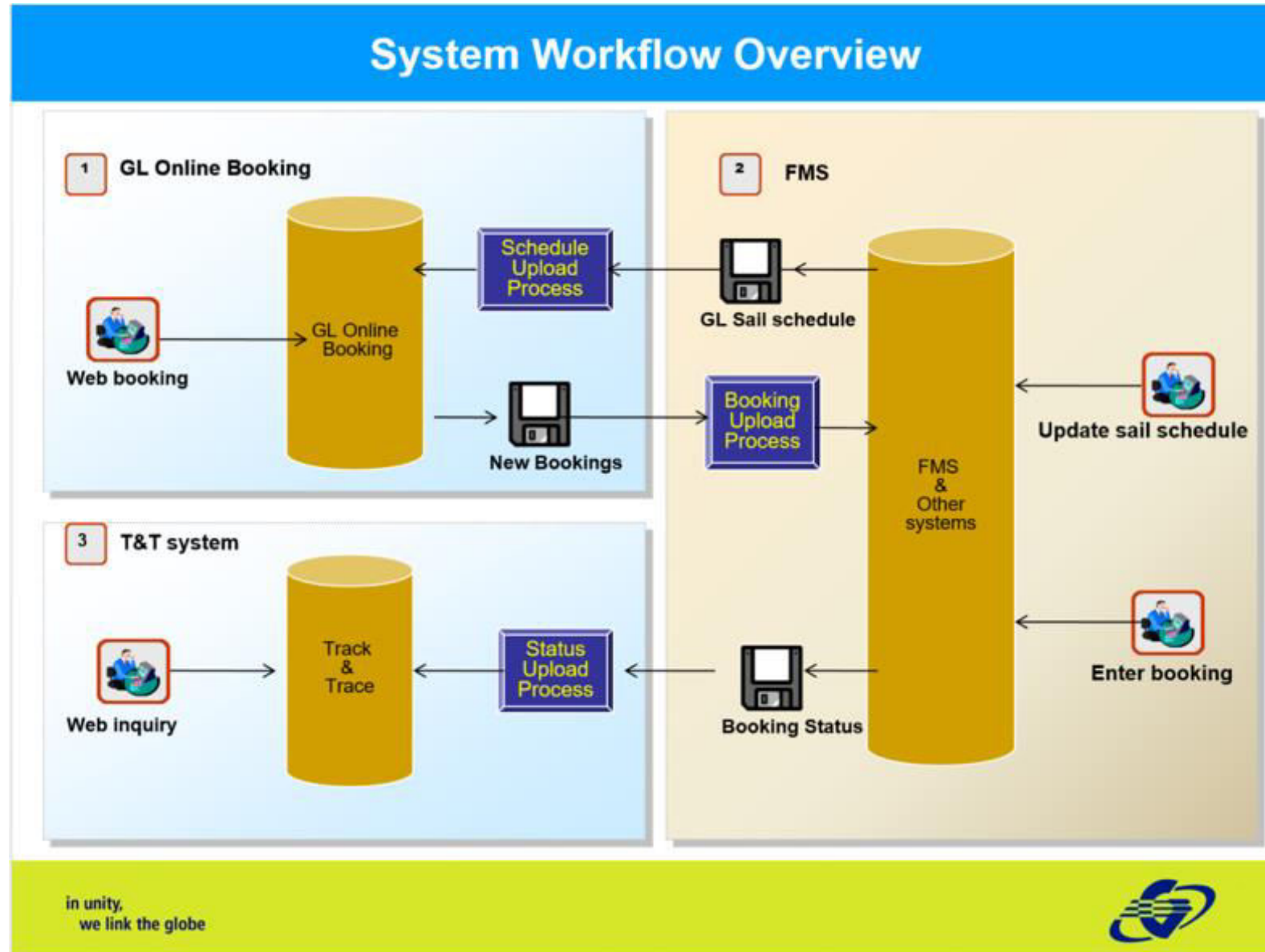


In Unity, We Link The Globe

# Online FMS

Built for customer (2010)

- Sailing Schedule
- Online Booking
- Track & Trace

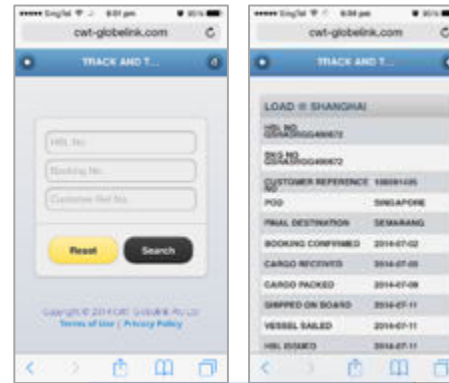
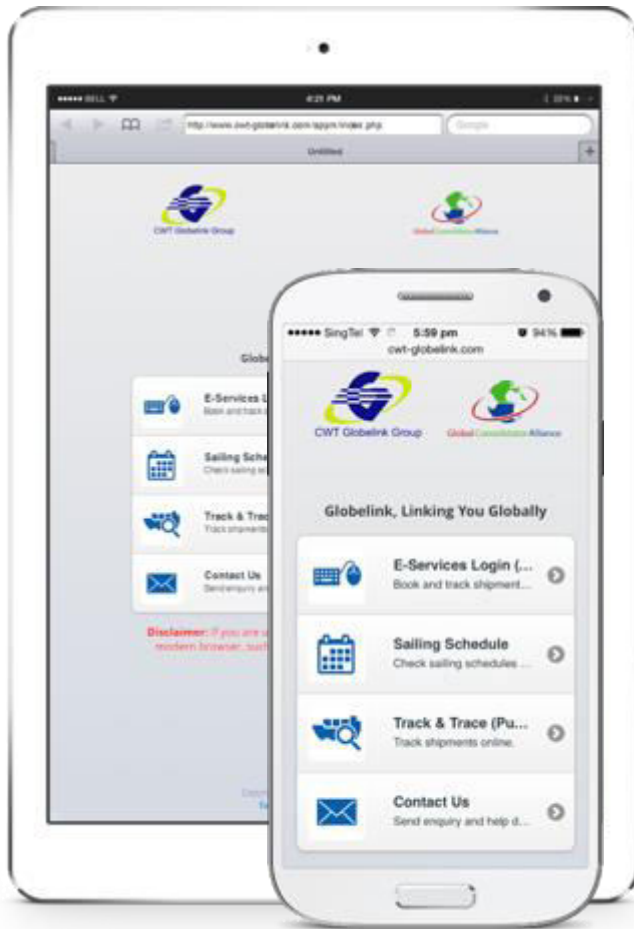


# JDeveloper

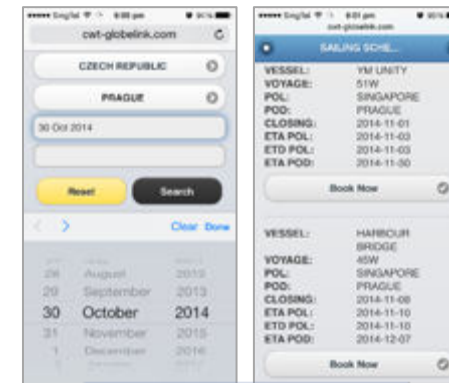
- Easy to build with help of wizard
- Difficult to customize on look and feel
- Dealing with difficult parts is easy, easy parts is difficult
- Learning curve on this tool and Java

# Open Source Solution

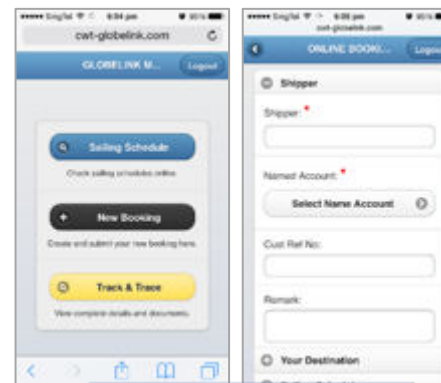
HTML5, CSS, JQuery, JavaScript, AJAX & PHP ...



Track & Trace



Sailing Schedule

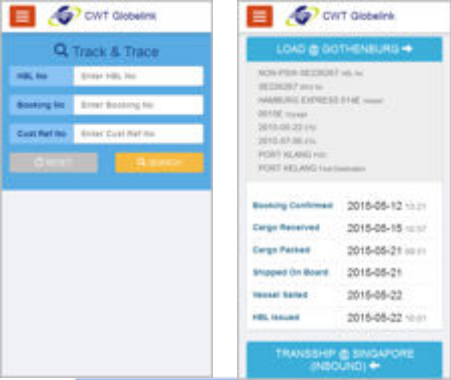
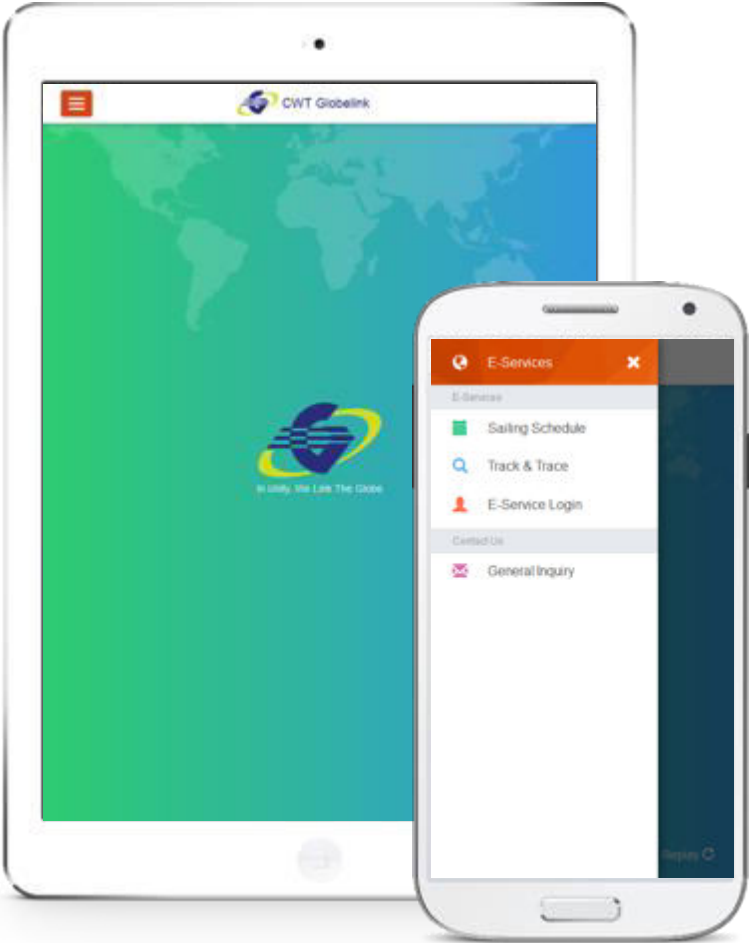


e-Booking

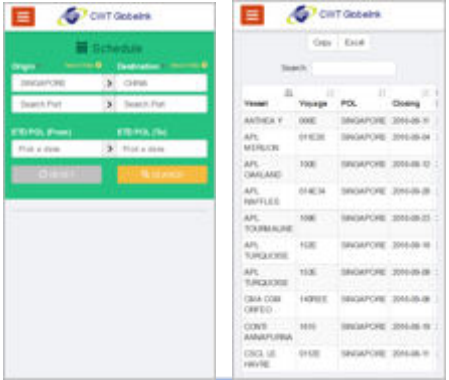


Secured Login

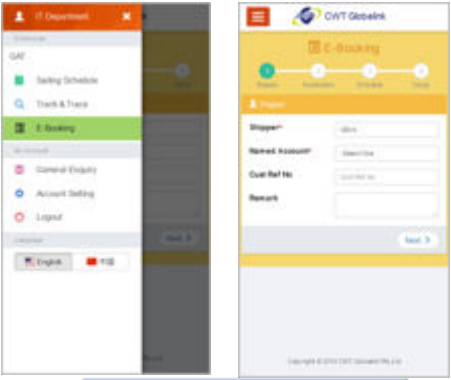
# Different Version with the same data source



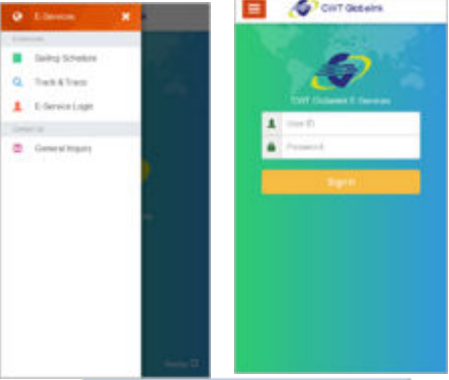
Track & Trace



Sailing Schedule

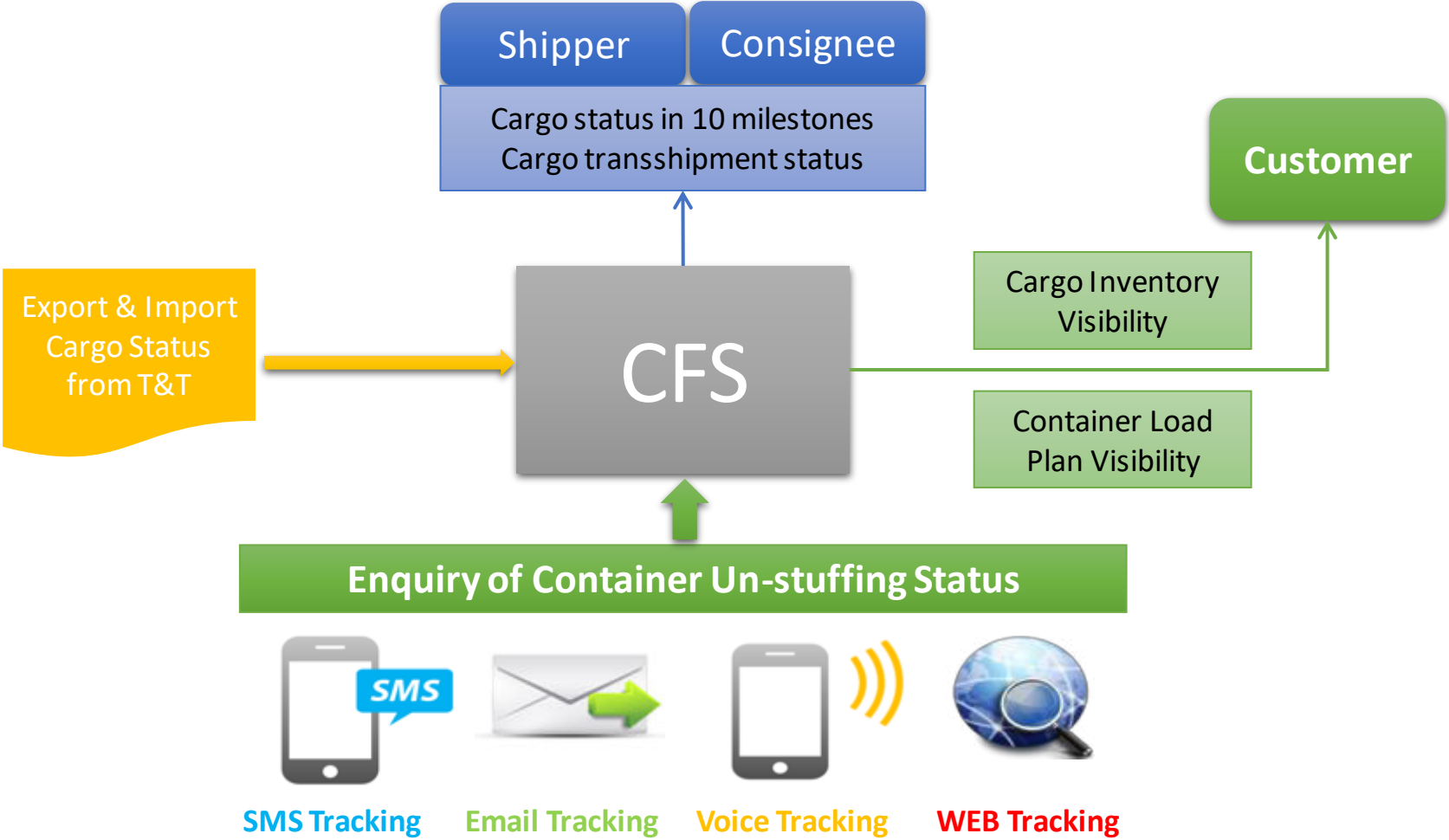


e-Booking



Secured Login

# Extend to Warehouse Services



# Was stuck in 2016

Very hard to handle data centric project

- Planning 3 months to complete and UAT
- Changing go-live deadline each time after user test
- Estimated completion time extended to 3 years later

No framework to help on

- Data manipulate (DML)
- Validation & controlling
- When business logic become more flexible and complicated
- Reuse existing program units

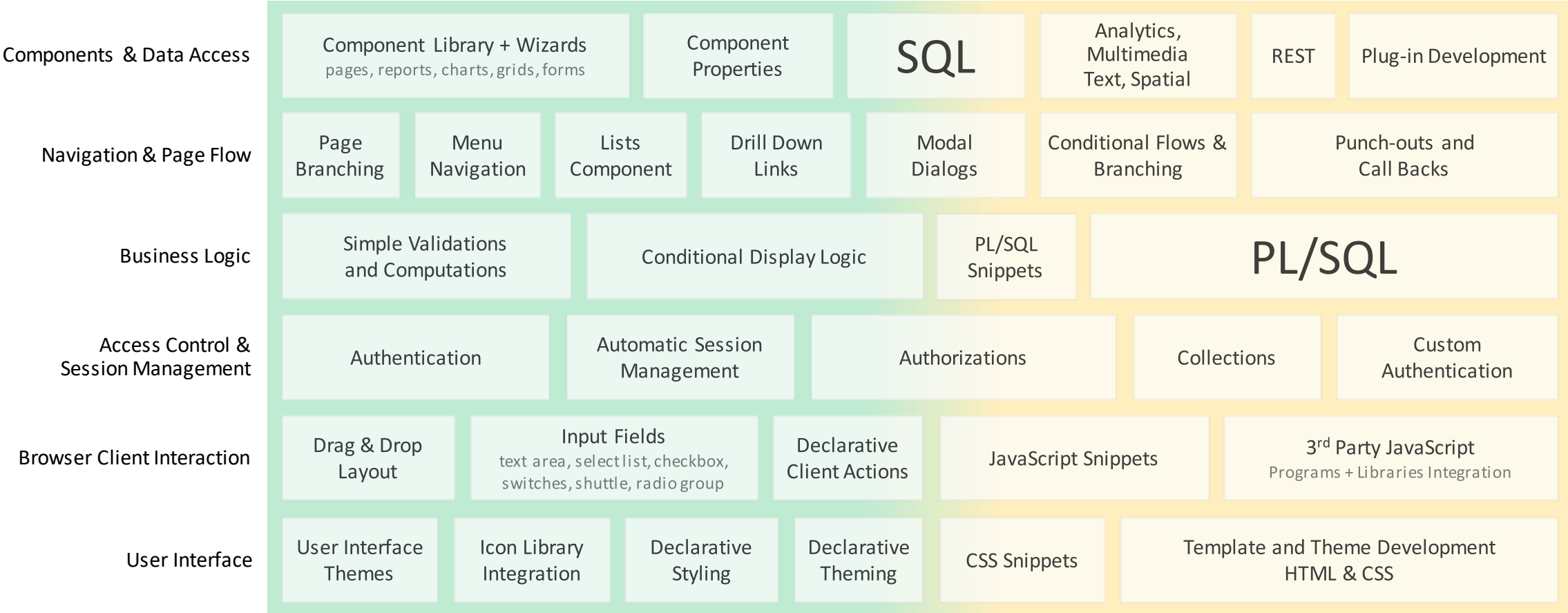
Do we want to build our own framework? Or Time to look around again?

# APEX - Oracle Application Express

- **Aligned with industry trends:** Strong support for HTML5 development frameworks, Modern & responsive CSS3 UI, integrated JavaScript libraries, Browser-based, self-service provisioning, flexible development and deployment including cloud services.
- **Consistent with Oracle developers skill set:** SQL, PL/SQL, Oracle Database. Proficiency in the Oracle database easily translates into an ability to develop web applications.
- **A perfect match with our skillsets!!**



# APEX Framework



## No Code

High Productivity  
Citizen Developer  
4GL meta-data driven development

## Low Code

More Control  
Power User / Departmental Developer  
Extend using code snippets and plug-ins

## Programmatic

High Control  
IT Professional  
3GL Procedural Code / Libraries

# Our way to Apex

- Started from small projects
- Covert existing projects
- Rebuild FMS the enterprise grade application in APEX
- All applications are under on roof

# Advantages for us

- All the existing logic stored in DB as stored procedure can be reused
- Built-in data manipulate functions handle all types of transactions
- Very open to web application standard JQuery, HTML, CSS & JavaScript
- Out of box features which save lots of development time
  - Upload wizard
  - Download function
  - Support customize views for different users
- Ready to use Plugin
  - Dropbox
  - LOV
- RESTFUL service – convert EDI to API
- Many other APIs

# IT Strategy - 2013

To integrate Globelink IT applications to a single platform by innovations leveraging on the power of cloud computing

Benefits of Cloud Computing:

- High performance
- Reliable & scalable
- Pay as you use as utilities
- Easy and Agile deployment
- Device & location independent
- Unlimited storage space
- Low total cost ownership
- Free up internal resources
- Highly automated



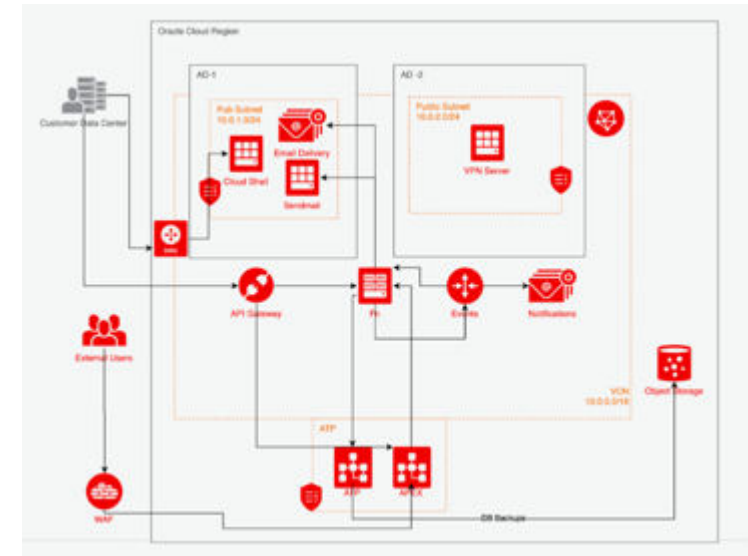
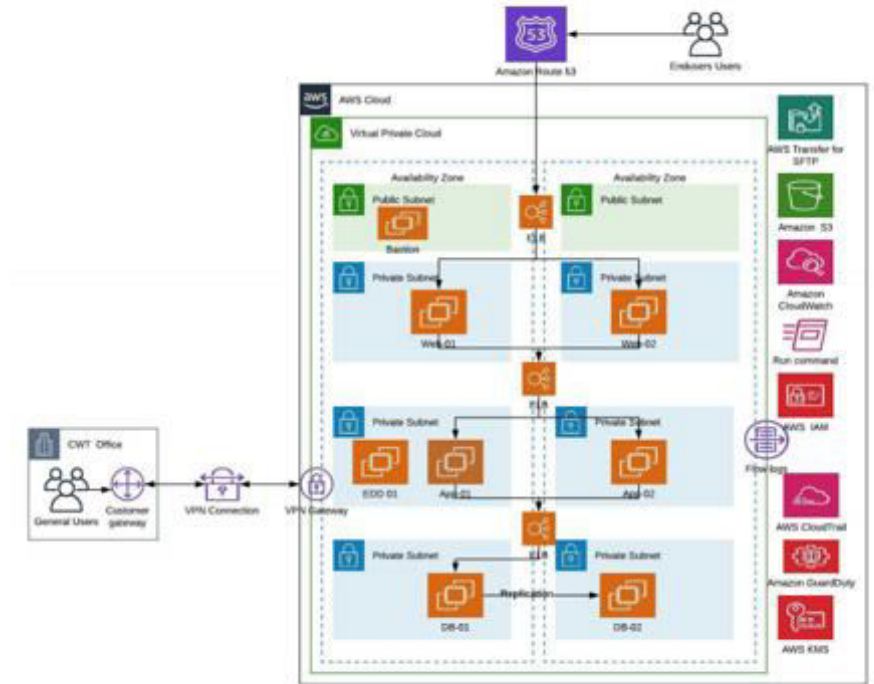
# Cloud Finally

- Designed for Centralized Application but fail to implement due to poor internet performance and high cost of dedicated connections to support client-server model application
- Citrix, VMWare & Remote Desktop Connection also not work for us due to high infrastructure cost: application servers, huge memory, software licenses and Oracle Database to support many concurrent user connections
- Apex is cloud base by default together with Database

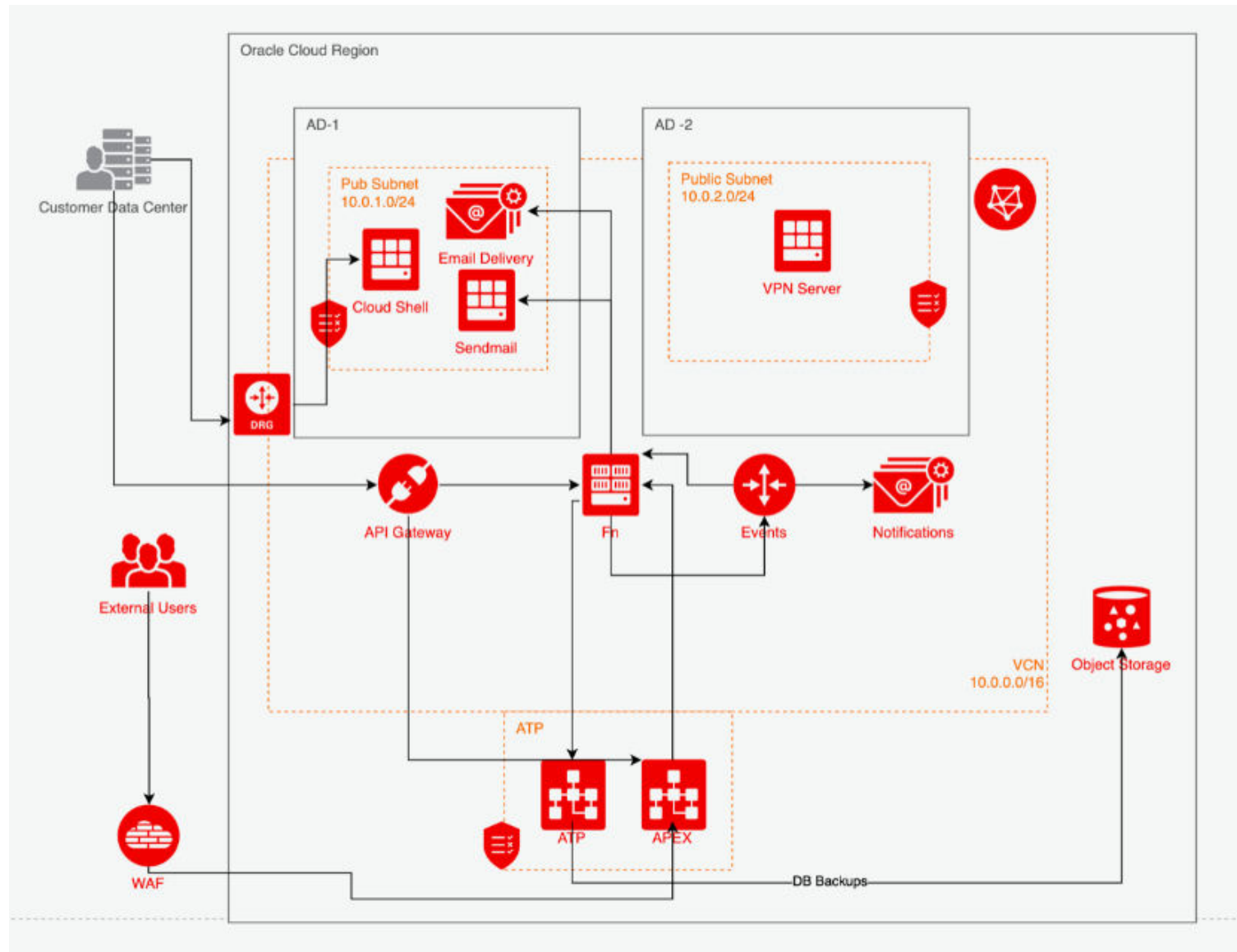
# Why ATP

- What we need are all built-in: Database, APEX & Email Services
- Always the latest version and maintained by Oracle
- Auto Scalable
- Availability & Failover
- Performance – 5 times faster running on huge data

Test Script	No. of records	AWS (4 cores)	GL On-Premise (4 cores)	ATP (1 ocpu)	ADW (1 ocpu)
<pre>SELECT pol_id, pod_id, COUNT (bkg_no) FROM booking_hist WHERE com_id = '010' GROUP BY pol_id, pod_id</pre>	1,515,140	42.8 seconds	38.5 seconds	8.6 seconds	0.44 seconds



# Oracle Cloud Application Architecture



# Saving

- High Performance
- Lower cost by ATP integrated solution for APEX
- Turn our time from maintenance & recovery to innovation via developing our application



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# DESTINATION: AUTONOMOUS INNOVATIONS

INNOVATION@SCALE

WITH THE ORACLE CLOUD

3 DECEMBER 2020

\*\*\*Material, Non-Public—Not To Be Distributed Further\*\*\*



# INTRODUCTION



## JULIAN DONTCHEFF

MANAGING DIRECTOR AND  
MASTER TECHNOLOGY ARCHITECT

### ORACLE GLOBAL TECHNOLOGY LEAD

- More than 25 years of Database Experience
- Accenture Global Database Lead
- Accenture Global Oracle Technology Lead
- Oracle Certified Professional 8i-12c
- First Oracle Certified Master in Europe: 2002
- Oracle ACE Director
- More than 10.000 hours of on-call DBA duty
- Blog at [juliandontcheff.wordpress.com](http://juliandontcheff.wordpress.com)



## CLARK KHO

DIRECTOR AND  
SENIOR TECHNOLOGY ARCHITECT

### ORACLE CLOUD TECHNOLOGY LEAD

More than 25 years technology experience.  
Provides expert support for Oracle Cloud (SaaS, PaaS, IaaS), Oracle Technology Architecture, and other Oracle Applications.  
Leads Accenture Advanced Technology Center for Philippines

INNOVATING WITH ORACLE CLOUD

# TOPICS FOR TODAY

Topic 1



**Innovation landscape**

Topic 2



**Platform for Innovation**

Topic 3



**Demonstrating  
Live Innovation**

Topic 4



**Future thinking**

A hand is holding a large, golden-brown chocolate chip cookie with several dark chocolate chunks. The cookie is positioned directly above a clear glass filled with white milk. The background is plain white.

**MOST ORGANIZATIONS ARE  
FACING AN INNOVATION  
ACHIEVEMENT GAP**



# AT THE SPEED OF SMART

**To scale innovation, companies need systems that seamlessly adapt to business and technology change.**

Advances in trusted data and intelligent technologies power systems that learn and improve by themselves, and help people take confident action.



LET'S CREATE THE  
PLATFORM

LIVE!

# Go to [CLOUD.ORACLE.COM](https://cloud.oracle.com)

The screenshot shows the Oracle Cloud website header and main content area. The header is dark grey with the Oracle logo on the left, a search bar containing "Ask 'HCM'", and a "View Accounts" button. A red box highlights a "Try Oracle Cloud Free Tier" button in the top right corner. The main content area is divided into three columns with abstract background graphics. The first column is teal and features "Gen 2 Cloud Infrastructure" with a sub-header "Elastic, highly available, and secure" and a paragraph describing the benefits of Oracle Cloud Infrastructure. The second column is green and features "Cloud Applications" with a sub-header "Complete suite of integrated apps" and a paragraph about streamlining business processes. The third column is dark blue and features "Oracle Cloud Day Online" with a sub-header "Explore and discover cloud technologies through customer success stories, a must-see keynote, live Q&A, and a virtual partner expo. May 5, 9:00 a.m. PT." and a "Register for free" button.

[Try Oracle Cloud Free Tier](#)

**Gen 2 Cloud Infrastructure**

Elastic, highly available, and secure

Oracle Cloud Infrastructure delivers the elasticity and efficiencies of public cloud with the granular control, security, and predictability of on-premises infrastructure.

**Cloud Applications**

Complete suite of integrated apps

Streamline your business processes. With ERP Financials, Procurement, and more, you can increase productivity, lower costs, and improve controls.

**Oracle Cloud Day Online**

Explore and discover cloud technologies through customer success stories, a must-see keynote, live Q&A, and a virtual partner expo. May 5, 9:00 a.m. PT.

[Register for free](#)



# Always Free – What's Included



## Autonomous Database

*2 x Databases  
20 GB each*



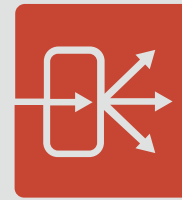
## Compute

*2 x VMs  
1 GB Memory  
each*



## Storage

*100 GB Block  
10 GB Object  
10 GB Archive*



## Networking/ Load Balancing

*10 Mbps LB  
10 TB Outbound  
Data Transfer*



## Monitoring / Notification

*500M Metrics  
Ingestion  
1B Metrics Retrieval  
1M Notifications  
1K Emails*

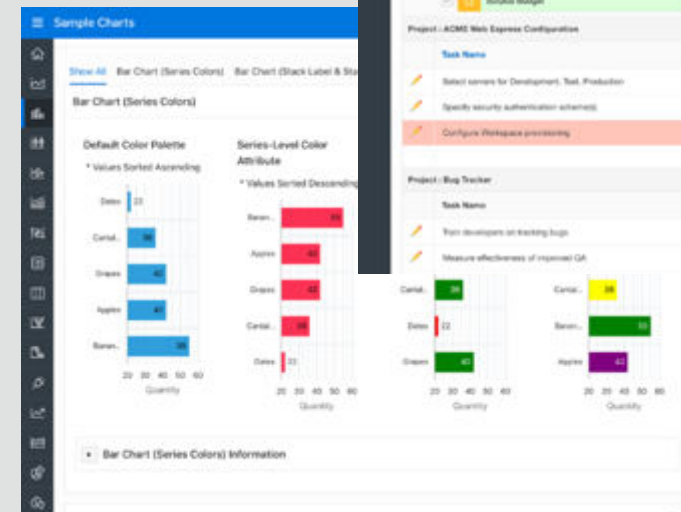
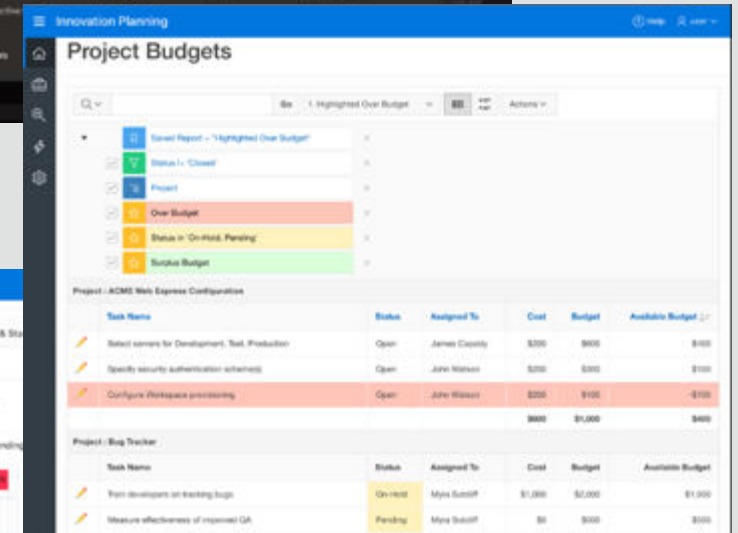
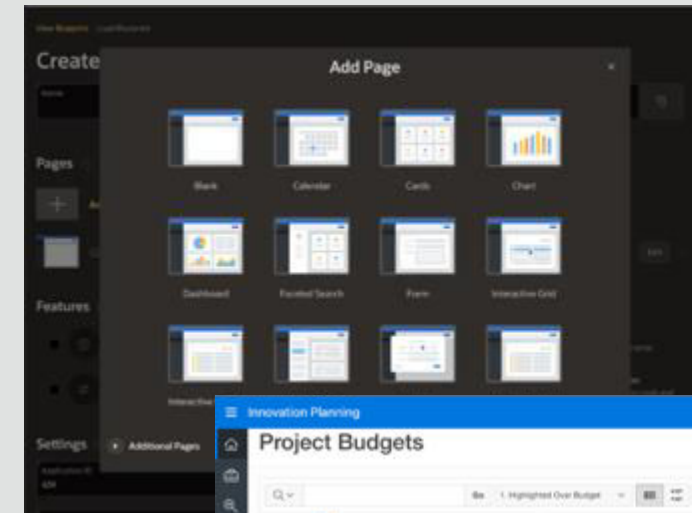
# Available to All New and Existing Cloud Accounts

# LET'S BUILD OUR APP IN MINUTES

# What is Oracle APEX?

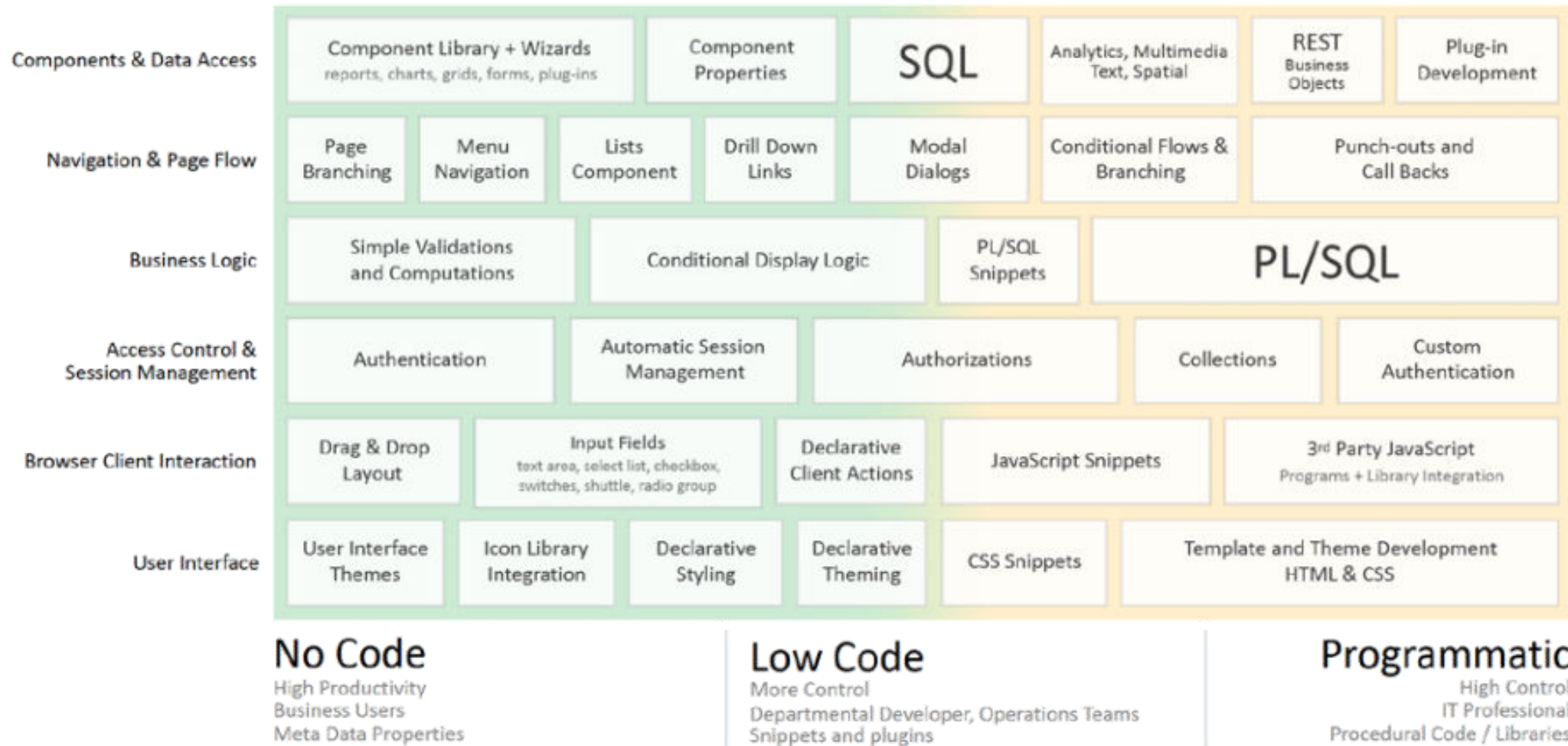
Oracle Application Express (APEX) is a low-code development platform that enables you to build scalable, secure enterprise apps, with world-class features, that can be deployed anywhere.

- ✓ Simple
- ✓ Powerful and Proven
- ✓ Secure
- ✓ Portable



# APEX PROGRAMMATIC SPECTRUM

## 3 Developer Persona



ORACLE

Source: Oracle

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# AUTONOMOUS STANDBY

DEMO

ACCUMULATING AND PREPARING INFORMATION FOR USE IS ONE OF THE BIGGEST CHALLENGES FOR ORGANIZATIONS THAT DEPLOY SYSTEMS.



# Fusion Analytics Warehouse



How CFOs/CHROs gain a Holistic View and become Data-driven



## Analytics

Analytics drive business agility with faster time to insights



## Data science & AI

Data science, machine learning, cloud SQL, AI applications



## Augmented analytics

Predictive analytics, Automated explanation of results, automated data enrichment



## Pre-Built to Maximize Value of Cloud ERP

with pre-built KPIs / dashboards / data foundation

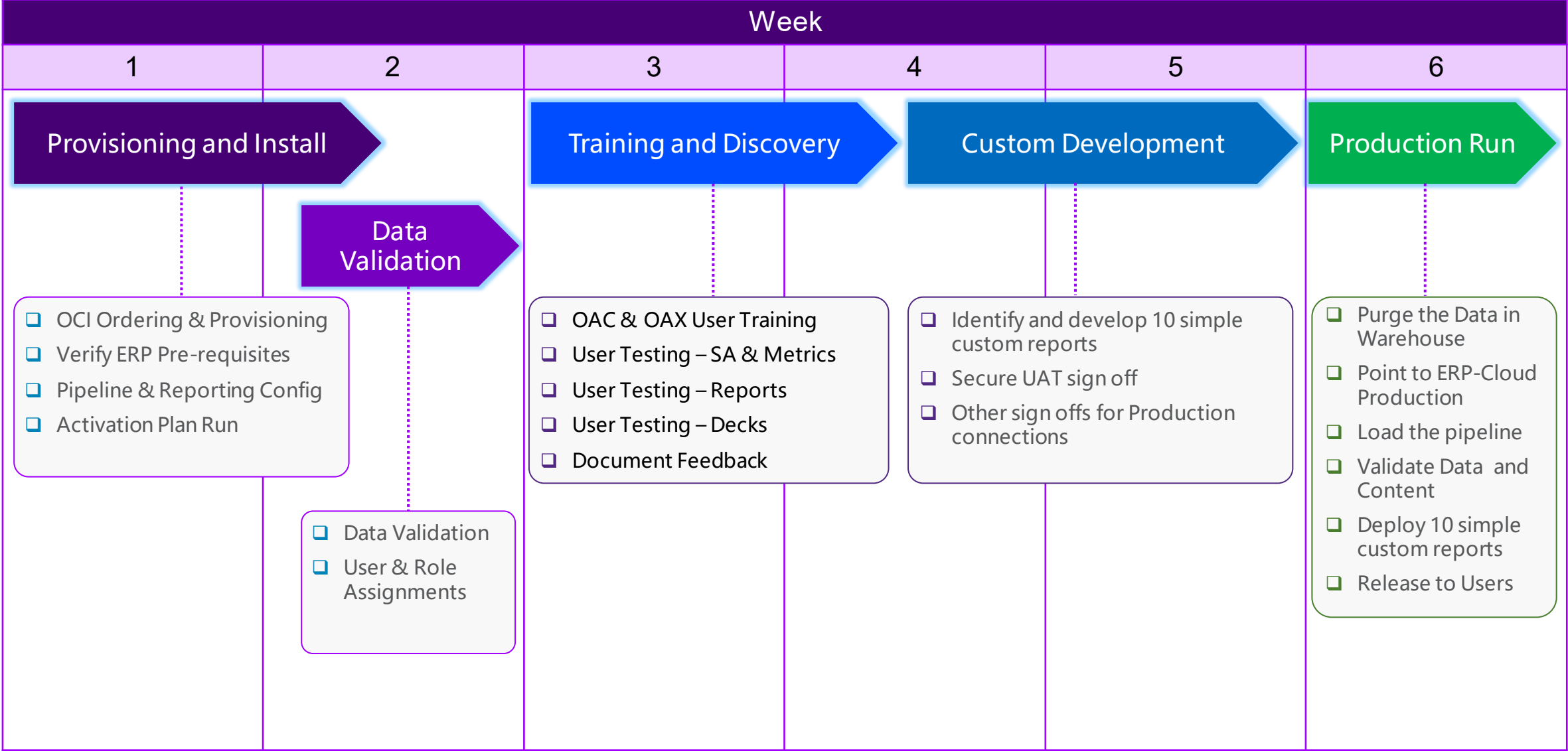


## Extensible to Fit your Business

by combining external data sources into your analysis



# Weekly Plan for FAW Rapid Implementation





# ORACLE PRACTICE FACTS

Through the Oracle Business Group, Accenture helps its clients win today and own tomorrow—synchronizing innovation and growth to unleash the power of the intelligent enterprise.

**#1**



Diamond Status, Platinum Level in the Oracle Partner Network, noted Oracle Cloud Excellence Implementer.

**500+**



Oracle Cloud programs completed or in flight.

**80%+**



of Accenture's Oracle clients are repeat clients with more than 650 clients served annually.

**58,000**



Oracle-skilled professionals globally. With 105+ specializations, including 20 advanced specializations in virtually all Oracle products.

**170+**



Oracle awards won since 2003 – and more than 50 won since 2016..

**7,200+**



Oracle projects completed or underway.

**4,500+**



Oracle Cloud Specialists

**20,000+**

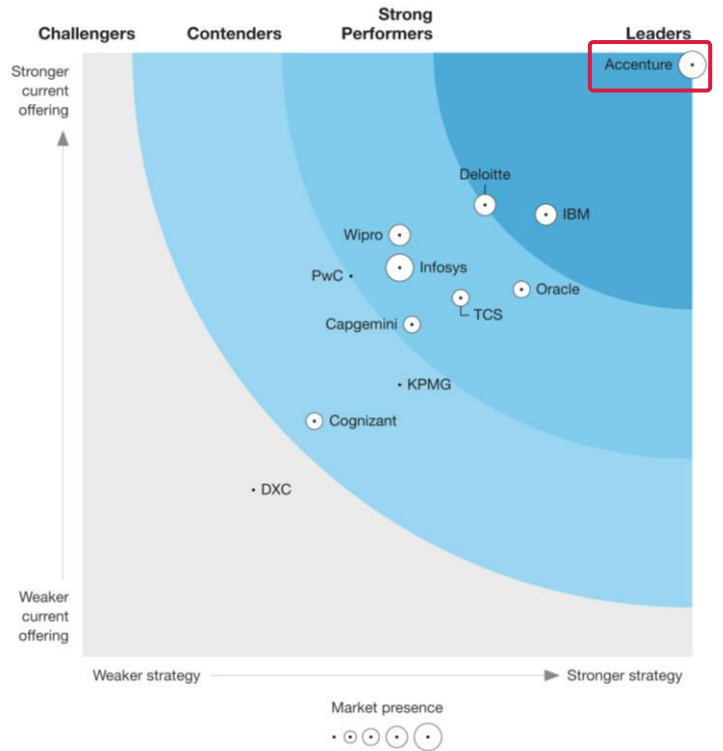


Oracle certifications with 6,500+ certified implementation specialists. 120+ Data Experts in the Accenture Enkitec Group.

# WHAT OTHER ANALYST SAY ABOUT OUR ORACLE CLOUD IMPLEMENTATION EXPERTISE

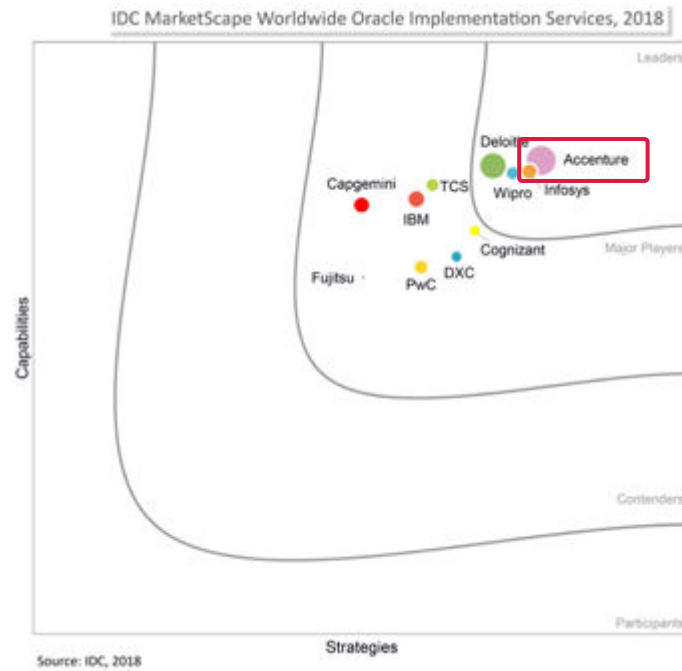
Accenture is acknowledged as leader in Oracle Cloud Implementation by various other industry analysts that refers to our experiences, assets and accelerators.

## FORRESTER WAVE™: SERVICE PROVIDERS FOR NEXT GENERATION ORACLE APPLICATIONS



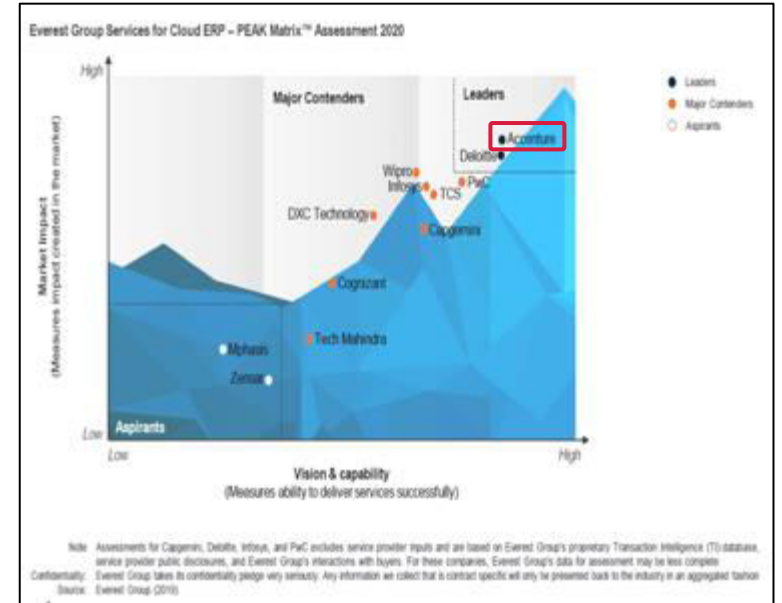
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## IDC MARKET SCAPE POSITION™: WORLDWIDE LEADER IN ORACLE IMPLEMENTATION SERVICES



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## EVEREST GROUP: LEADER IN SERVICES FOR CLOUD ERP



Note: Assessments for Capgemini, Deloitte, Infosys, and PwC excludes service provider inputs and are based on Everest Group's proprietary Transaction Intelligence (TI) database, service provider public disclosures, and Everest Group's interactions with buyers. For these companies, Everest Group's data for assessment may be less complete. Confidentiality: Everest Group takes its confidentiality pledge very seriously. Any information we collect that is contract specific will only be presented back to the industry in an aggregated fashion. Source: Everest Group (2019)

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EGR-2019-48-R-3424

# REASONS TO USE ORACLE CLOUD FOR INNOVATION

- **Focus on application development and productivity, and not get bogged down by maintenance activities**
- **Rapid deployment**
- **Powerful free offering that beats the competition**



# QUESTIONS



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