



# Oracle Multi Experience Development Platform

Modern Digital Experience with Low-code Application Development

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Luke Lee

Solution Engineer



# Agenda

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- **Oracle Multi Experience Development Platform introduction**
- Oracle Low-code Application Development
- Oracle Modern Digital Experience
- Wrap-up

# Oracle Multi-Experience Development Platform

# 什麼是MXDP?

A multi-experience development platform (MXDP) is a product or suite of products that offers professional developers (and potentially including citizen developers) **an integrated set of front-end development tools and back-end services that enable scalable development** of fit-for-purpose apps across digital touchpoints--including custom mobile apps, responsive web and PWAs, immersive, and conversational app support.

**Gartner**<sup>®</sup>

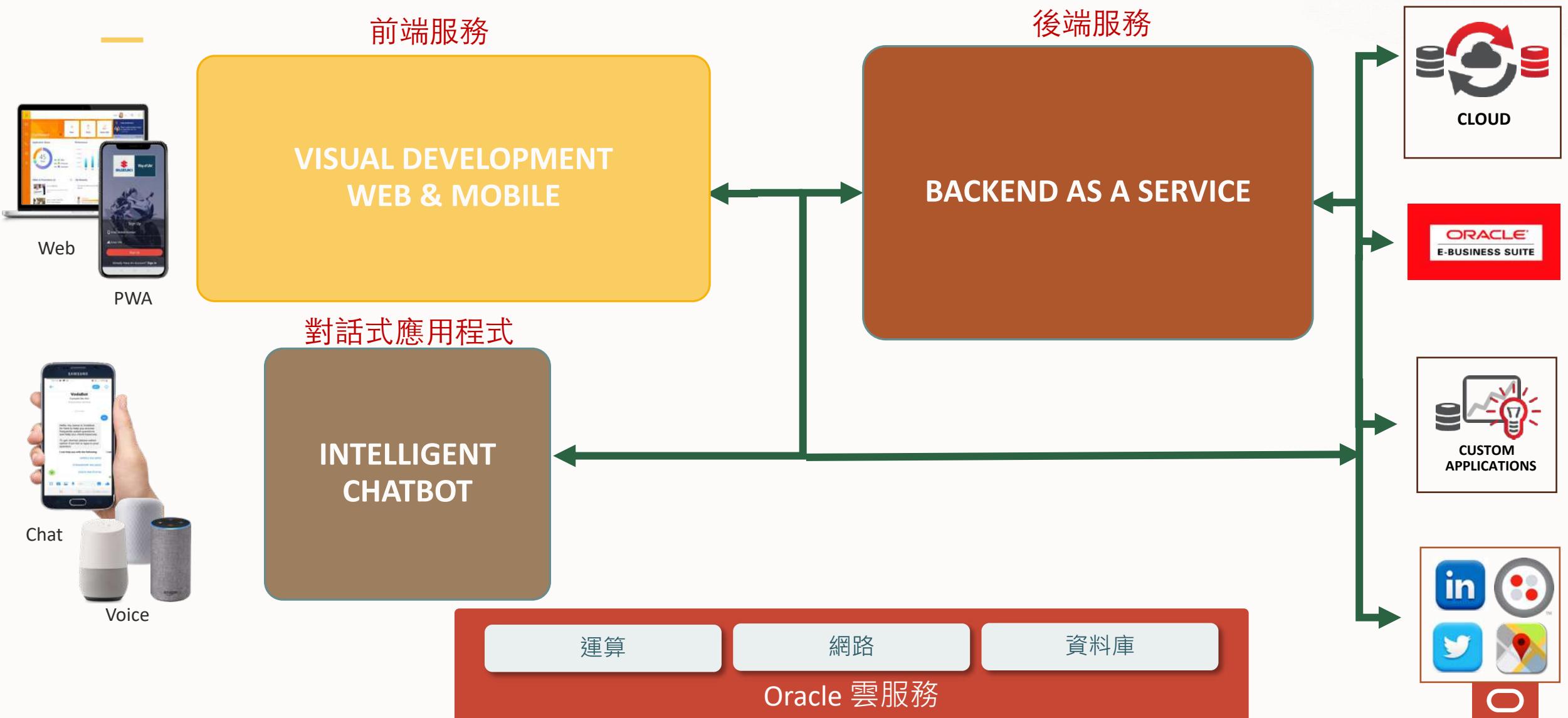
# MXDP 的優勢

- 協助企業加速數位轉型
- 企業可以在各種設備上快速擴展應用程式
- 協助開發者簡化設計流程和可重複使用的程式碼
- 由於使用高生產力的開發工具和通用的開發語言，開發人員可以在多個 Touchpoints 上提高開發生產力
- 可以重複使用核心後端服務，降低了在各種 Touchpoints 開發應用程式的成本

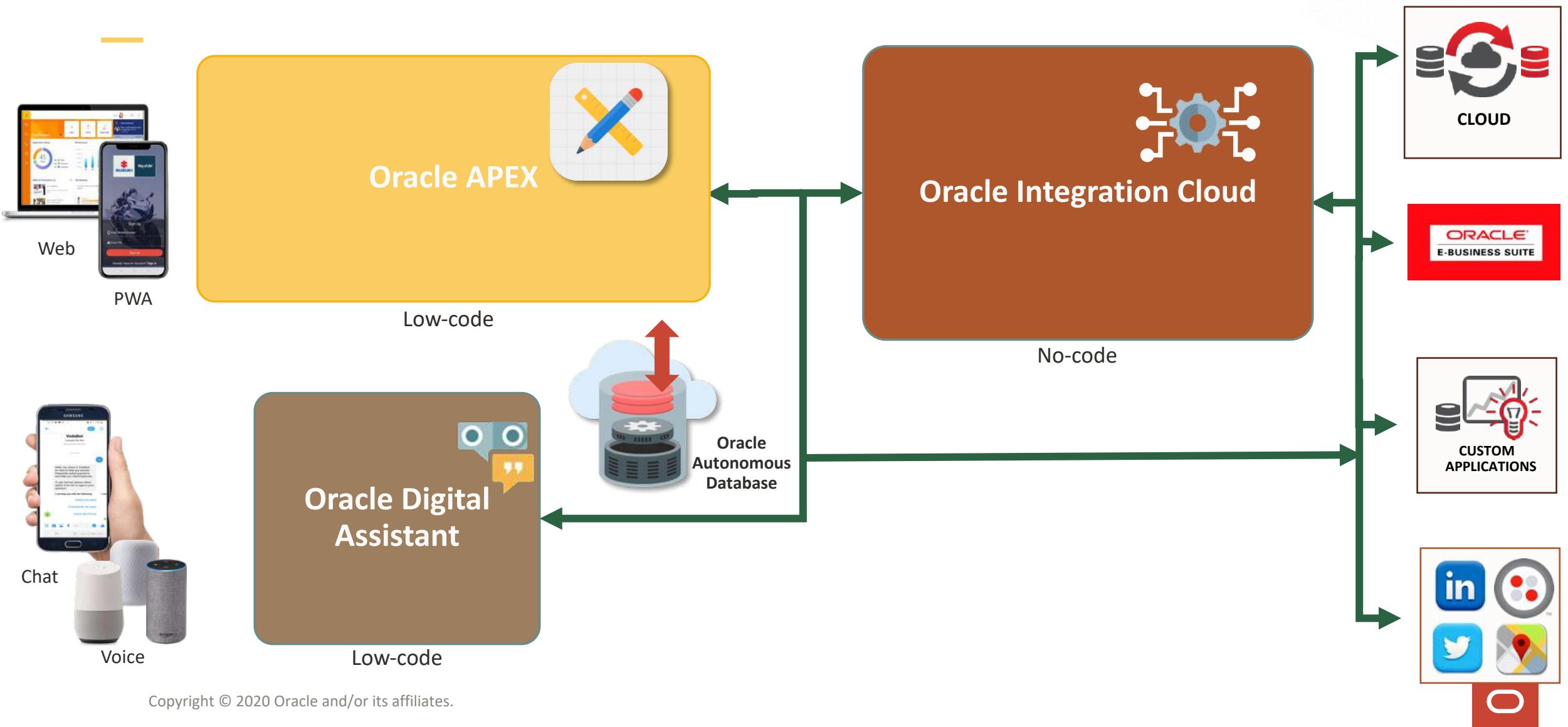


**“By 2023, more than 25% of the mobile apps, progressive web apps and conversational apps at large enterprises will be built and/or run through a multi-experience development platform”**

# Multi Experience Development Platform



# Oracle - Multi Experience Development Platform



# Agenda

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- **Oracle Low-code Application Development**
- Oracle Modern Digital Experience
- Wrap-up

# Oracle Low-code Application Development

# 未來應用程式開發會採用低程式碼開發平台

Projected to reach **\$187 Billion** by 2030

## 31.1% CAGR

業務數位化需求的增加、雲技術的採用以及對專業開發人員的依賴減少是推動低程式碼開發平台發展的關鍵因素



Source: <https://www.psmarketresearch.com/market-analysis/low-code-development-platform-market>

## 傳統應用程式開發具有許多的挑戰

- 1 需要仰賴專業人才及專業技能
- 2 開發週期長，拉長 Go-to-Market 的時間
- 3 來不及滿足逐漸增加的業務需求
- 4 建置和維護整個應用程式的成本很高
- 5 應用程式缺乏快速迭代的敏捷性



## 管理電子表單同樣具有挑戰性



手動執行數據驗證容易出錯



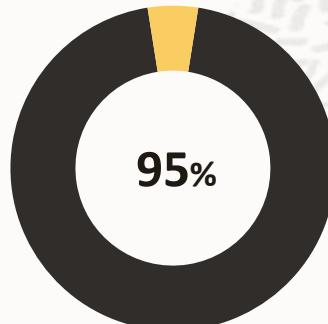
無法保證多個用戶環境下數據的準確性和完整性



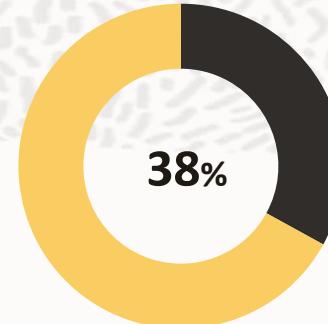
數據的安全性難以控管



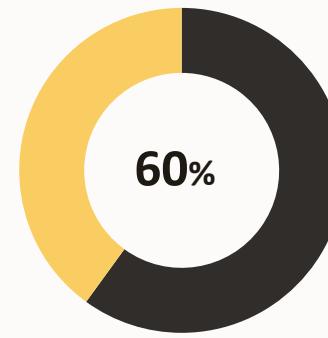
Excel 運行緩慢且難以共享



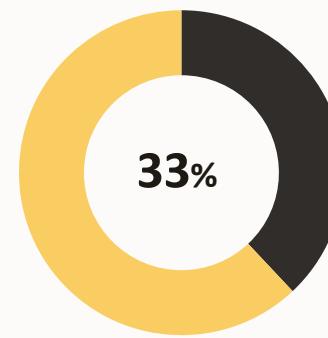
手動操作容易出錯



過時的數據和數據孤島



缺乏效率的數據編輯



難以分享數據

Source: Oracle Internal Survey

# 低程式碼開發平台能為您帶來的好處



## Rapidly

快速交付業務應用的  
應用程式



## Simplify

借助低程式碼工具簡化  
應用程式開發



## Multi-experience

視覺化設計的智能應用  
程式，可提供卓越的  
用戶體驗

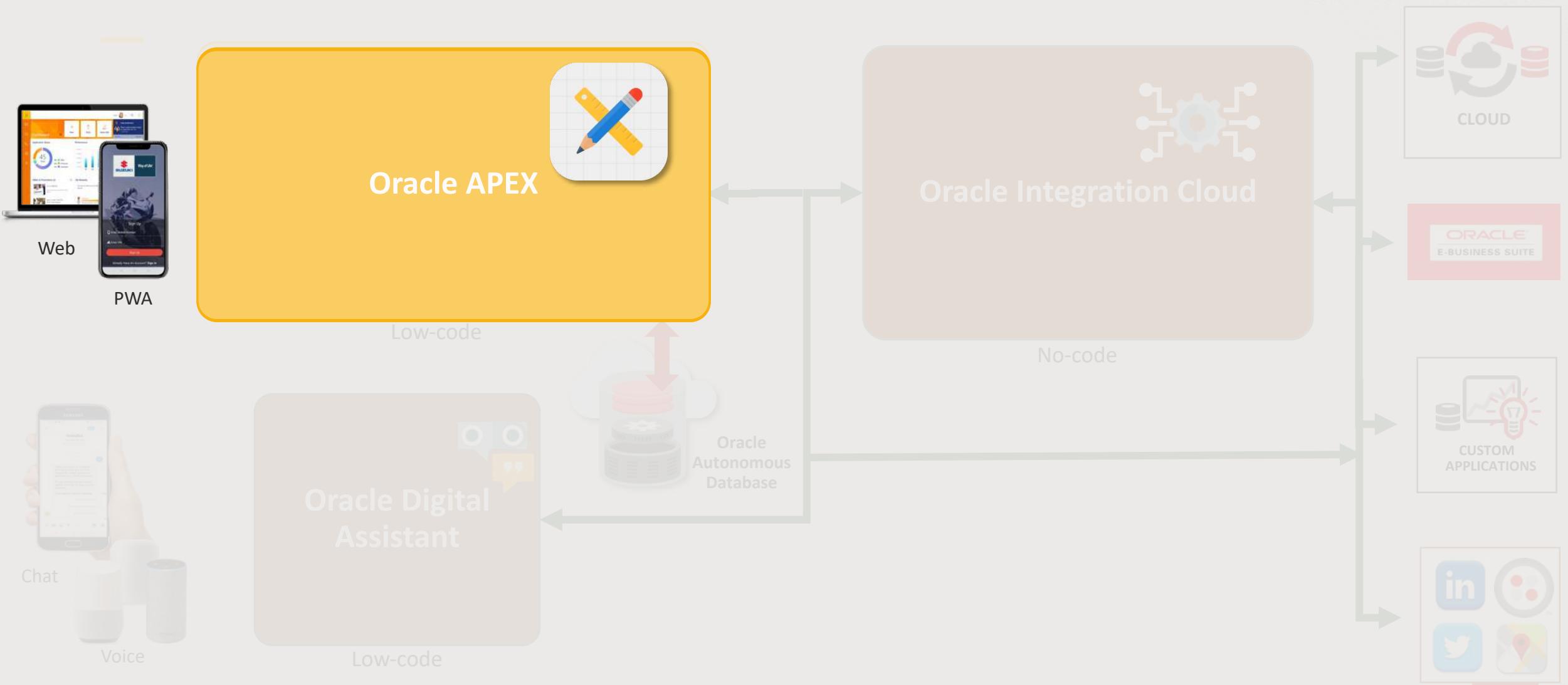


## Artificial Intelligence

無縫連接 AI 服務提升  
現有解決方案

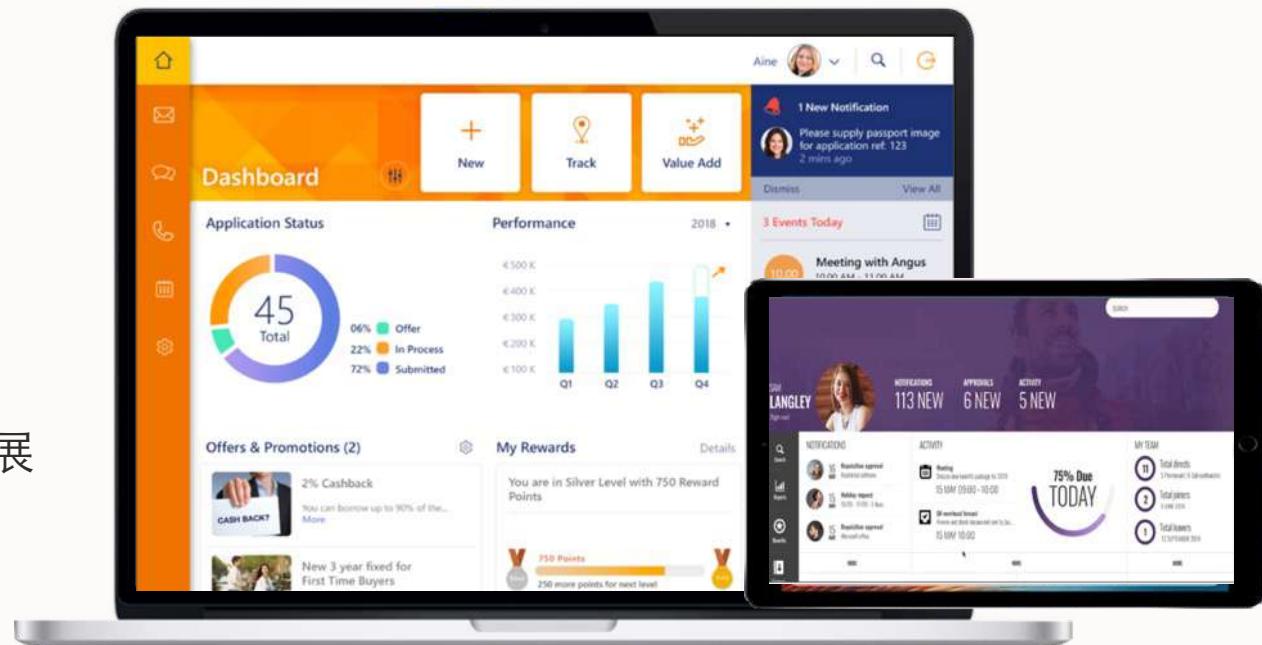


# Oracle - Low-code Application Development

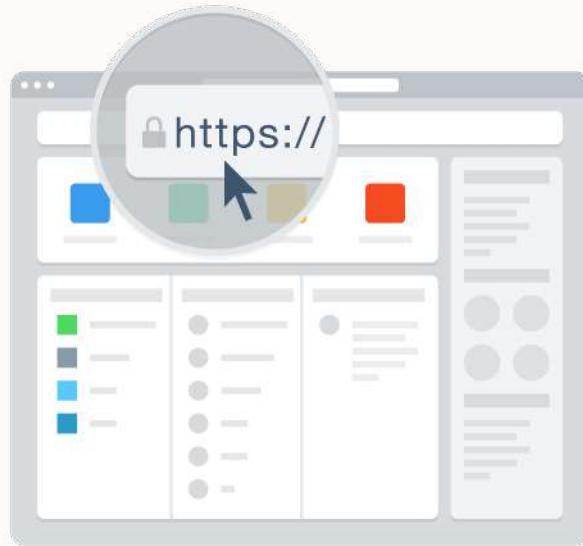


藉由 **Oracle APEX**, “以更快、更簡單的方式建置和託管應用程式，  
在OCI中提供零安裝和基於低程式碼的視覺化開發體驗”

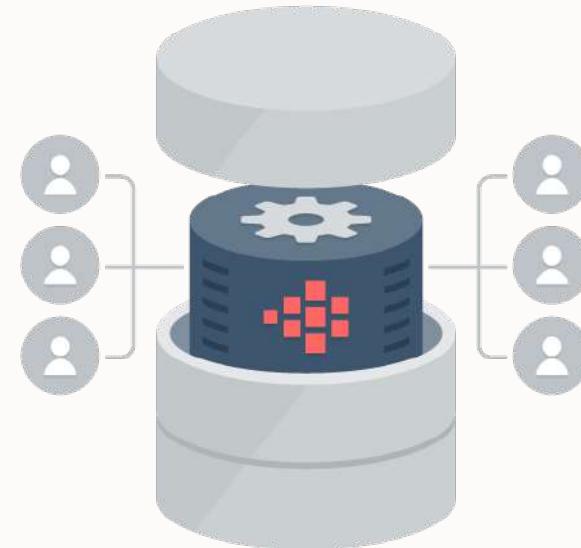
- 基於 SQL 和 PL/SQL
- 建構響應式應用程式、設計數據模型及建立 REST API
- 透過導入 Excel、CSV、JSON自動生成應用程式
- 透過提供的範本快速開發應用程式
- 使用標準 JavaScript、HTML5、CSS、SQL 和 REST 進行擴展



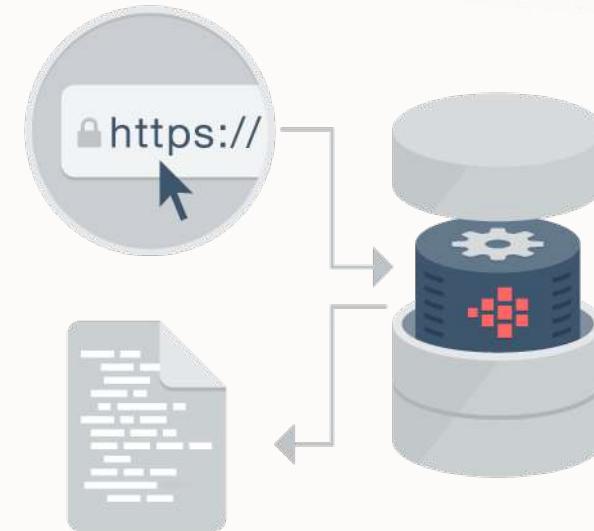
# Oracle APEX



開發電腦和行動裝置用的  
web apps

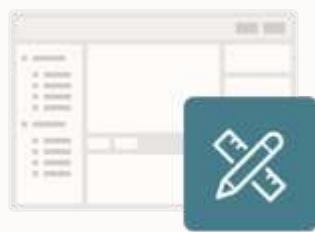


提供使用者視覺化介面，維護  
資料庫內的數據



活用 SQL 技能和資料庫功能

# Oracle APEX – 全面性的低程式碼開發平台



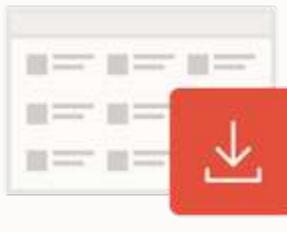
App Builder



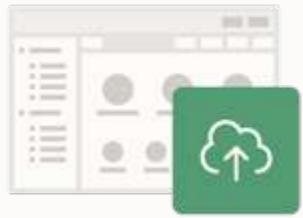
SQL Workshop



Team Development



App Gallery



RESTful Services



Object Browser



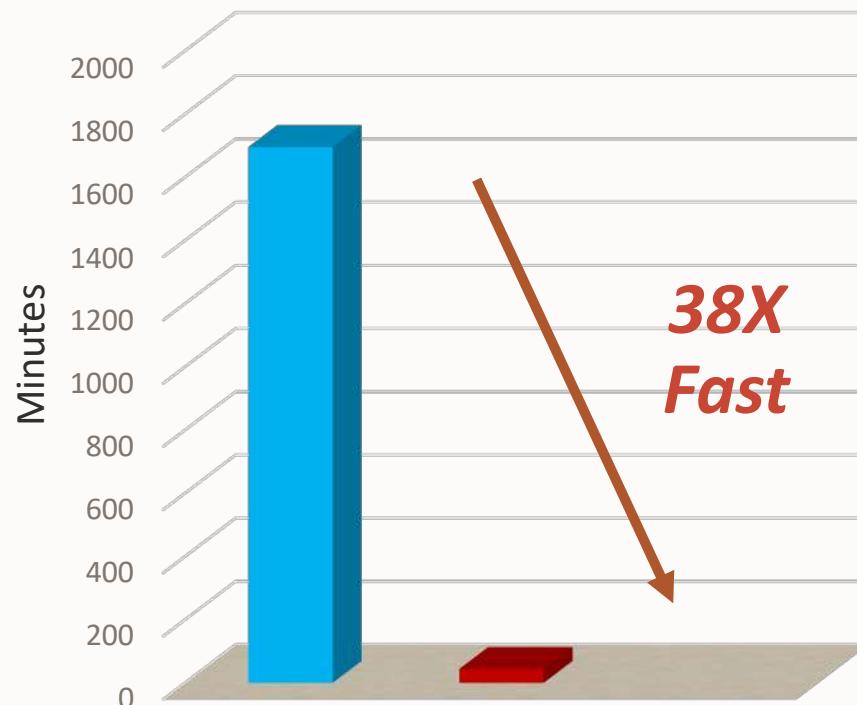
Data Loading



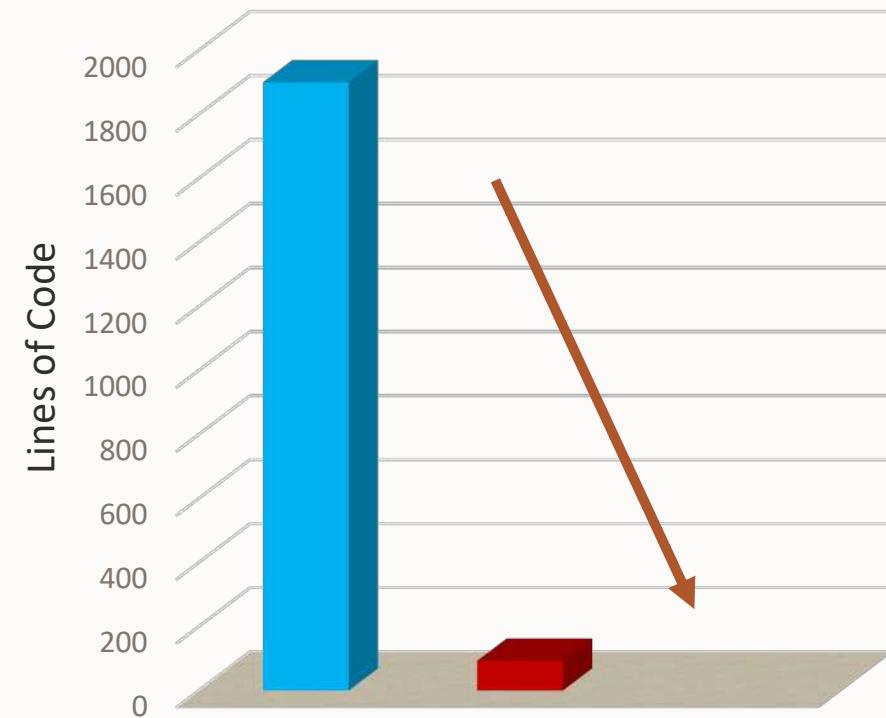
Monitor

# 在Oracle APEX 中的開發速度明顯加快

## Development Time



## Lines of Code



[Time and Motion Study : ReactJS vs. Low-Code APEX](#)

# 現代化 Oracle Forms



- 基於 SQL 和 PL/SQL
- 可重複使用的 DB 套件、函式
- 輕鬆培訓開發人員開發 APEX
- 在平板電腦、手機上運行應用程式
- 透過轉換器可以輕鬆地將Forms轉換APEX

# Oracle APEX 評選為 2021 年 Gartner Peer Insight customer choice

ORACLE

Oracle APEX named a 2021 Gartner Peer Insights Customers' Choice for Enterprise Low-Code Application Platforms

See what our users have to say on Gartner Peer Insights



Apr 24, 2020



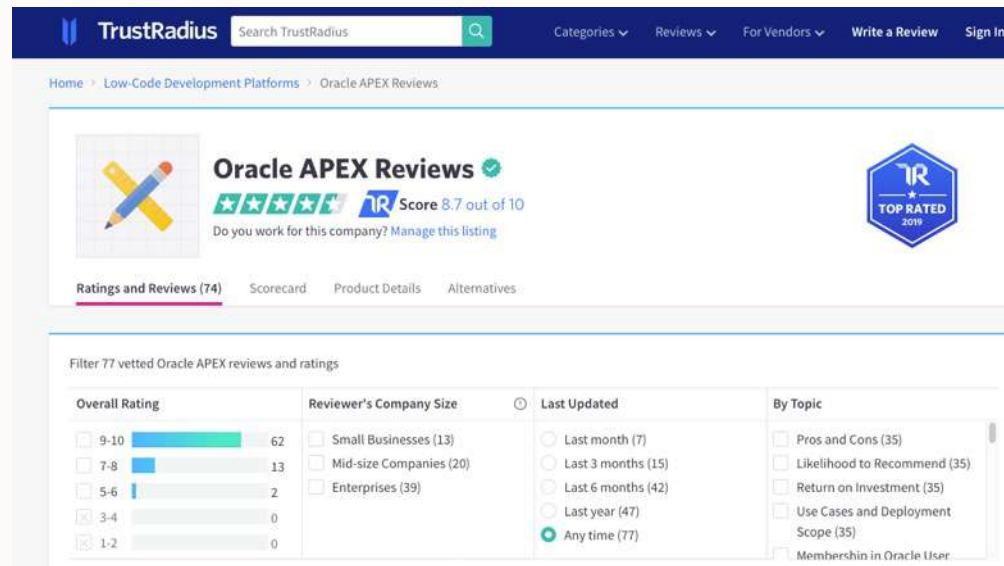
“APEX is a fantastic product. As far as low-code, rapid application tools go, I've never found anything that even comes close to the productivity that APEX enables.”

– Chief Data Officer, Energy & Utilities Industry

The Gartner Peer Insights Customers' Choice badge is a trademark and service mark of Gartner, Inc., and/or its affiliates, and is used herein with permission. All rights reserved. Gartner Peer Insights Customers' Choice constitute the subjective opinions of individual end-user reviews, ratings, and data applied against a documented methodology; they neither represent the views of, nor constitute an endorsement by, Gartner or its affiliates

<https://www.gartner.com/reviews/market/enterprise-low-code-application-platform/vendor/oracle/product/application-express-apex/review/view/1341735>

# APEX 在 Trust Radius 和 Gartner Peer Insights 的評價



TrustRadius Search TrustRadius Categories Reviews For Vendors Write a Review Sign In

Home > Low-Code Development Platforms > Oracle APEX Reviews

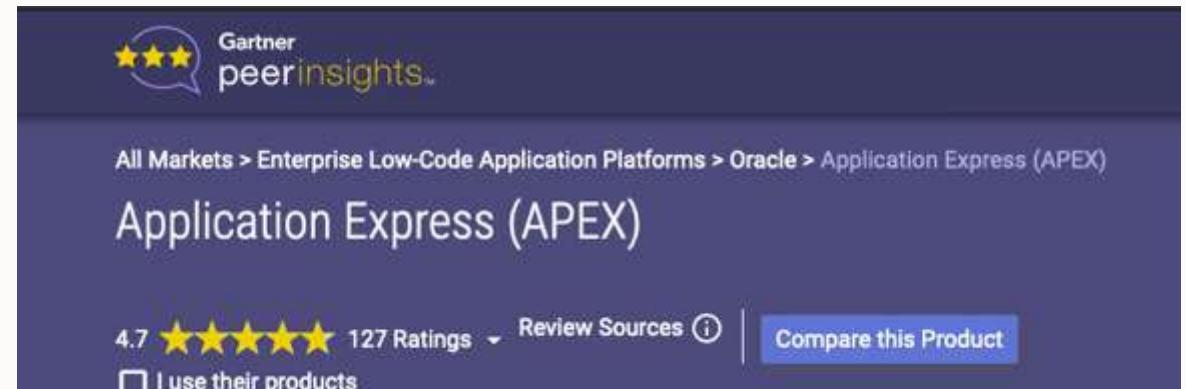
**Oracle APEX Reviews** ✓   **IR Score 8.7 out of 10**

Do you work for this company? [Manage this listing](#)

**Ratings and Reviews (74)** [Scorecard](#) [Product Details](#) [Alternatives](#)

Filter 77 vetted Oracle APEX reviews and ratings

Overall Rating	Reviewer's Company Size	Last Updated	By Topic
<input type="checkbox"/> 9-10  62	<input type="checkbox"/> Small Businesses (13)	<input type="radio"/> Last month (7)	<input type="checkbox"/> Pros and Cons (35)
<input type="checkbox"/> 7-8  13	<input type="checkbox"/> Mid-size Companies (20)	<input type="radio"/> Last 3 months (15)	<input type="checkbox"/> Likelihood to Recommend (35)
<input type="checkbox"/> 5-6  2	<input type="checkbox"/> Enterprises (39)	<input type="radio"/> Last 6 months (42)	<input type="checkbox"/> Return on Investment (35)
<input type="checkbox"/> 3-4  0	<input type="checkbox"/> Last year (47)	<input type="radio"/> Last year (47)	<input type="checkbox"/> Use Cases and Deployment Scope (35)
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**Gartner peerinsights** 

All Markets > Enterprise Low-Code Application Platforms > Oracle > Application Express (APEX)

## Application Express (APEX)

4.7  127 Ratings [Review Sources](#)  [Compare this Product](#)

I use their products

**"Excellent Product , Must Be Implement"**

Submitted: February 23, 2019 [Email this page](#)

1 of 1 found this review helpful.

<https://www.trustradius.com/products/oracle-application-express/reviews>

<https://www.gartner.com/reviews/market/enterprise-low-code-application-platform/vendor/oracle/product/application-express-apex?pageNum=5>

# 客戶案例- Union Investment

## 開發Web 應用程式來管理投資基金

- 實施 **Oracle APEX** 以支持公司的業務應用程式- FondsProfiler 的快速開發，該應用程式可顯著提高成本效益並增強客戶服務
- 能夠在 FondsProfiler 中自動處理所有投資基金數據，包括具有多達 500 個複雜資產分類，這些數據以前使用電子表單分發給 IT 人員，藉由APEX提高業務敏捷性
- 用戶現在可以立即透過應用程式訪問所有基金資訊，並且授權管理人員可以建立和修改數據

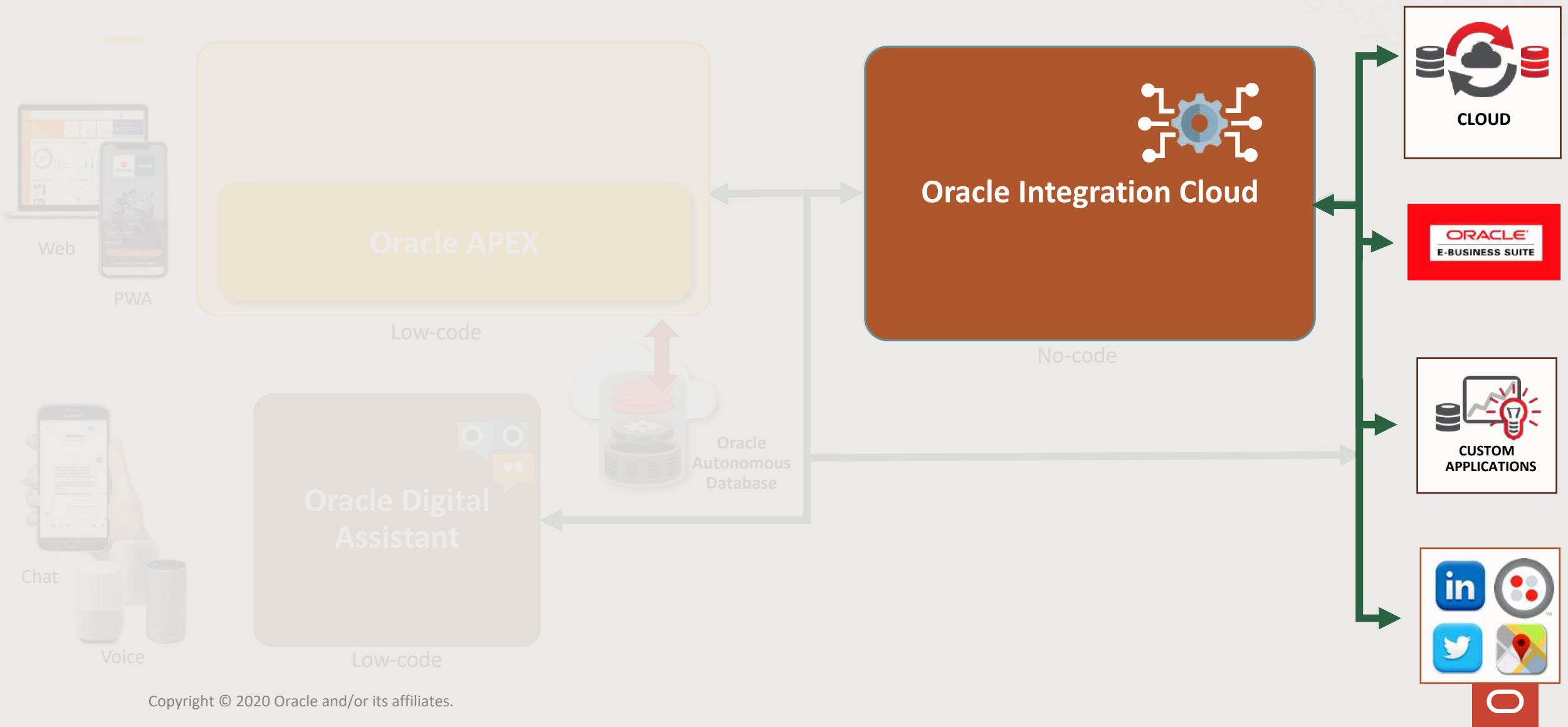


Union  
Investment

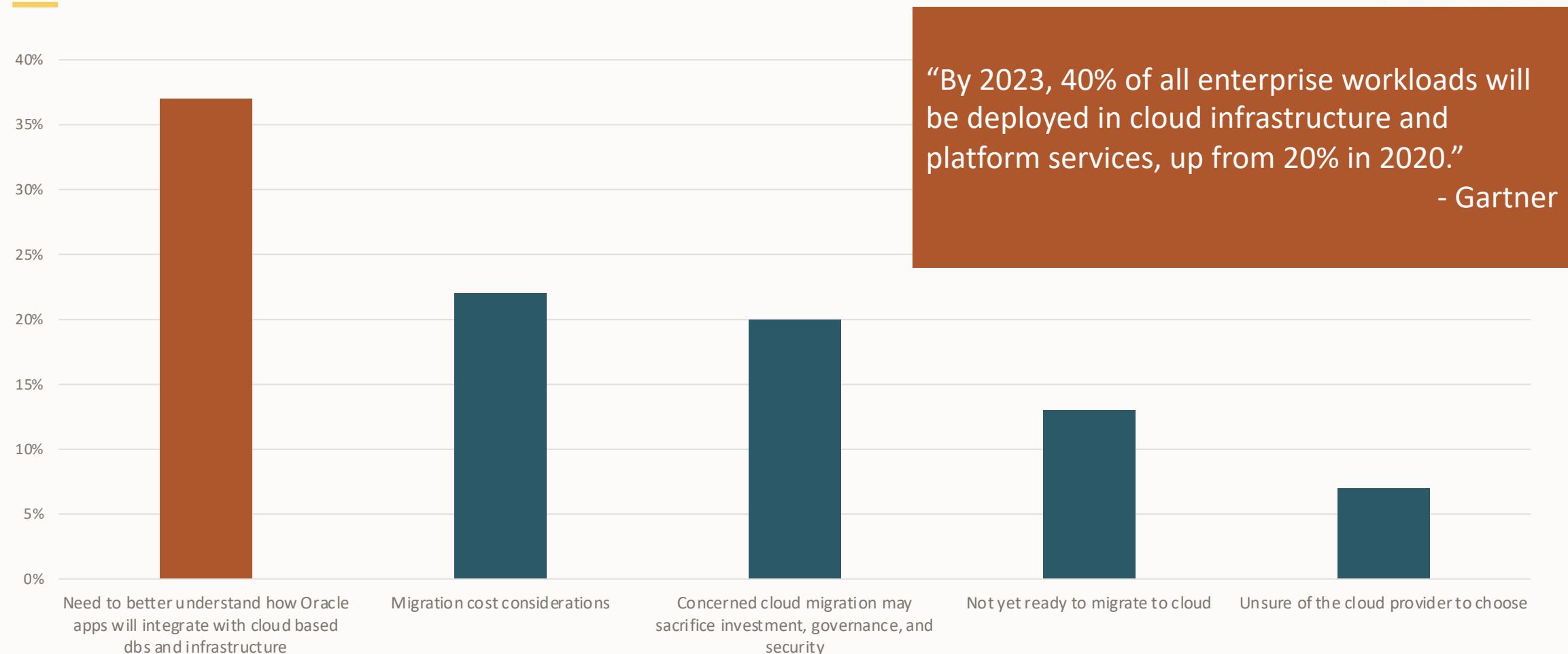
“We have a long history with Oracle Database, which we rely on to be efficient in our asset management business. It is certainly the market’s leading database, and by using Oracle Application Express we have developed a game-changing web application at the very heart of our business, which has enabled process improvements throughout our core operations.”

**Rolf Fillinge.**  
**Team Leader, Union Investment**

# Oracle - Low-code Application Development



# Integration 是阻止客戶遷移到雲的第一大挑戰

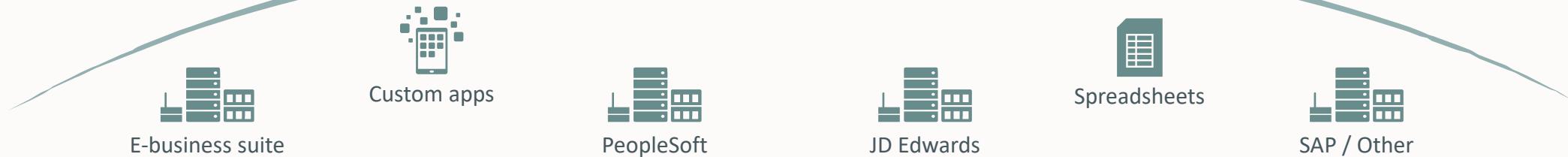


# 整合是很複雜的任務

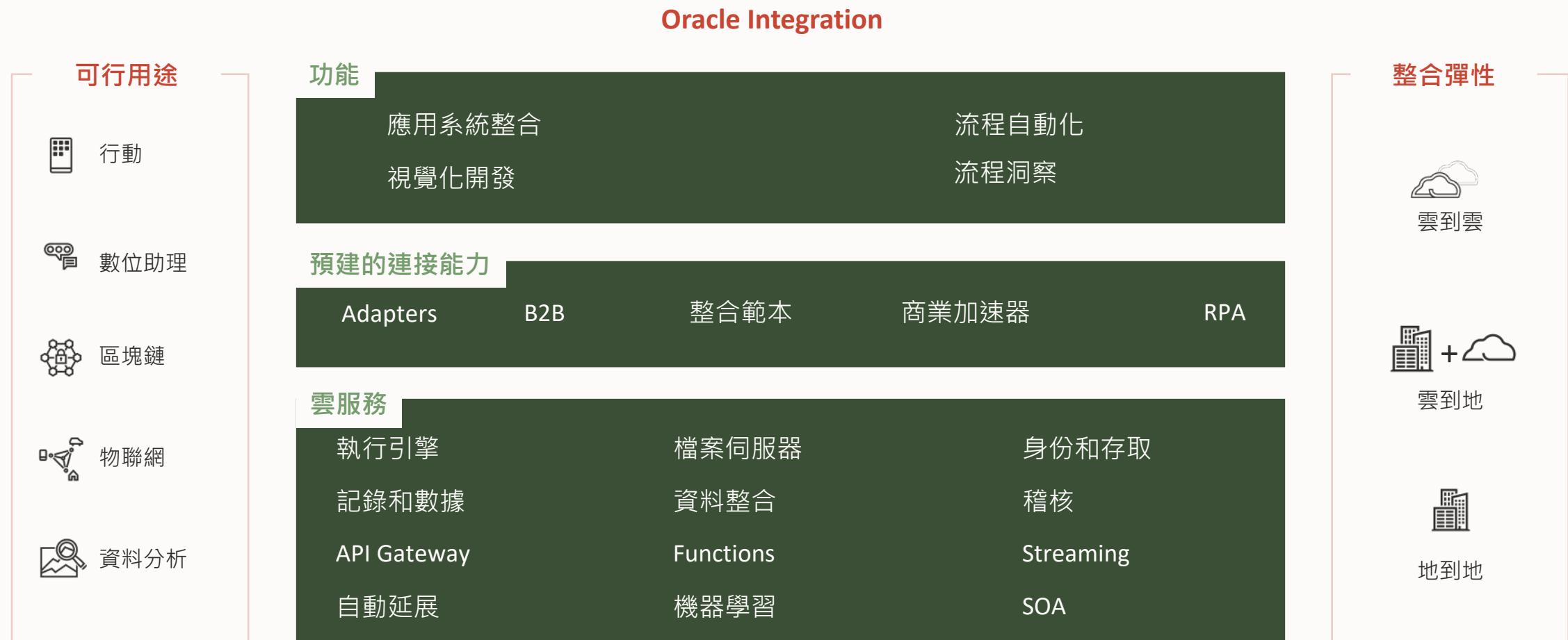


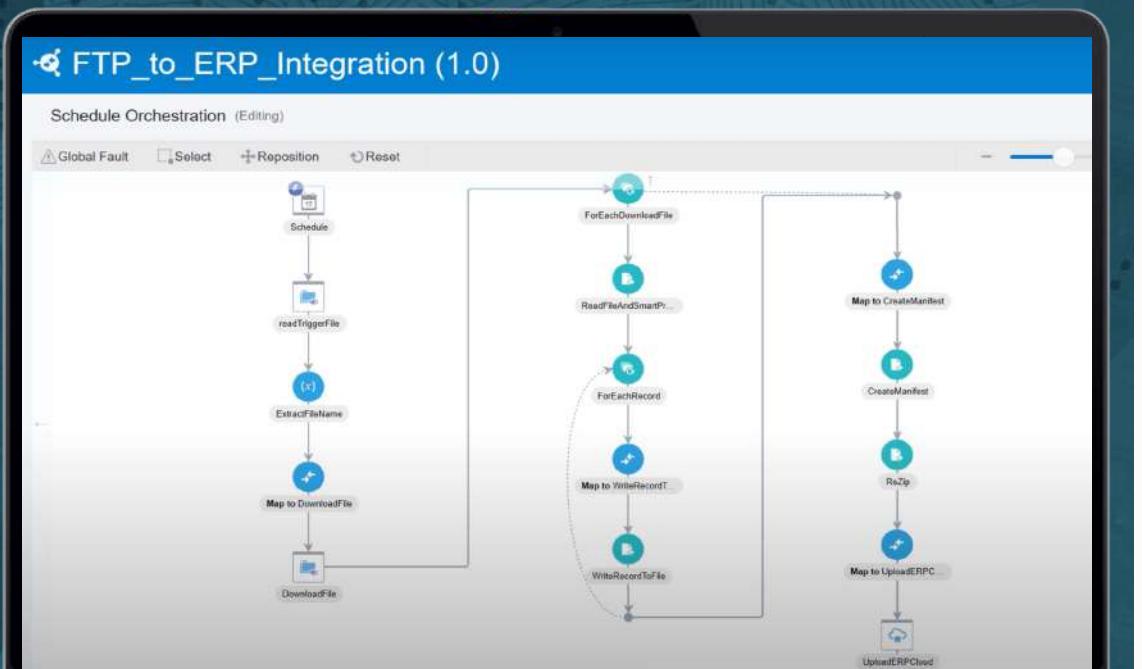
交付和更新緩慢

地端



# Oracle Integration





## 應用系統整合

- > 70 個 Oracle 的預先建構的adapters
- 利用預先建構的集成方法和加速器
- 使用內建的 AI 功能減少多達 60% 的開發人員時間
- 將任何 SaaS 與本地應用程式連接的速度提高 10 倍
- 將 SaaS 應用程式擴展到現有和新的應用程式生態圈中

# 連接企業級應用

## ERP Connectivity



ORACLE NETSUITE  
ORACLE E-Business Suite  
ORACLE JD Edwards

ERP Cloud EPM Cloud Commerce Cloud Utilities Logistics Trace & Trace

salesforce SAP S/4HANA SAP Commerce Cloud SAP Ariba CONCERN Shopify

## HCM Connectivity



HCM Cloud Taleo Talent Acquisition Cloud Taleo Talent Cloud for Midsize

successfactors An SAP Company workday

## Productivity and Social



Jira DocuSign  
facebook twilio  
Eventbrite

Google Calendar

Twitter Trello

Gmail box

Google Tasks

MS Contacts

Adobe Sign

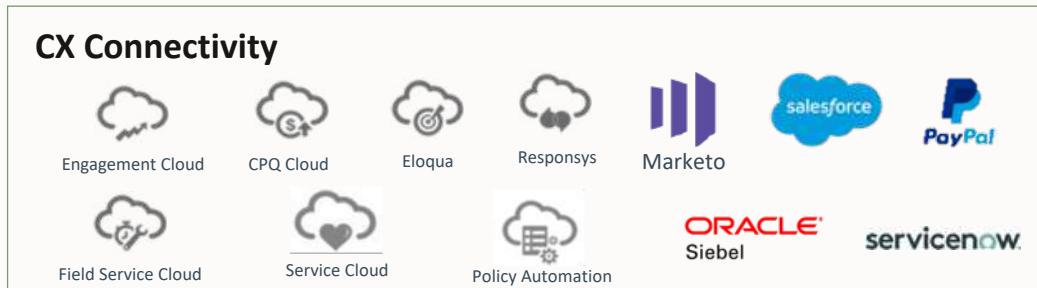
MS Email

LinkedIn

SurveyMonkey

MS Calendar

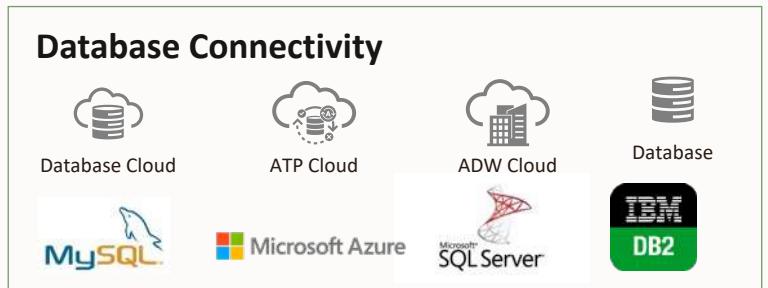
## CX Connectivity



Engagement Cloud CPQ Cloud Eloqua Responsys Marketo salesforce PayPal

Field Service Cloud Service Cloud Policy Automation ORACLE Siebel servicenow

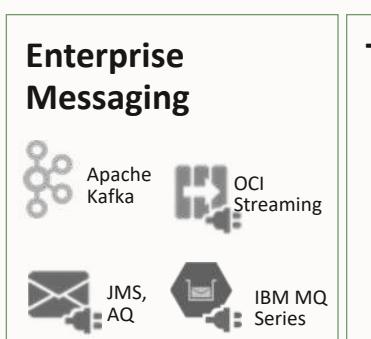
## Database Connectivity



Database Cloud ATP Cloud ADW Cloud Database

MySQL Microsoft Azure Microsoft SQL Server IBM DB2

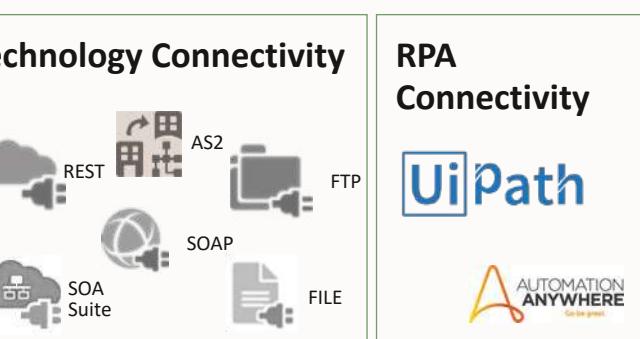
## Enterprise Messaging



Apache Kafka OCI Streaming

JMS, AQ IBM MQ Series

## Technology Connectivity



REST AS2 FTP

SOAP FILE

SOA Suite

## RPA Connectivity



UiPath AUTOMATION ANYWHERE

## Future Proof

+

Limit maintenance and upgrade costs  
Oracle supported



# Oracle Integration 加速您的數位轉型



## 快速交付

- 將交付時間縮短 6-10 倍
- 能在數分鐘內看到成果



## 成本控管

- 降低技術開發成本
- 最大限度地減少升級測試和驗證



## 限制風險

- 簡化交付的技術複雜性
- 減少多雲和混合身份暴露
- 利用最佳實踐避免延誤



## 未來擴展

- 依照需求快速擴展
- 整合包括 RPA、區塊鏈、數位助理、物聯網

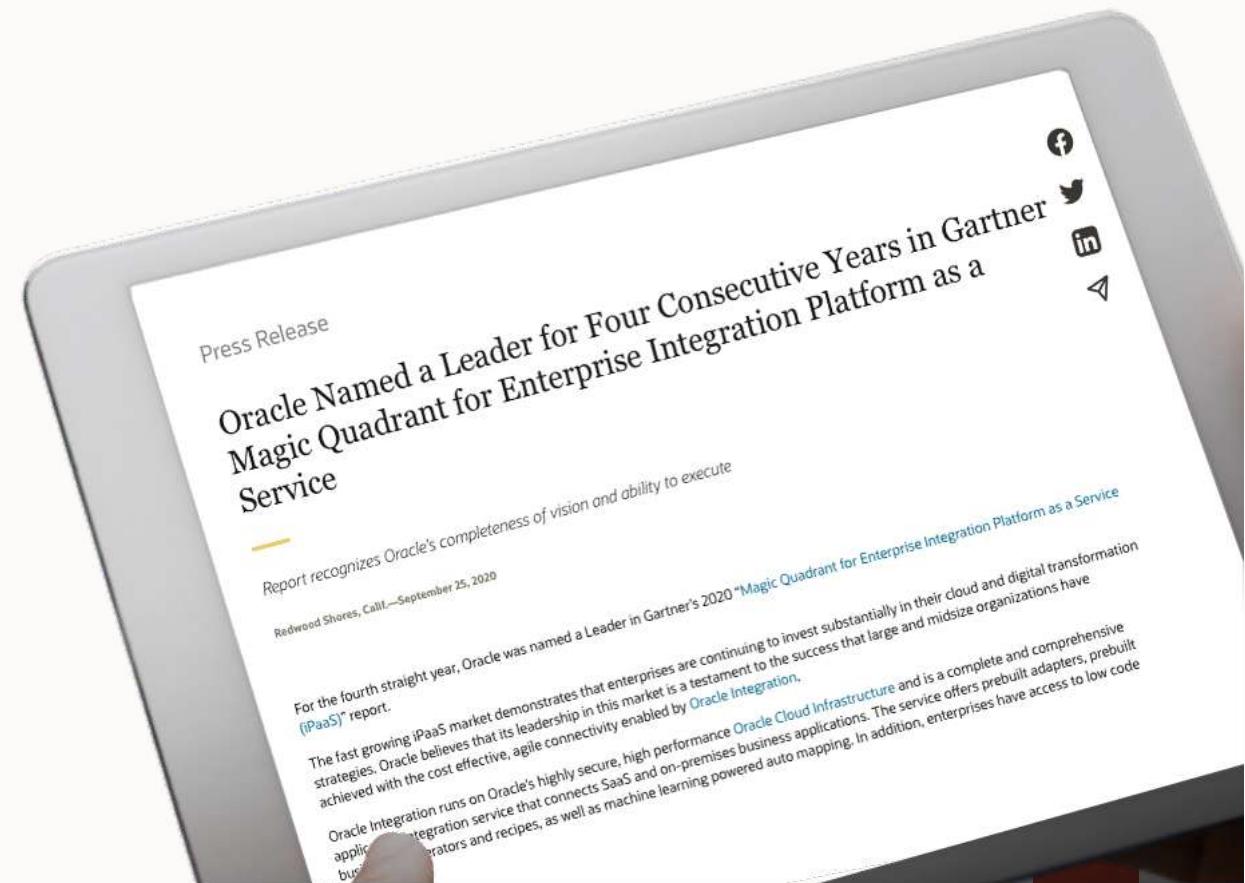
# Oracle 連續第四年被評為leader

Sept. 2020 Gartner Magic Quadrant for Enterprise Integration Platform as a Service

“Gartner estimates that the iPaaS market approached \$2.5 billion in revenue during 2019 and grew by approximately 48%, compared with 2018. We estimate that the iPaaS market will reach over \$5.6 billion in revenue by 2024 (see Forecast: Enterprise Infrastructure Software, Worldwide, 2018-2024, 2020 Update).”

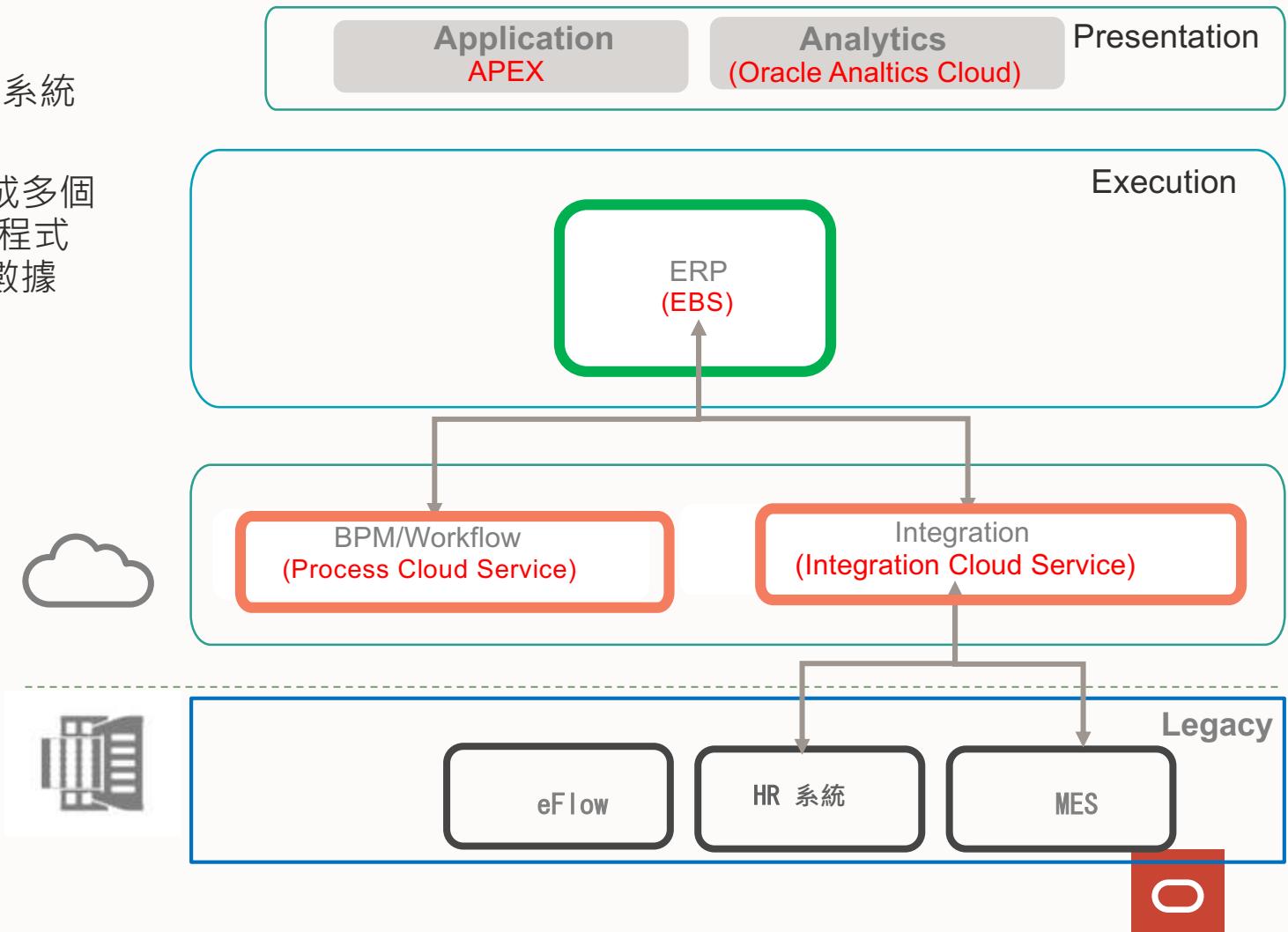
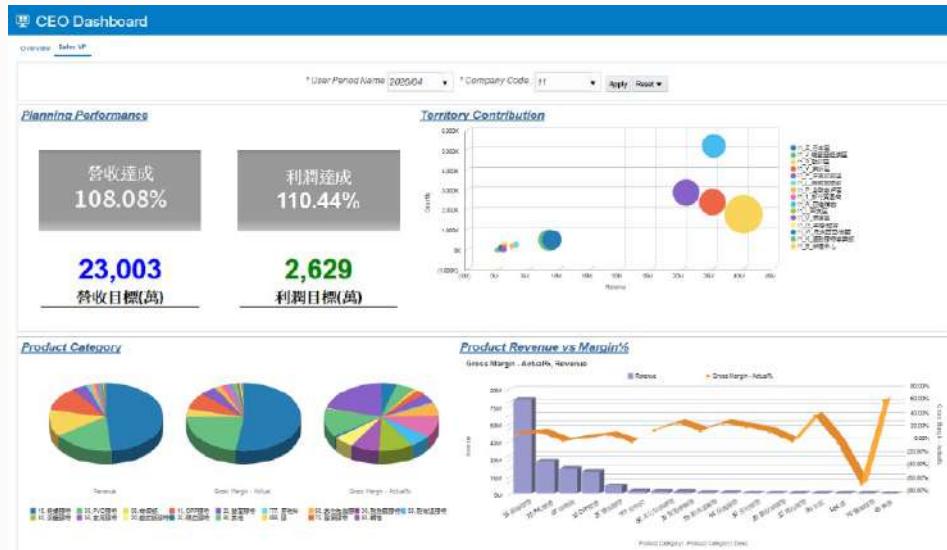
[Link to Gartner Magic Quadrant report](#)

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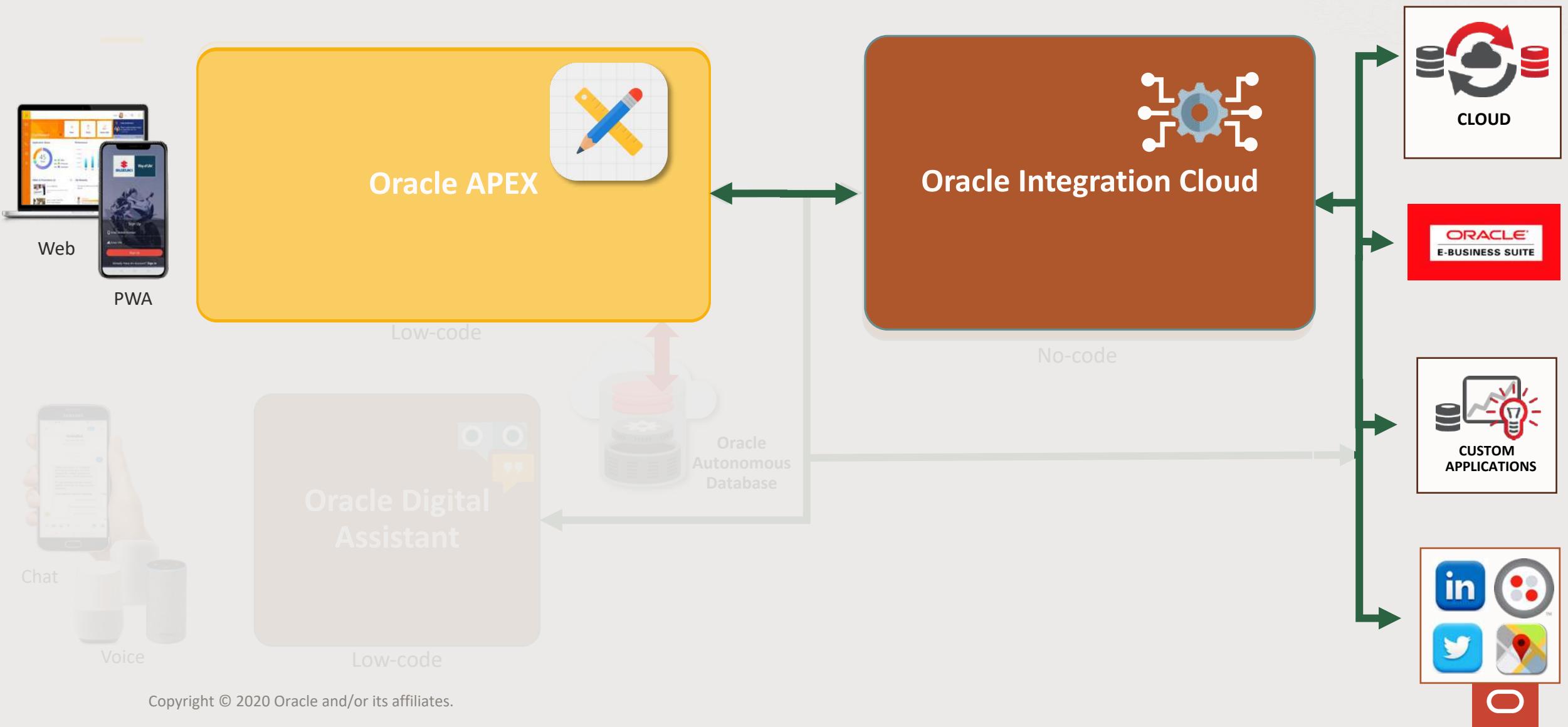


# 客戶案例-全球材料製造商

- 透過利用高度靈活的 **Oracle Integration Cloud Service**，整合了EBS 與本地端HR 系統和其他系統並建立請假、出差等審核流程
- 使用 **Oracle Autonomous Data Warehouse** 集成多個數據源的資料，透過**APEX**快速建立表單應用程式與資料庫互動；也利用**Analytics Cloud** 分析數據

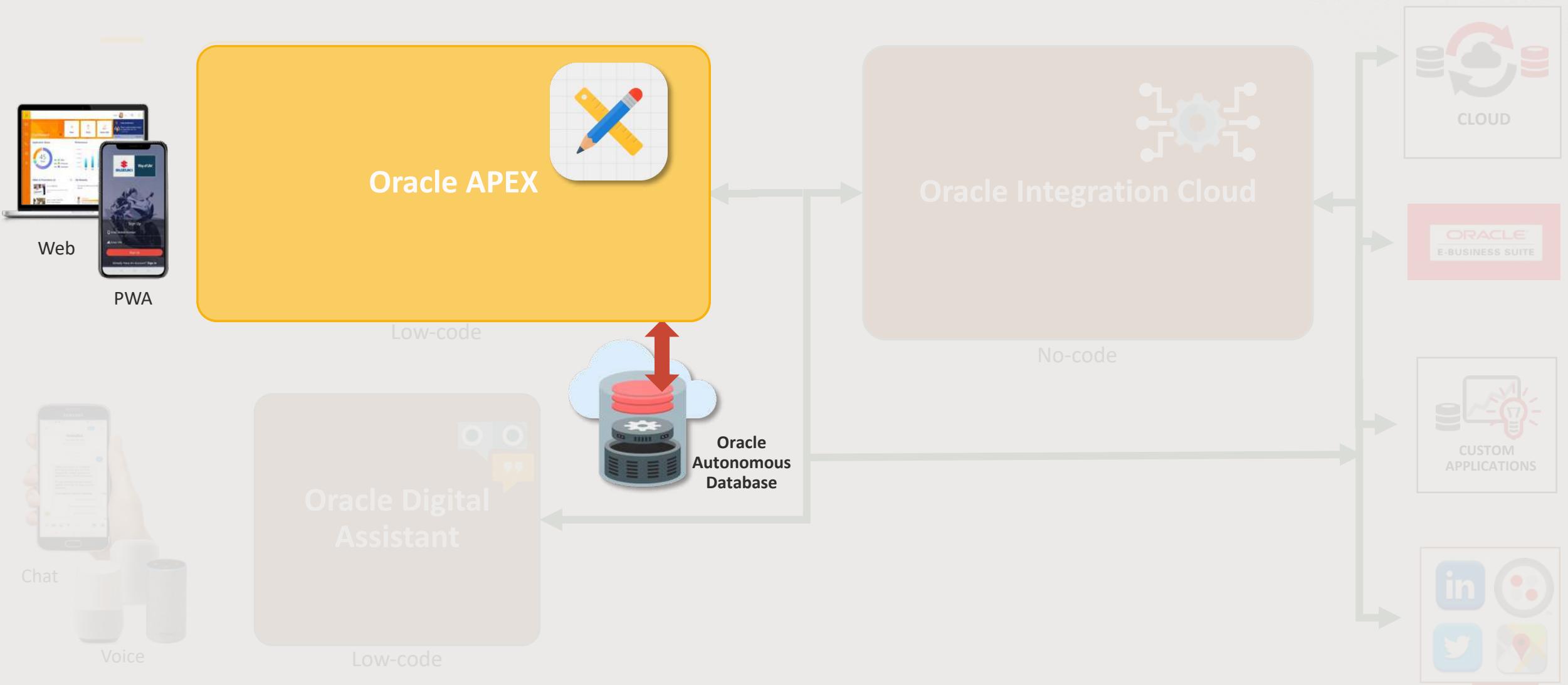


# Oracle - Low-code Application Development

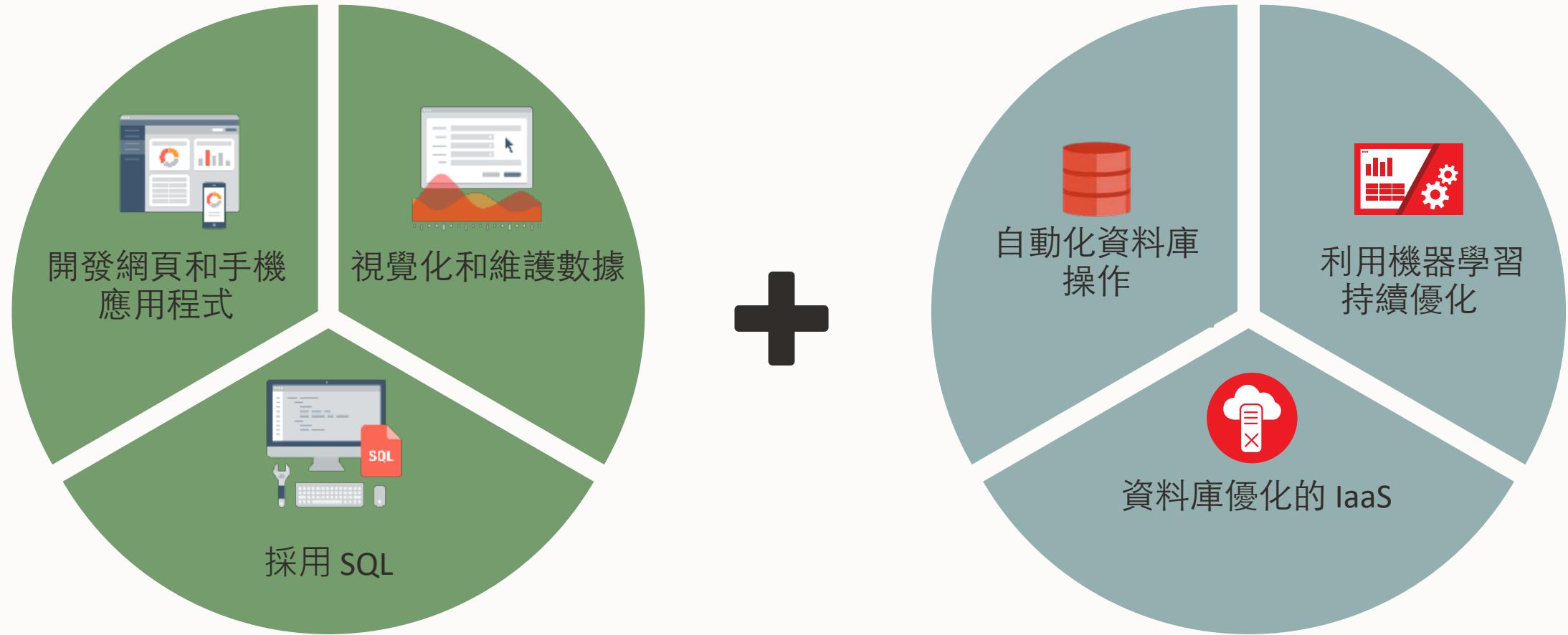


# Low-code Application Development

## with Superior Data Management



# 在Autonomous Database 中提供免費的Oracle APEX



# Autonomous Database



**部署**

快速輕鬆地建立任務關鍵型資料庫



**安全**

保護數據免受外部和內部威脅



**管理**

自動化所有基礎設施和資料庫維護



**高可用性**

無需停機即可從任何故障中恢復



**擴展**

支援擴展以獲得最高性能和最低成本



**優化**

無需手動調整即可獲得最佳工作負載

# 分析和視覺化數據



Oracle APEX

Oracle Autonomous  
Database

Oracle Analytics  
Cloud

# Oracle Analytics Cloud Service

- Deploy with ease (簡易部署)
- Open connectivity (資料連結器可連結多種資料源)
  - E.g. Amazon Redshift, Microsoft SQL Server, Snowflake, Google Big Query
- Data enrichment (資料豐富化)
  - E.g. 智能資料描述
- Data flows (數據整理工具)
  - E.g. 資料清洗, 轉換, 整合的工具
- Self-service analytics (自助式資料探索)
- Machine learning (機器學習)
- Mobile analytics (原生行動裝置應用程式)



# 客戶案例- AsiaPay

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- Oracle Autonomous Data Warehouse 每年可處理超過 4000 萬筆交易，安全性更高，管理更少
- 在移動裝置跟觸控設備中來自物聯網和生物識別技術的數據量增長了 80%
- 使用 Oracle Analytics 進行即時詐欺預防和個人化服務
- 加快上市時間以支援新的支付方式



# Agenda

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- Oracle Multi Experience Development Platform introduction
- Oracle Low-code Application Development
- **Oracle Modern Digital Experience**
- Wrap-up

# 什麼是 digital experiences?



自然對話

無需下載

24/7/365 隨時可用

更多的溝通方式

單一服務窗口

# Digital Experience 帶來的益處



**Up to 30% Reduction**

運營成本

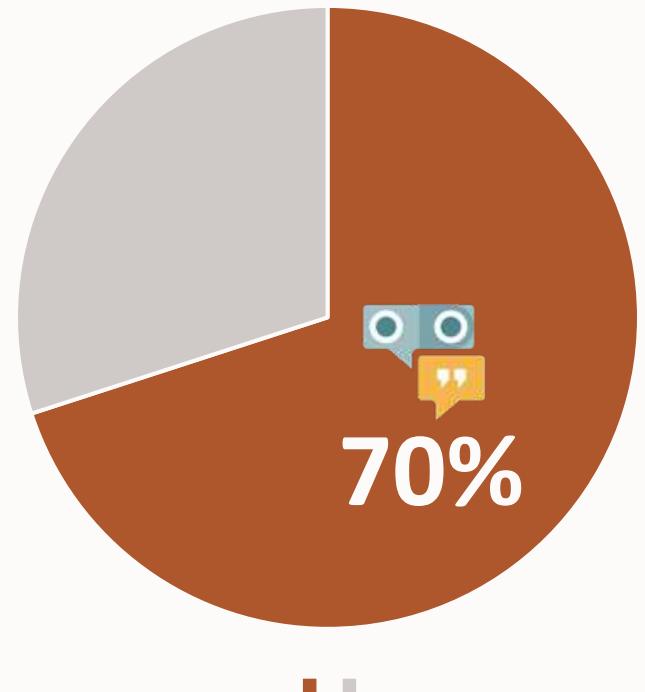
**Improve Up to 60%**

客戶滿意度、員工生產力和服務水平

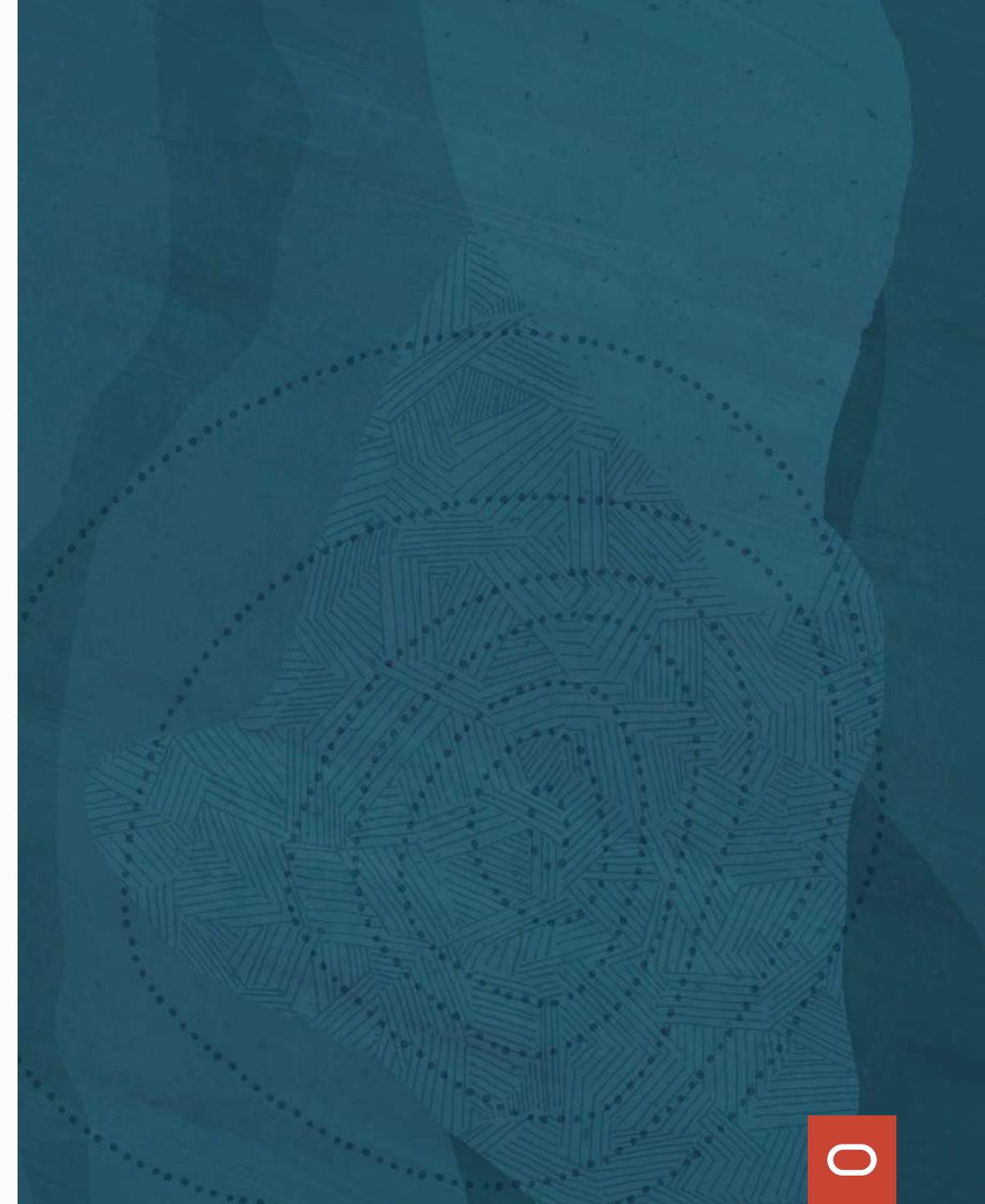
**2X Improvement**

在活動轉化率和客戶忠誠度

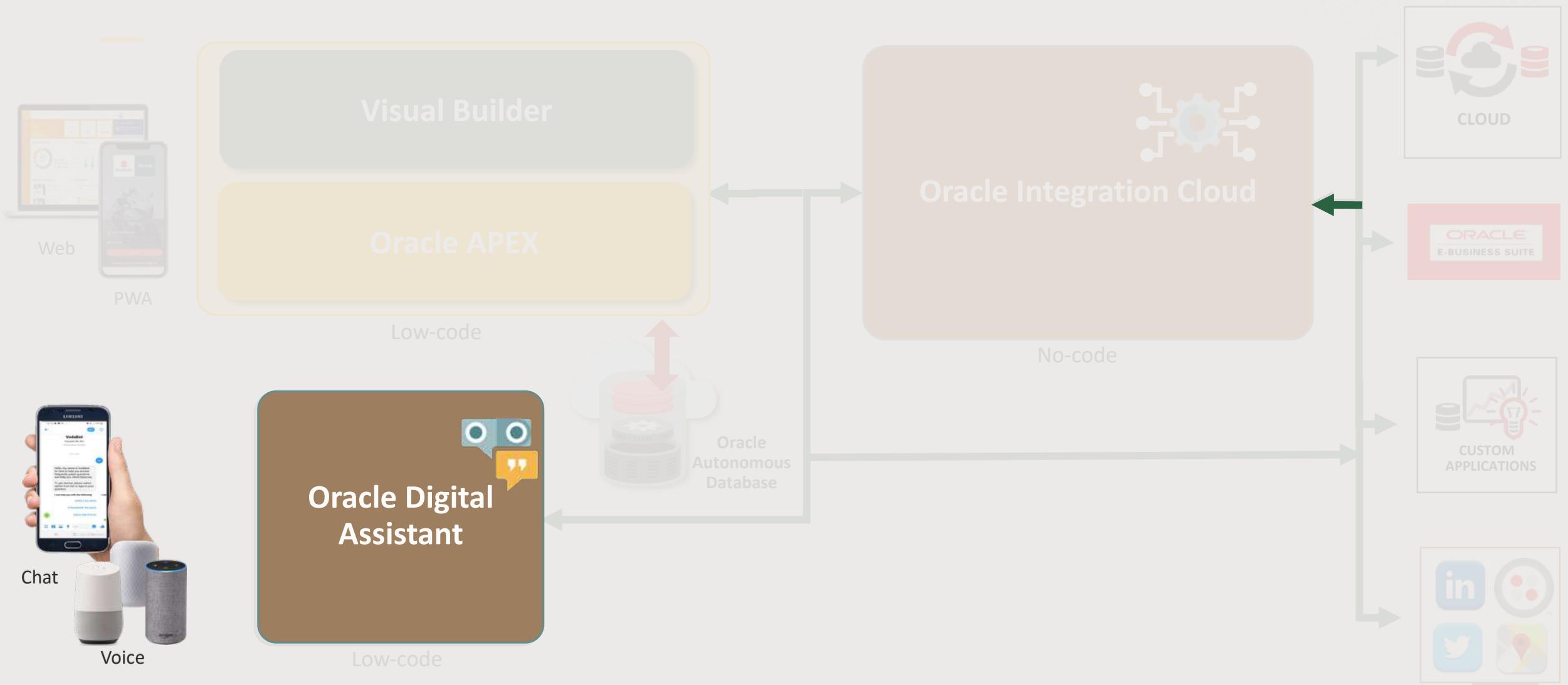
# 到 2022 年，預測上班族每天與 AI 對話平台的互動



- By 2022, 70% of white-collar workers will interact with conversational platforms on a daily basis.

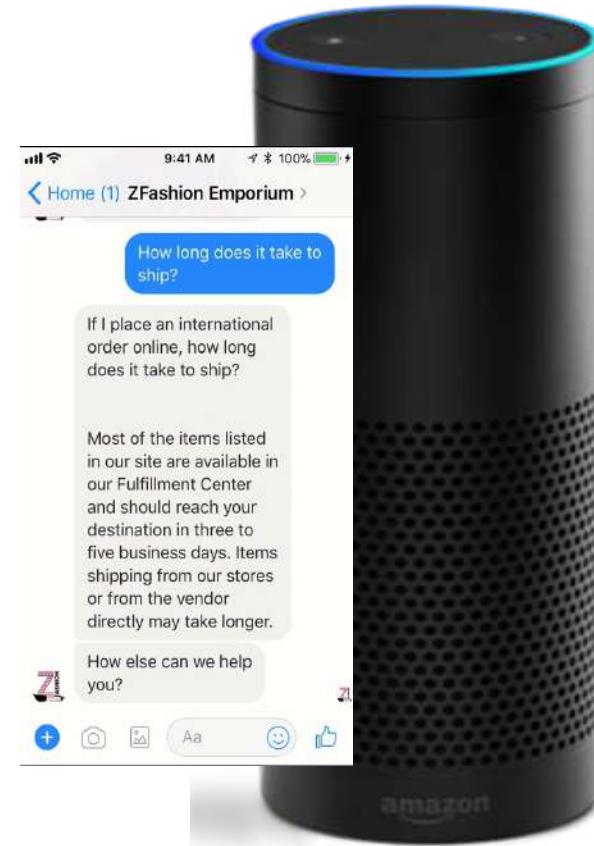


# Oracle - Modern Digital Experience

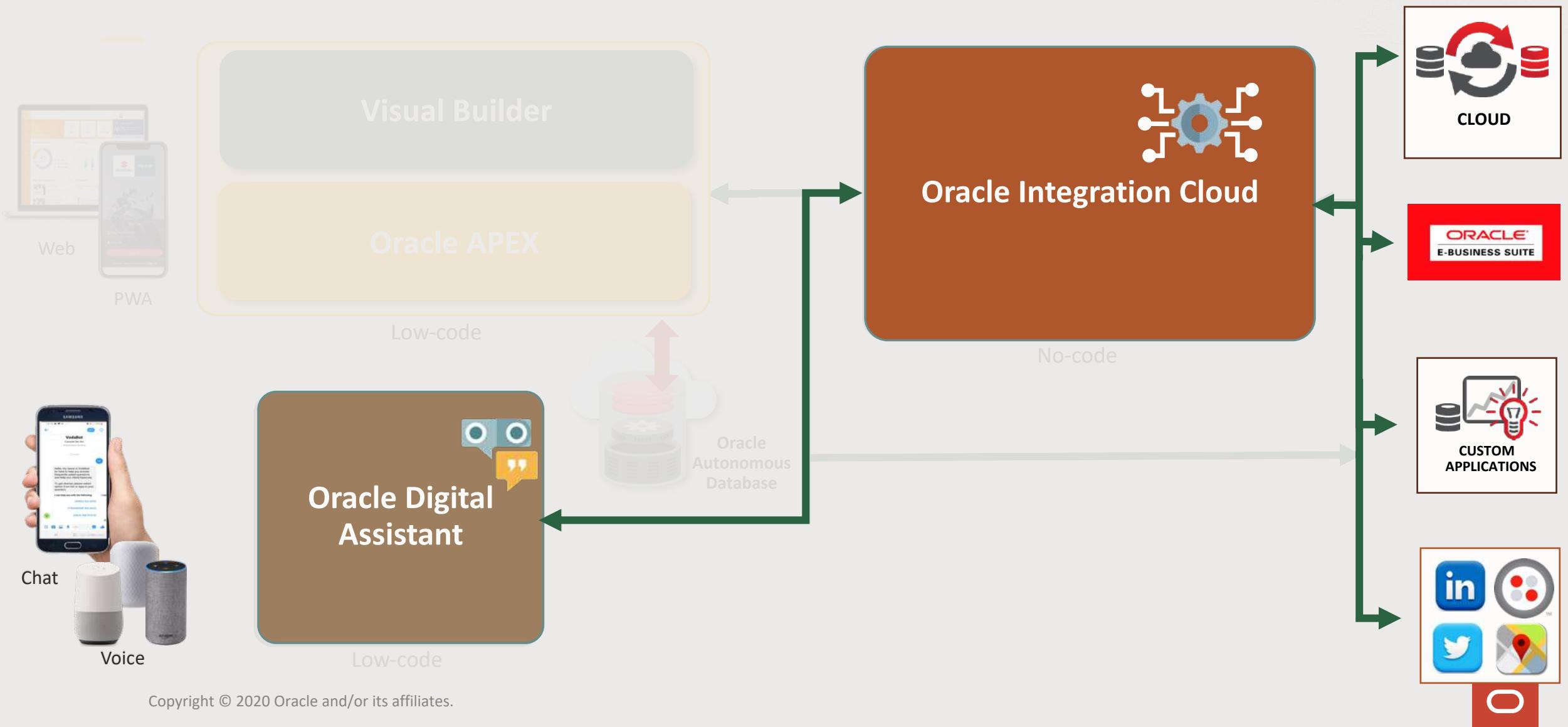


# 使用 AI 驅動的數位助理-Oracle Digital Assistant

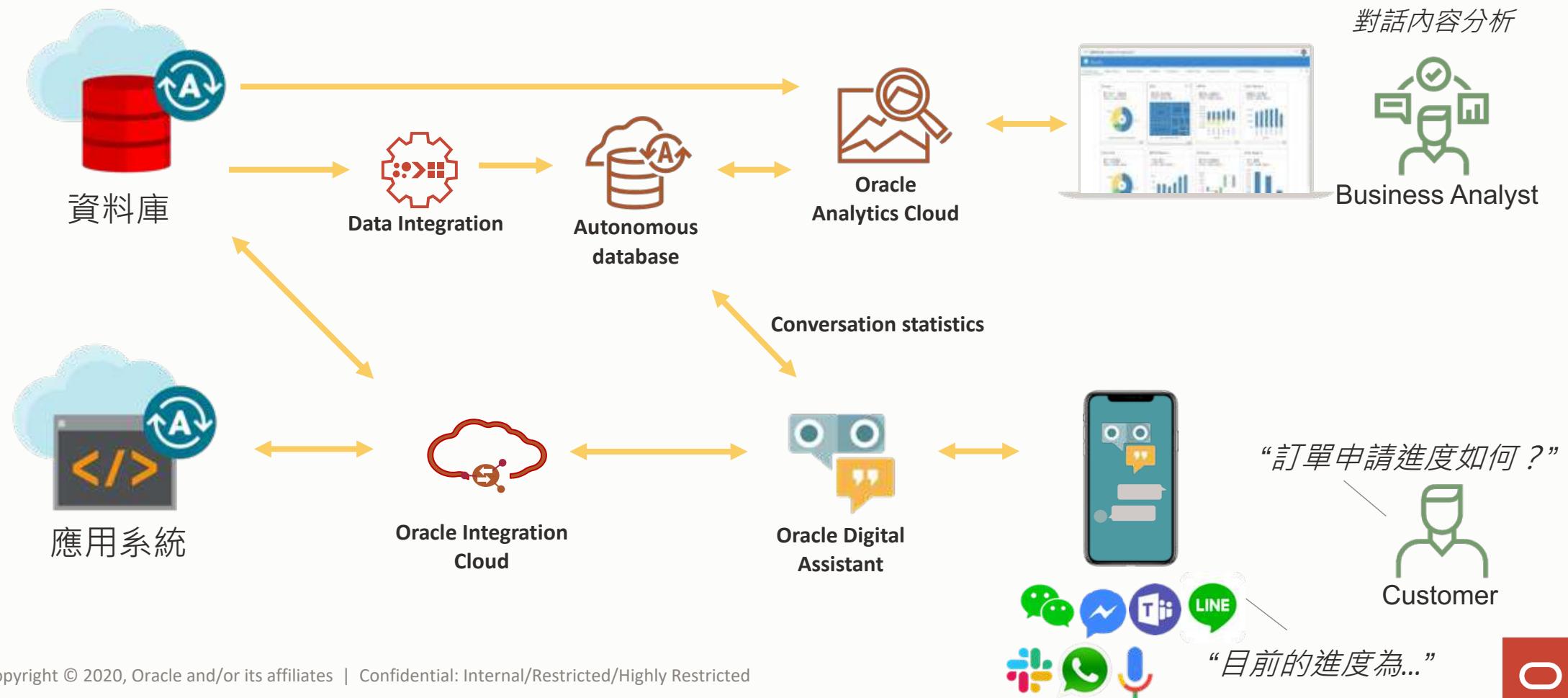
- 一套平台和工具，提供建構AI驅動、會話導向的使用介面。讓使用者以更自然的方式和後台系統與資料互動
- 提供基於 AI 的 Natural Language Processing (NLP)
- 支援文字和語音
- 支援多國語言
- 支援多種會話溝通管道，包括 Web, WhatsApp, Facebook, WeChat, LINE, Slack, MS Teams 等.
- 開發簡單容易 易於上手
- 提供用戶對話的分析



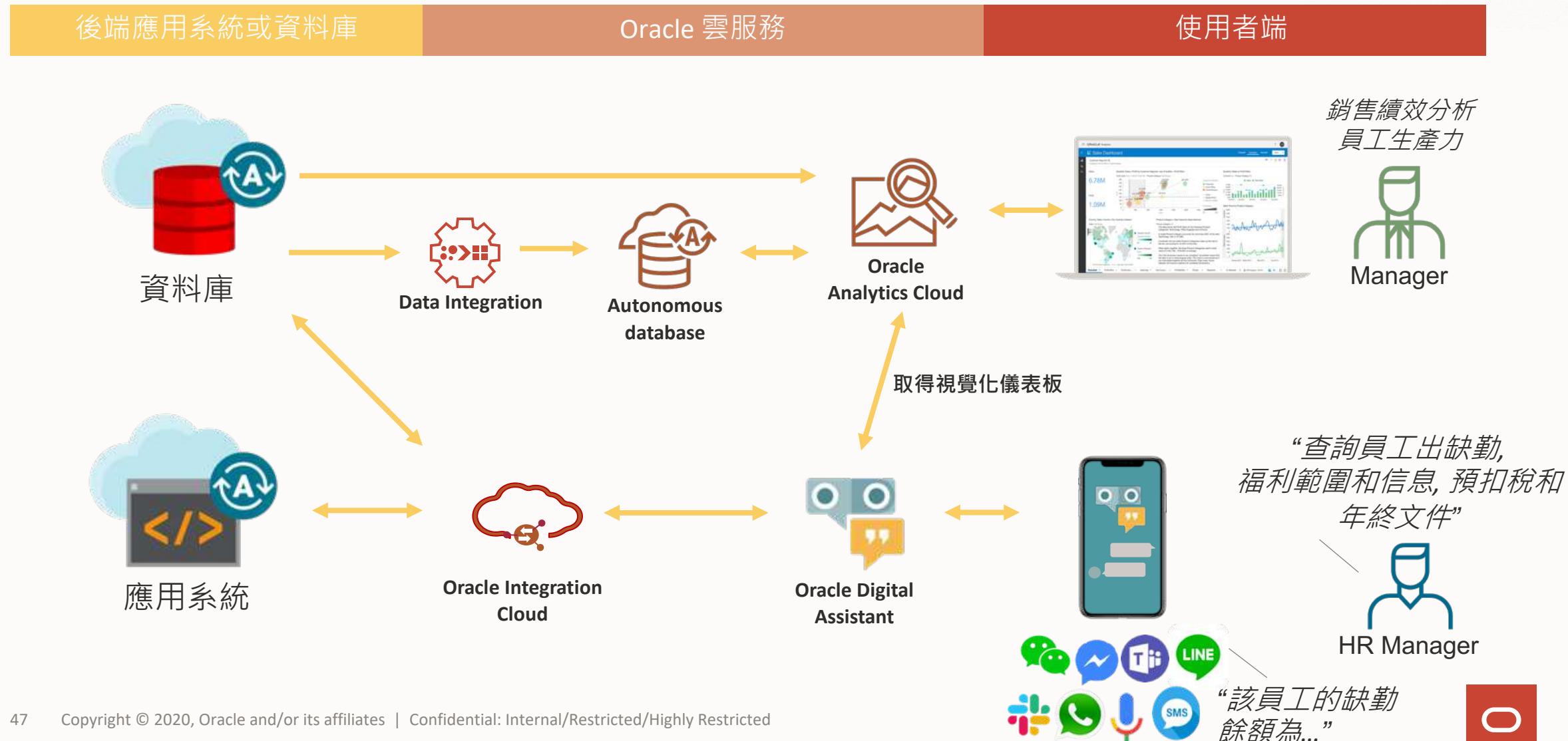
# Oracle - Modern Digital Experience



# Digital Experience情境—對終端客戶

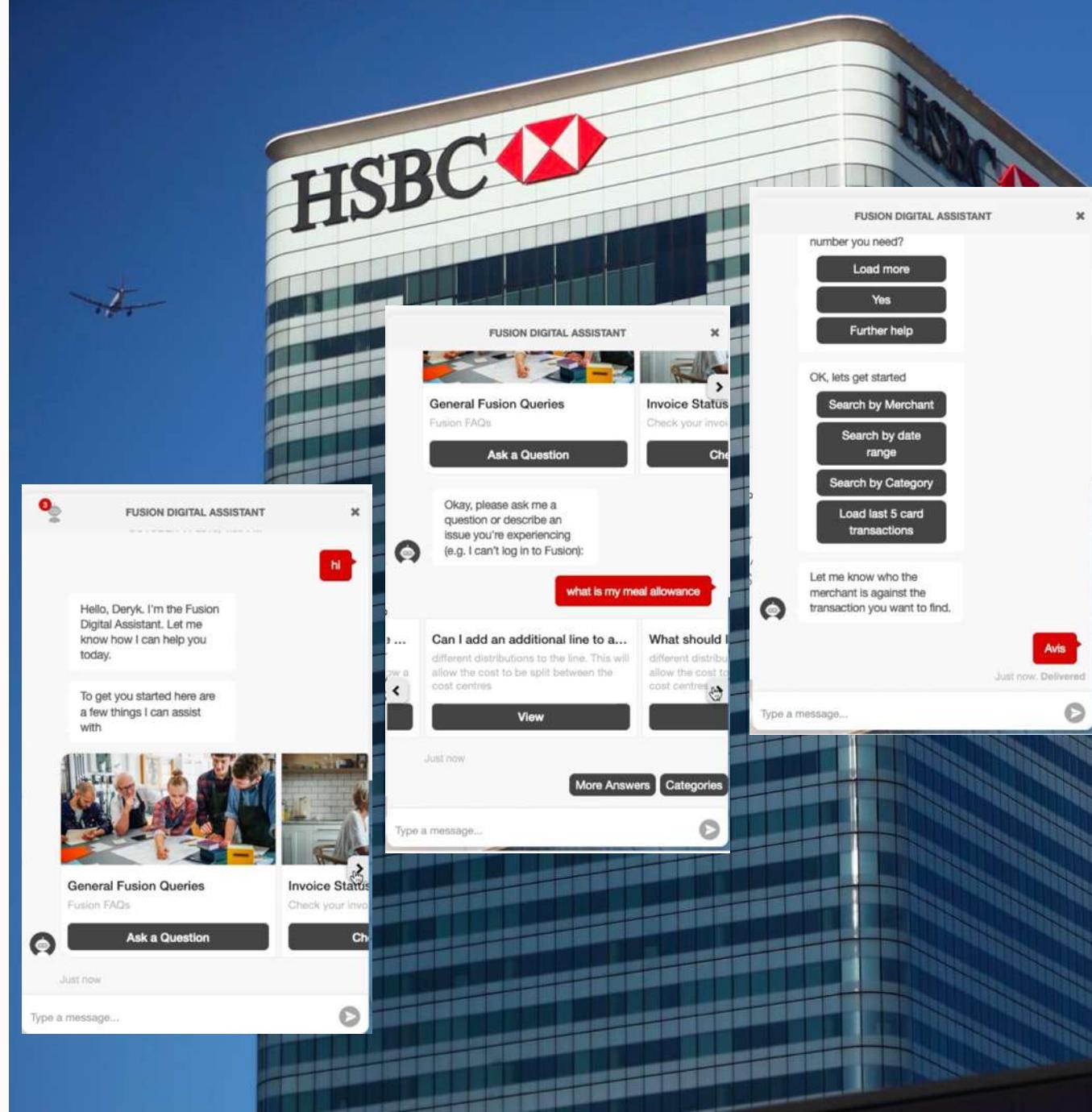


# Digital Experience情境—對內部員工



# 客戶案例- HSBC 行政服務助理

- 整合 Oracle Fusion，協助員工能快速與財務系統溝通
- 查詢報帳審核狀態、信用卡歷史交易紀錄和常見問題解答



# 客戶案例- Banco Daycoval 銀行服務客服助理

- 銀行賬戶相關功能的對話
- 自動化和簡化業務流程
- Digital Assistant 與 Oracle Service Cloud 整合

43%

減少客服中心的  
呼叫量

30%

由Digital Assistant  
獨立完成的對話  
量

25

從開發到上線的  
花費的時間(天數)



# Agenda

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- Oracle Multi Experience Development Platform introduction
- Oracle Low-code Application Development
- Oracle Modern Digital Experience
- **Wrap-up**

# 總結

- ✓ Oracle 提供低程式碼/無程式碼解決方案來滿足您的業務需求
- ✓ 使用 APEX 快速建構和交付高質量的應用程式
- ✓ Integration Cloud 提供快速連結到 SaaS 和本地端應用系統(ERP, HCM...等)
- ✓ Digital Assistant 提供預先建構的技能和模板，為您創造對話體驗
- ✓ APEX、Digital Assistant 與 Integration Cloud 結合，能快速建立應用程式並擴展應用為終端用戶帶來價值



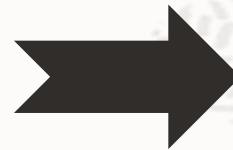
# Oracle Support Rewards 專案



在 Database 維護期  
間內的附加價值



可使用 Oracle Cloud  
Infrastructure (OCI) 累積 Support  
Rewards



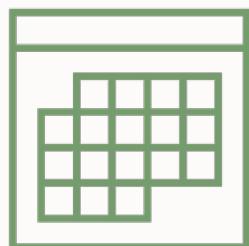
使用累積的 Support Rewards  
抵扣 Database 維護費用

依據 Oracle 雲 (OCI)  
實際使用量之

**25 - 35%**

回饋金額用於抵扣  
Database 維護費用

Oracle 雲 (OCI) 實際使  
用量越多 – 回饋越多



## Oracle Support Rewards

在每個月底基於 OCI 雲服務  
整個月消費金額賺取

範例

Database  
維護費用

原本需支付的  
維護費用

**\$450**

OCI 一整個月  
的消費金額

**\$1000**

Oracle  
Support  
Reward 產生的  
回饋金額

**\$250**

新的  
維護費用

**\$200**

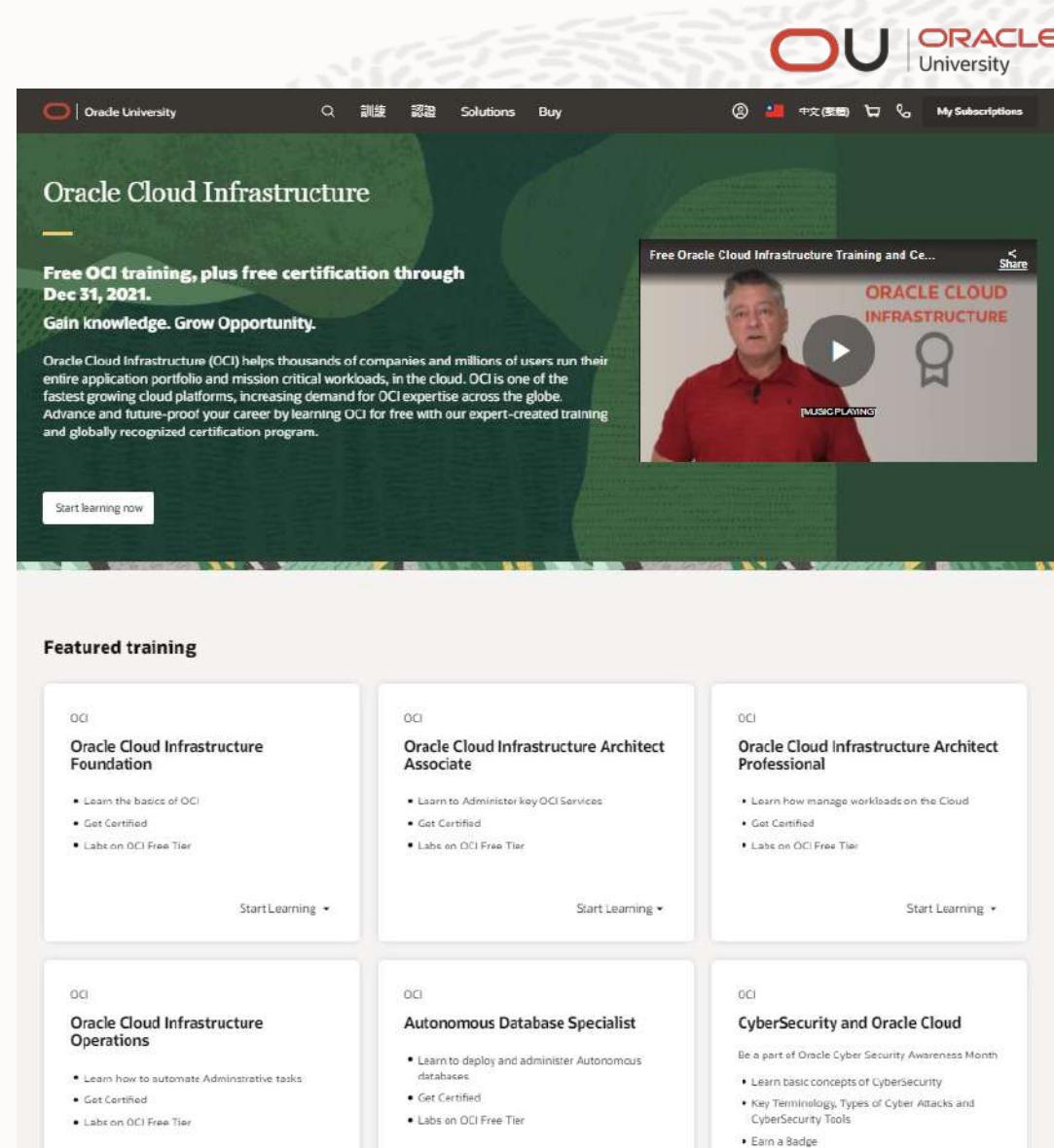


藉由使用 Oracle 雲 (OCI) , 客戶有機會可以將 Database 維護費用降至 0\*

\* 不適用於抵扣 Database 維護費用所需繳納的稅金

# 免費 Oracle Cloud Infrastructure 教育訓練課程及認證考試

- 幫助增加客戶對 OCI 服務的了解和後續使用.
- 客戶可以免費參加我們針對所有學習階段和角色的 OCI 雲端課程培訓內容
- 包括 培訓課程及認證考試.
  - OCI 教育訓練課程
  - 資料管理訓練課程
  - OCI 免費認證考試 從 2021/9/8 至 2021/12/31.



The screenshot shows the Oracle University website with a dark green background. At the top, the Oracle University logo is on the left, and a navigation bar with links for 'Search', 'Training', 'Certification', 'Solutions', 'Buy', and 'My Subscriptions' is on the right. A banner on the left side of the main content area says 'Free OCI training, plus free certification through Dec 31, 2021.' Below this, a section titled 'Featured training' lists several OCI training paths, each with a 'Start Learning' button. The paths include 'Oracle Cloud Infrastructure Foundation', 'Oracle Cloud Infrastructure Architect Associate', 'Oracle Cloud Infrastructure Architect Professional', 'Oracle Cloud Infrastructure Operations', 'Autonomous Database Specialist', and 'CyberSecurity and Oracle Cloud'. Each path has a brief description and a list of learning objectives.

Thank you

