

Digital transformation at Dublin Airport

Using Oracle Primavera Unifier

Sherief Elabd & Nathan Lambert



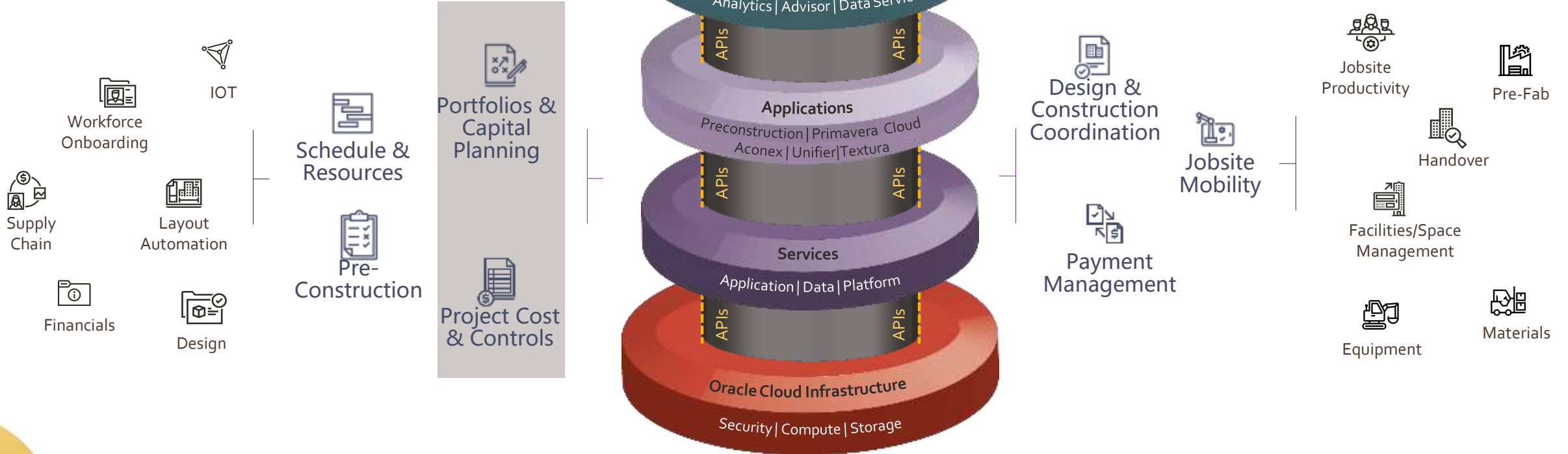


ORACLE®

Construction and Engineering



Oracle Smart Construction Platform



Connect, Empower, Synchronize the construction lifecycle for all stakeholders

Oracle Primavera Unifier

- Highly configurable
- Integrated cost and schedule management
- Powerful project controls solution

Primavera Unifier Accelerator

Business Process Automation (BPA)

Stage-gate Management

Capital Planning

Contract Execution

Change Management

Cost Control & Cash Flow



Documents



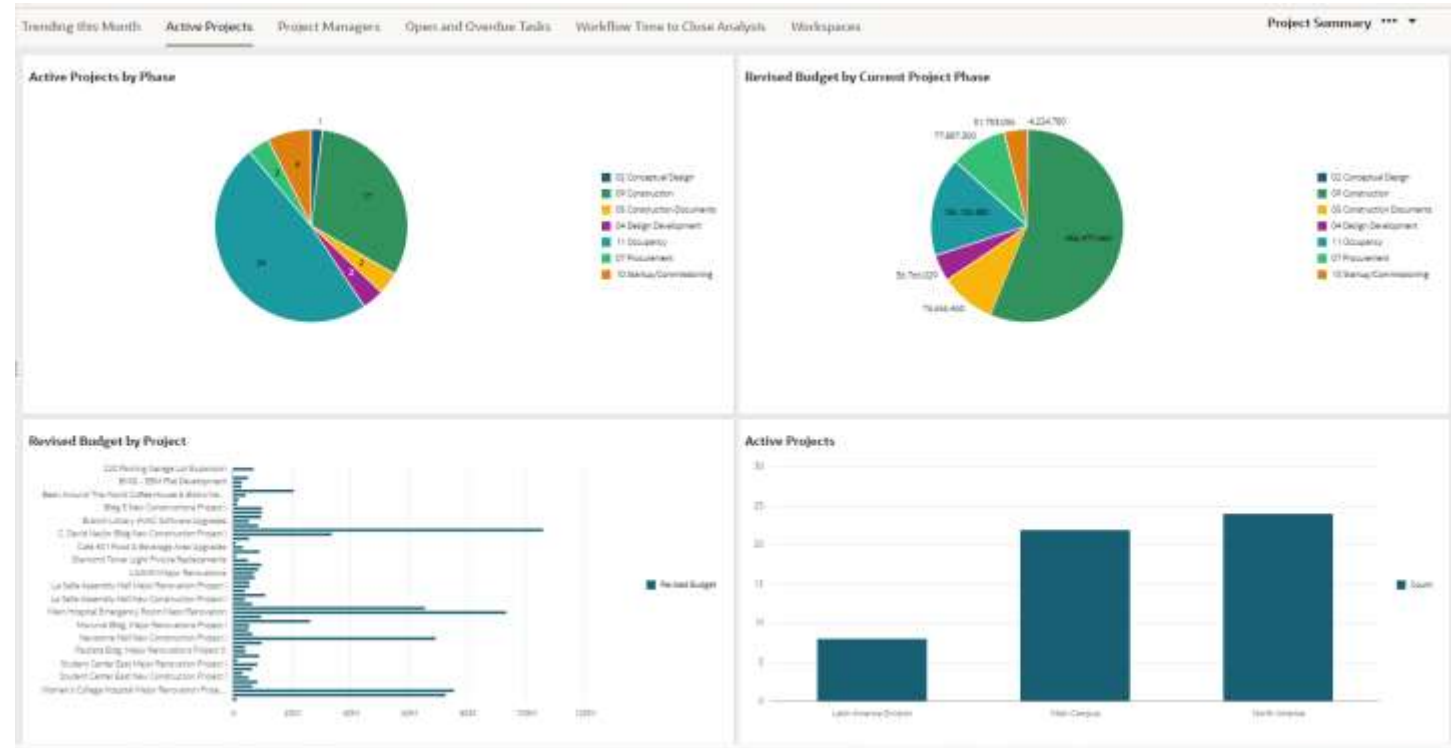
Deliverables



Financials



Assets



20+

Years of experience building, implementing and supporting the most comprehensive Project Controls platform

55+

Business processes as a starting point to customize and add to. Accelerate implementation and improve process management across all phases of the project and asset lifecycle

350+

Pre-built reports, layouts and dashboards to be used as-is, added to, or configured to meet the needs of any organization. Executive reports leverage Oracle Analytics Publisher used by leading ERP systems

150+

Successful system integrations with scheduling, ERP, finance and analytics systems using Oracle's own REST based APIs and middleware

100s

Of implementations, providing experience and proven business processes as the foundation for the Unifier Accelerator

OCI

Self-hosted by Oracle on Oracle Cloud Infrastructure. Will be available on-premise in January, 2024.

8

Fully translated into 8 languages to serve the Americas, Europe, Asia and the Middle East. Supports multiple languages on a single project, 183 currencies and unlimited exchange rates

24/7

Support offered by a financially stable industry leader with a long history of industry recognition and a proven track record of providing a superior ownership experience

Business Process

Budget Transfer

Record Details Workflow Progress Attachments

Use the Budget Transfer form to define, review, and approve transfers between accounts within the project budget. The amount of this record must be zero in order to submit it. If you need to add or remove budget from the project, use the Budget Change form.

Record No.	Title	Status	Reason	Ver.
BTR-00002	Burrowing Owl - Ornithologist Consulting	Awaiting Review	Regulatory Change	
BTR-00001	Burrowing Owl - Retaining Wall	Approved	Regulatory Change	

Key Information

Key information about this Budget Transfer.

Title: Burrowing Owl - Ornithologist Consulting Amount: \$0.00

Reason: Regulatory Change Due Date: 05/22/2021 07:09 AM

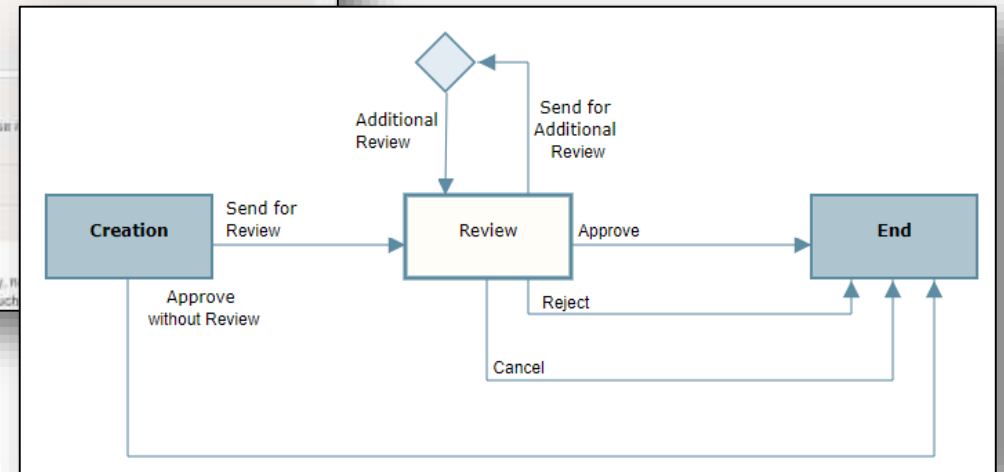
Budget Transfer Version: 0

Description

Change description, assumptions, justification and anything else

Short Description: Protected Species - Burrowing Owl

Detailed Description: Issue
The Burrowing Owl is a tiny, long-legged member of the owl family. It inhabits open, arid landscapes where they can dig new holes or use existing ones (such as...



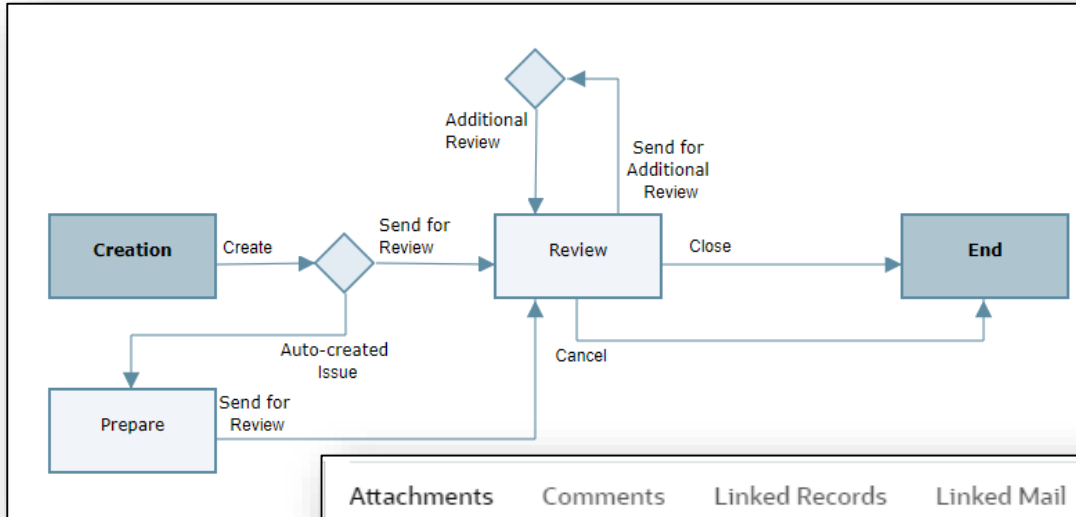
Forms



WorkFlow



Workflow Layout & Audit Log



Attachments Comments Linked Records Linked Mail Workflow Progress Audit Log Reference Records

Audit Log: ISS-0001

Date ▼	Event	Action	Field	Old Value	New Value	User Name	Proxy User	Attachment
04/22/2021 05:47 AM	Auto Creation of "Change Re...	The Auto Creation condit...	New Change Req...					
04/22/2021 05:47 AM	Workflow>Review	Additional Review	Send to		William Brown: Or...	William Brow...		
04/22/2021 05:47 AM	Linked Records	Attach 'RFI-00001'				William Brow...		
04/22/2021 05:46 AM	Linked Records	Remove 'RFI-00001'				William Brow...		
04/22/2021 05:46 AM	Linked Records	Attach 'RFI-00001'				William Brow...		
04/22/2021 05:45 AM	Auto Creation of "Change Re...	The Auto Creation condit...	New Change Req...					
04/22/2021 05:45 AM	Workflow>Creation	Send for Review	Send to		William Brown: Or...	William Brow...		

Contract Management

Contract Save ☰

[Contract](#) [Line Items](#) [Change Orders](#) [Payment Applications](#)

Use the Contracts form to manage a commitment with a vendor, typically for services, and track key information about the commitment such as vendor and type of contract.

> **Key Information**

> **Description**

> **Contract Details**

> **Financial Summary**
The information below provides a full snapshot of the approved Contract.

A. Original Commitment ⓘ

800,000.00

B. Approved Change Orders ⓘ

0.00

C. Revised Commitment (A+B) ⓘ

800,000.00

D. Total Completed and Stored to Date ⓘ

800,000.00

E. Total Work Retainage ⓘ

80,000.00

F. Total Stored Materials Retainage ⓘ

Percentage Complete to Date (D / C)

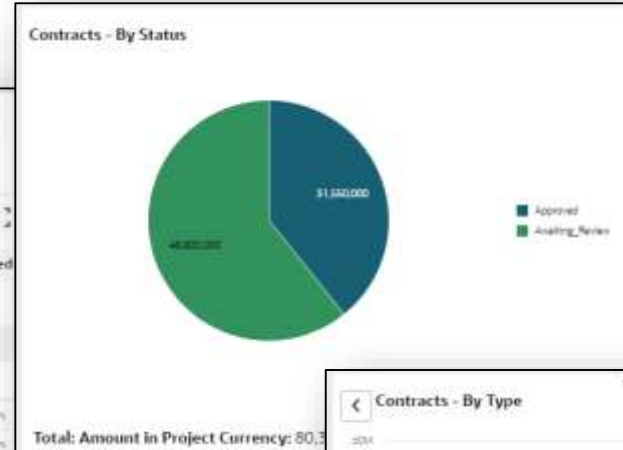
100

[←](#) [press](#) [Audit Log](#) [Reference Records](#) [↕](#)

Title: Planning and ... Record Number: CON-00001 Current Step: End BP Setup Used: Ball in Court

[View Graphic...](#) Filter By: Visited Steps

Step Name	Assignee	Company
Creation	William Brown	Oracle Corporation
Review	Dylan Harris	Oracle Corporation
End	Gwendolyn Watts	Wilkinson and Sons



Contract Details

Record Number	Contract Number	Contract Type	Creator	Amount in Project C
CON-00007	CON-82005624	Lump Sum	William Bro...	5,000,000
CON-00008	CON-74992312	Lump Sum	William Bro...	5,000,000
CON-00009	CON-38452294	Lump Sum	William Bro...	5,000,000
CON-00010	CON-94443266	Lump Sum	William Bro...	32,000,000
CON-00011	CON-45632177	Lump Sum	William Bro...	800,000
CON-00012	CON-94443267	Lump Sum	William Bro...	1,000,000

Total: Amount in Project Currency: 48,800,000

Change Management

The screenshot displays the Oracle Change Order interface. The main window shows a table of line items with the following data:

No.	Cost Code	Code Name
001	200	Construction

Below the table, the 'Total Amount' is shown as 25,000.00.

The 'Line Item Details' section includes the following information:

- General:** Cost Code: 200, Code Name: Construction, Reference: (empty), Originating Change Request: Protected Species - Burrowing.
- Change Order Details:** Cost for this Change Order line item. This cost can be entered as either lump sum or unit rate.

Item Quantity	Unit of Measure	Item Unit Cost	Amount
1	each	25,000.00	25,000.00

The right-hand pane provides a 'Financial Summary' with the following data:

Category	Amount	Percentage
A. Original Commitment	\$200,000.00	
B. Previously Approved Change Orders	\$0.00	
C. Amount Previous to this Change Order (A+B)	\$200,000.00	
D. Current Request	\$25,000.00	Current CO % Increase (D / C): 12.5
E. Revised Contract Amount (C + D)	\$225,000.00	Total % Change Increase ((B+D)/A): 12.5

Build | Change Management

ORACLE Change Order
 CO: Protected Species - Burrowing Owl
 Project PRJ-0001
 Build - Tower One

Reference and Linked Re | Transfer Focus | Reset | Display 20 | Per Node

Cost Sheet

View: (Modified) Grouped | Currency: United States Dollar (USD)

	Cost Code	Code Name	+ Budget	- Commitments					
			Revised Budget	Pending Contracts	Approved Contracts	Approved Change Orders	Approved POs	Approved PO Amendments	Approved Commitments
1	100	Design Services	1,000,000.00	0.00	800,000.00	0.00	0.00	0.00	800,000.00
2	200	Construction	95,325,000.00	48,800,000.00	29,750,000.00	25,000.00	0.00	0.00	29,775,000.00
3	300	Furnishings	20,000.00	0.00	0.00	0.00	15,000.00	0.00	15,000.00
4	400	Fixed Systems / E...	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	500	IT Systems/Equip...	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	600	Moveable Equip...	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	700	Miscellaneous	10,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8	800	Project Expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	900	Contingency	9,608,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Total			105,963,000.00	48,800,000.00	30,550,000.00	25,000.00	15,000.00	0.00	30,590,000.00

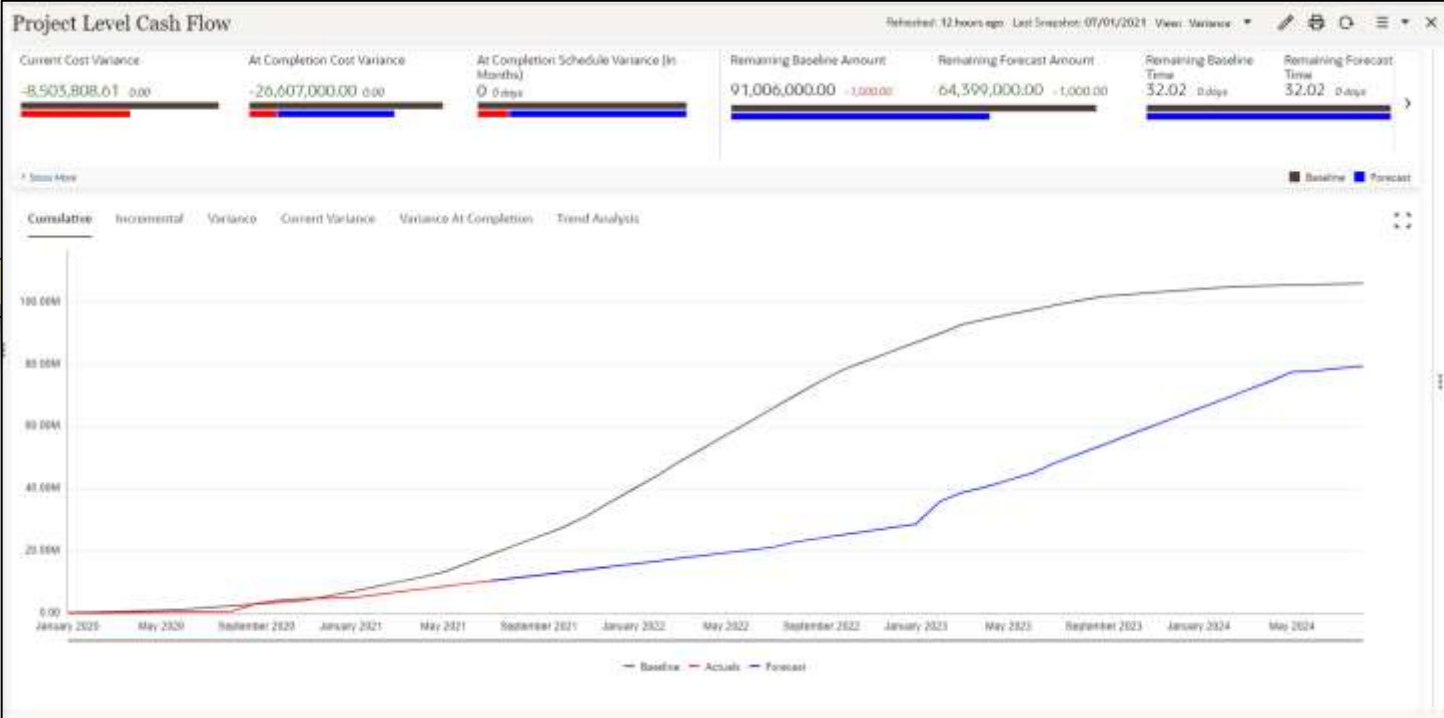
Total: 9

Cost Control and Cash Flow

Cost Sheet

View: Default Currency: United States Dollar (USD)

	Cost Code	Code Name	Approved Estimates	Approved Initial Budget	Pending Budget Changes	Pending Budget Transfers	Approved Budget Transfers	Revised Budget	% of Budget	Pending Contracts	Approved Contracts	Approved POs
1	100	Design Services	\$1,000,000.00	\$1,000,000.00	\$0.00	\$0.00	\$0.00	\$1,000,000.00	0.94%	\$0.00	\$800,000.00	\$0.00
2	200	Construction	\$93,800,000.00	\$95,300,000.00	\$0.00	\$0.00	\$25,000.00	\$95,325,000.00	89.96%	\$48,800,000.00	\$30,750,000.00	\$0.00
3	300	Furnishings	\$0.00	\$20,000.00								
4	400	Fixed Systems / Equip...	\$0.00	\$0.00								
5	500	IT Systems/Equipment	\$0.00	\$0.00								
6	600	Moveable Equipment	\$0.00	\$0.00								
7	700	Miscellaneous	\$0.00	\$10,000.00								
8	800	Project Expenses	\$0.00	\$0.00								
9	900	Contingency	\$0.00	\$9,633,000.00								
Total			\$94,800,000.00	\$105,963,000.00								



Business Process List

Planning

Portfolio Management

Project Request

Funding and Budget Management

Estimate
Initial Budget
Budget Change
Budget Transfer
Fund Appropriation
Forecast

Design

Document Management and Submittals

Submittal Package
Submittal
Document Approval

Procurement

Contracts and Procurement

Request for Bid (2)
Contract
Purchase Order
Master Service Agreement
Work Release
Notice to Proceed
Change Request
Potential Change Order
Change Order
Change Directive
PO Amendment
Payment Application
Invoice
Journal Entry
Actuals
Miscellaneous Cost

Construction

Field Management

Architect's Supp. Instruction
Daily Report
Field Observation
Incident Management
Site Photo
Request for Information

Closeout

Lessons Learned
Closeout Checklist
Owner Walk Through
Punch List Item
Warranty

Administrative

- Project Configuration
- Company Configuration
- Report Configuration
- Actuals Importer
- User Request

Libraries

- Standard Issues
- Areas
- Specification Sections
- Folder Templates
- Roles

Vendor Management

- Vendors

Project Management

- Meeting Minutes
- Action Items
- Communication
- Risk
- Permit
- Issue
- Project Note
- Project Status
- Timesheet (2)

Custom Reports (34)

Organization Level (20)

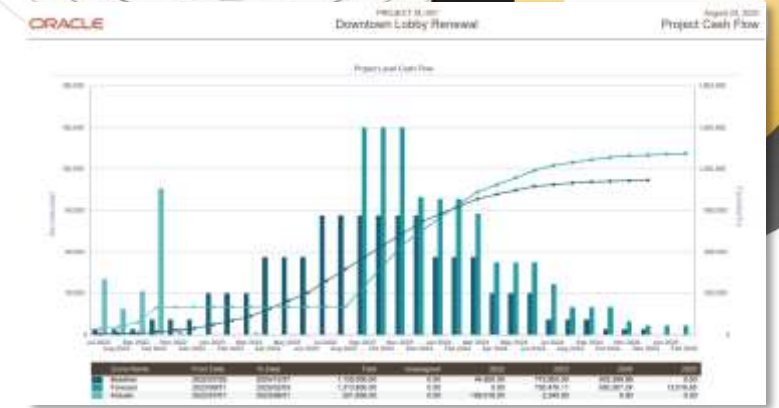
- Cash Flow History
- Cash Flow Roll-Up
- Cost Sheet Summary
- Open/Overdue Tasks Summary
- Project Comparison
- Project Details
- Project Phase Summary
- Project Schedule Summary
- Project Summary
- Project Summary (Excel)
- RFI Log
- Schedule Lookahead
- Text Search
- Administrative - BP Documentation - User Documentation View
- Administrative - BP Documentation - Developer View
- Administrative - BP Access Control - by BP
- Administrative - BP Access Control - by Group
- Administrative - Usage Analysis
- Administrative - User Group Membership - by Project
- Administrative - User Group Membership - by User

Program Level (2)

- Program Cost Sheet
- Program Project Summary

Project Level (12)

- Cash Flow History
- Cash Flow Report – Default
- Cash Flow Report – Quarterly Summary
- Commitment Summary
- Open/Overdue Tasks
- Project Cost Report
- Project Details
- RFI Log
- Schedule Lookahead Gantt chart
- Schedule Report – Gantt by Month
- Schedule Report – Gantt by Week
- Text Search



Shell Dashboards (80)

Organization Level (46)

Project Summary (41)

- Trending This Month
- Active Projects
- Project Managers
- Open and Overdue Tasks
- Workflow Time to Close Analysis
- Vendor Management
- Change Management
- Contingency

Cost Analysis (4)

- Cost Analysis by CBS
- Cost Analysis by Region/Site/Bldg/Project

MWBE / Diversity Tracking (1)

- Diversity Tracking

Program Level (4)

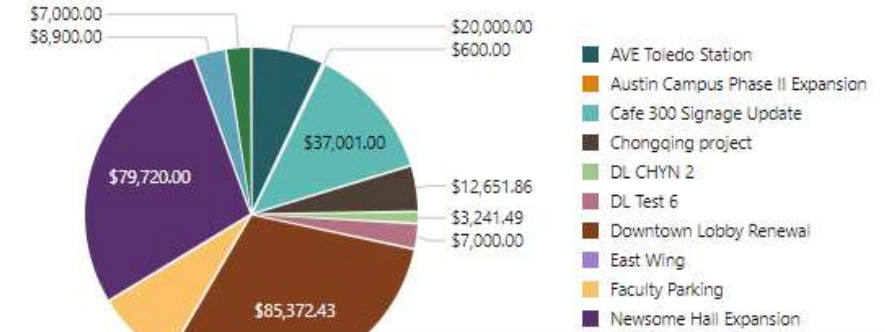
Program Summary (4)

Project Level (30)

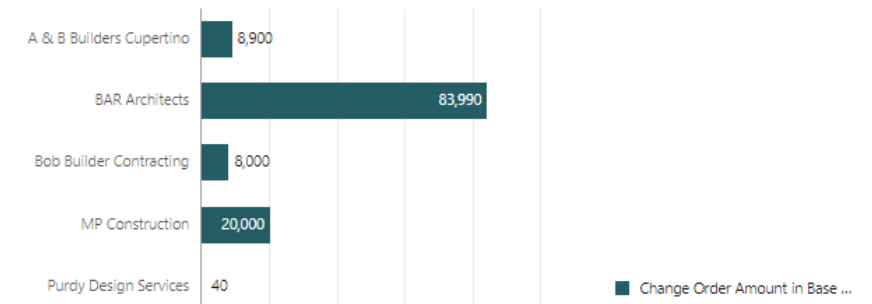
Project Controls

- Cost Controls (7)
- Project Management (6)
- Field Management (10)
- Manage by Exception (3)
- Cost Sheet (1)
- Open and Overdue Tasks (2)
- Project Feed (1)

Approved Change Order Amount by Project



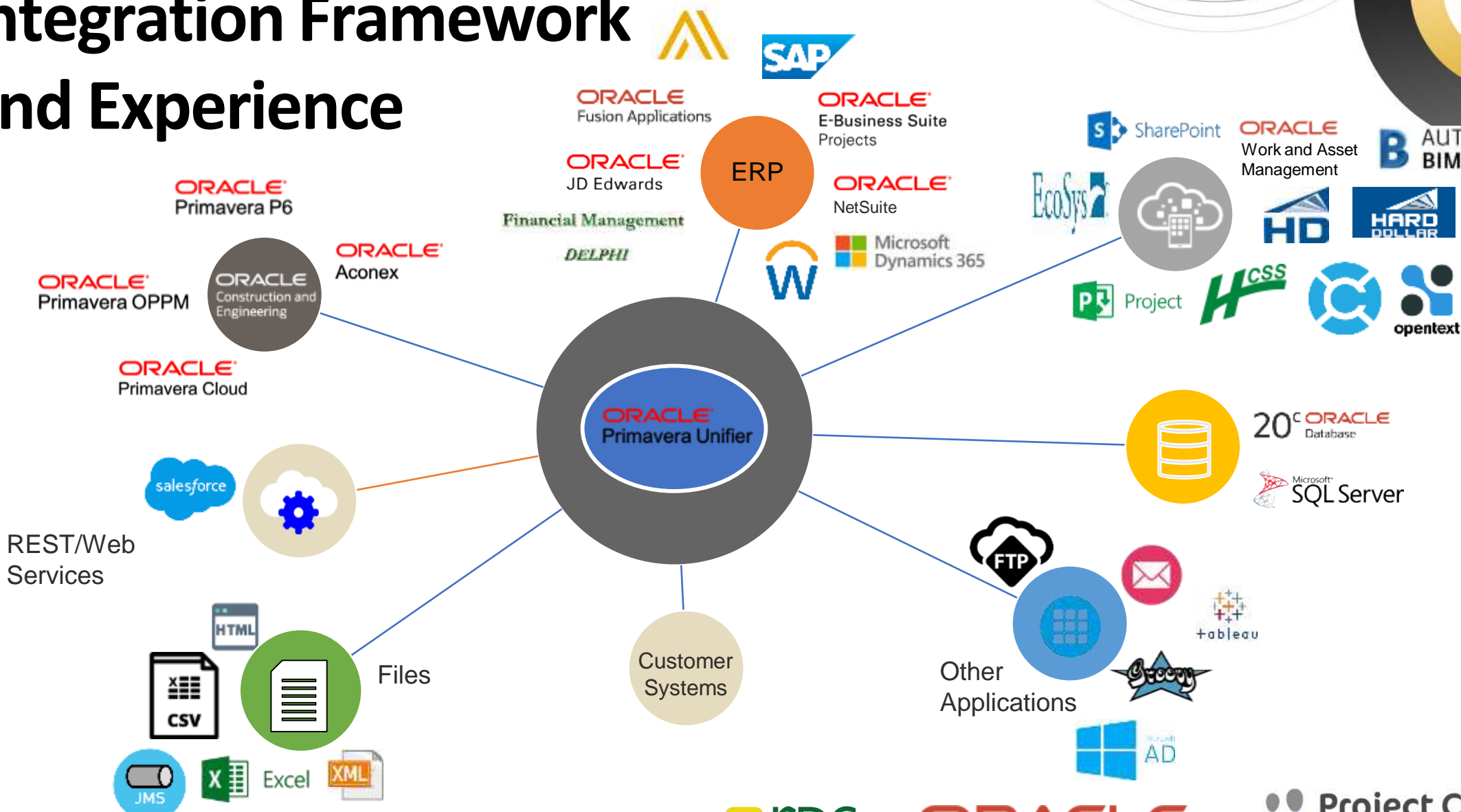
Active Contract Change Order Amount by Vendor



< List (Balance to Finish in Project Currency)

Project Name	Project Number	Contract Title	Change Order Title	Change Order Record Number	Vendor Name	Contract Amount in Base Currency	Change Order Amount in Base Currency	Contract Amount in Project Currency	Change Order Amount in Project Currency	K. Balance to Finish Including Retainage (C - I - J)	Change Order Amount as % of Contract Amount
Cafe 300 Signage Update	CAFEA-001	Architectural Services	Hurricane Debris Cleanup	CON-00002.001	BAR Architects	15,000	5,000	15,000	5,000	38,500	33.33
Cafe 300 Signage Update	CAFEA-001	Architectural Services	Hurricane Debris Cleanup	CON-00002.003	BAR Architects	15,000	5,000	15,000	5,000	38,500	33.33
Cafe 300 Signage Update	CAFEA-001	Architectural Services	Neon Sign Code	CON-00002.004	BAR Architects	15,000	26,500	15,000	26,500	38,500	176.67
Cafe 300 Signage Update	CAFEA-001	Architectural Services	Sitework	CON-00002.002	BAR Architects	15,000	500	15,000	500	38,500	3.33
Cafe 300 Signage Update	CAFEA-001	RAP Test 1	CO 1	CON-00003.001	BAR Architects	100	1	100	1	101	1

Integration Framework and Experience





Introduction to RPC

PEOPLE

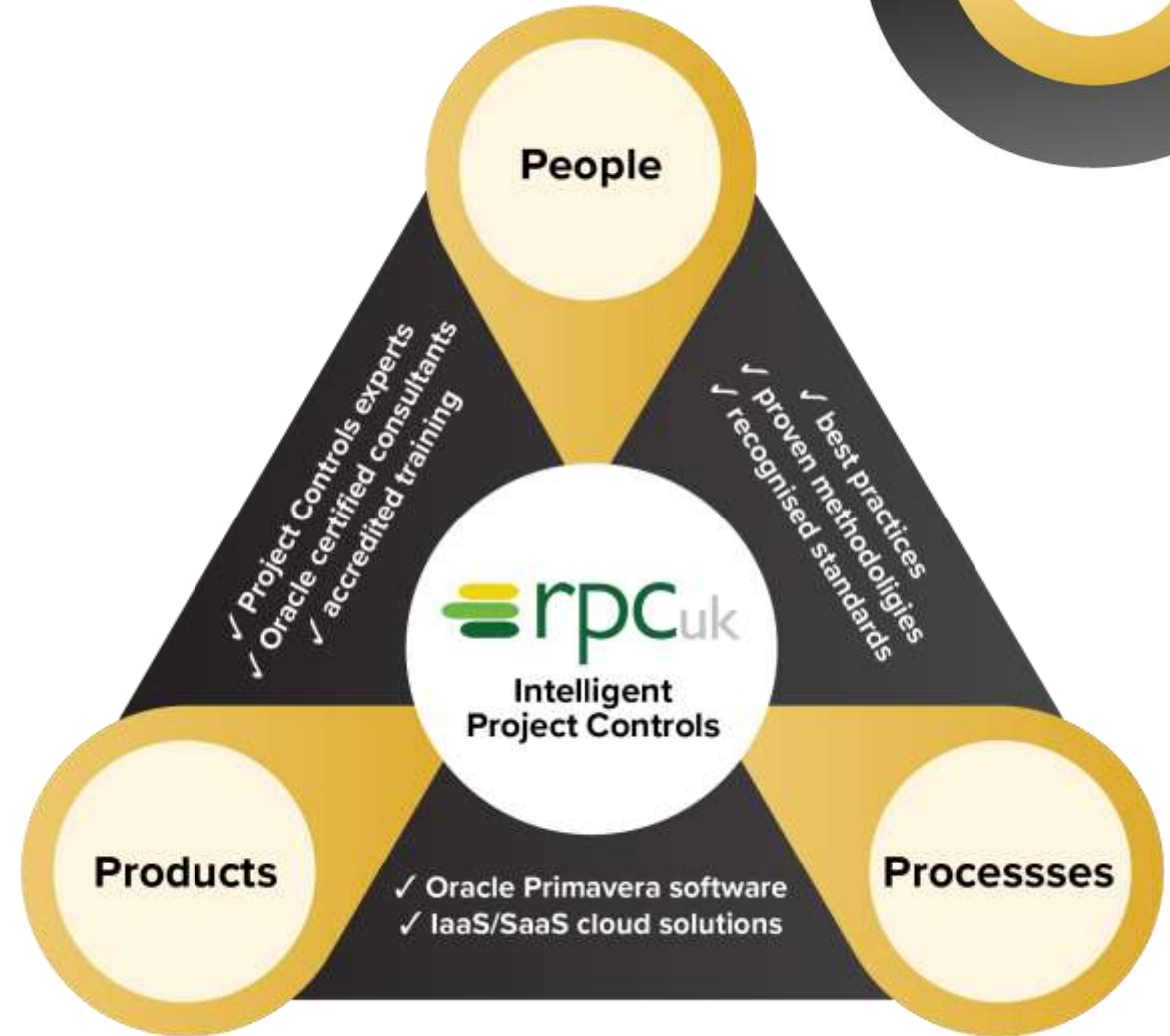
- Experts with first class project controls skills
- Quality generic skills and Oracle Primavera product training

PROCESSES

- Best practices
- Proven methodologies
- Recognised standards

PRODUCTS

- World leading Oracle Primavera software
- OBIEE, BI Publisher and UPK
- IaaS/PaaS/SaaS cloud solutions



**east
west**
RAIL


Ministry
of Defence

de&s

daa 

 **Marshall**

 **ALTERNUS**
ENERGY

NetworkRail


babcockTM

BAE SYSTEMS

ORACLE | Partner

MBDA
MISSILE SYSTEMS

M
MOTT
MACDONALD

ROLLS
ROYCE

 **LEONARDO**

 **edf**

 **ORACLE**

 **Project Controls**
EXPO
UAE, Middle East

Dublin Airport

Digital Transformation



About Dublin Airport

NUMBER OF PROJECTS

140+

NUMBER OF PROJECTS

€1.7bn

INVESTMENT PROGRAMMES

€450m South Apron
€200m+ North Apron
€600m Capital Maintenance

€200m+ Airfield
€250m Piers & Terminals

OVER
180
DESTINATIONS

2400+
DEPARTING
FLIGHTS
PER WEEK

12TH BEST
CONNECTED
AIRPORT IN
EUROPE

+31.5m
PASSENGERS

44+
AIRLINES

Challenges



Complying with contracts and obligations



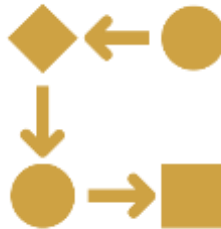
Reporting across portfolio



Consistency across contracts



Understanding trends and lessons learned

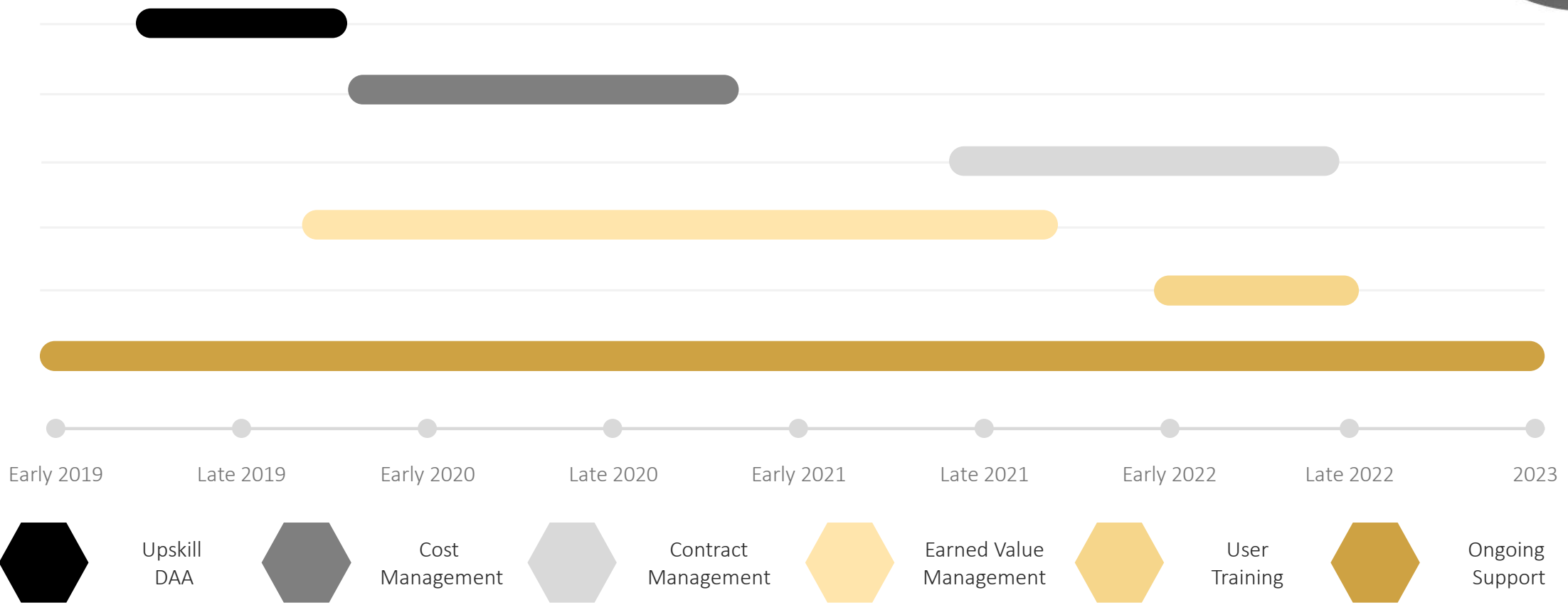


Managing key contract, cost and schedule information split across multiple systems



Accessing information hidden in spreadsheets and attachments

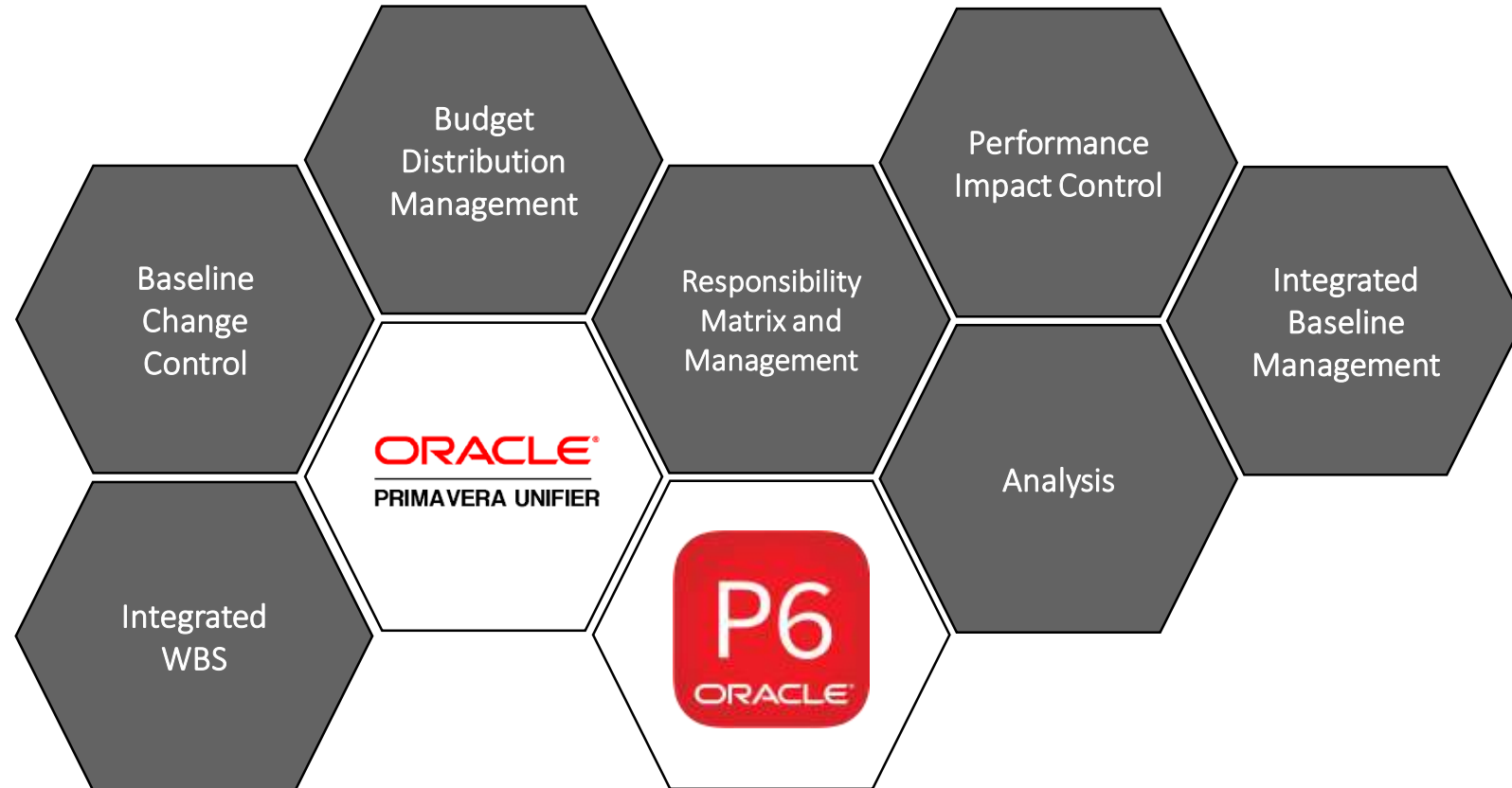
Timeline



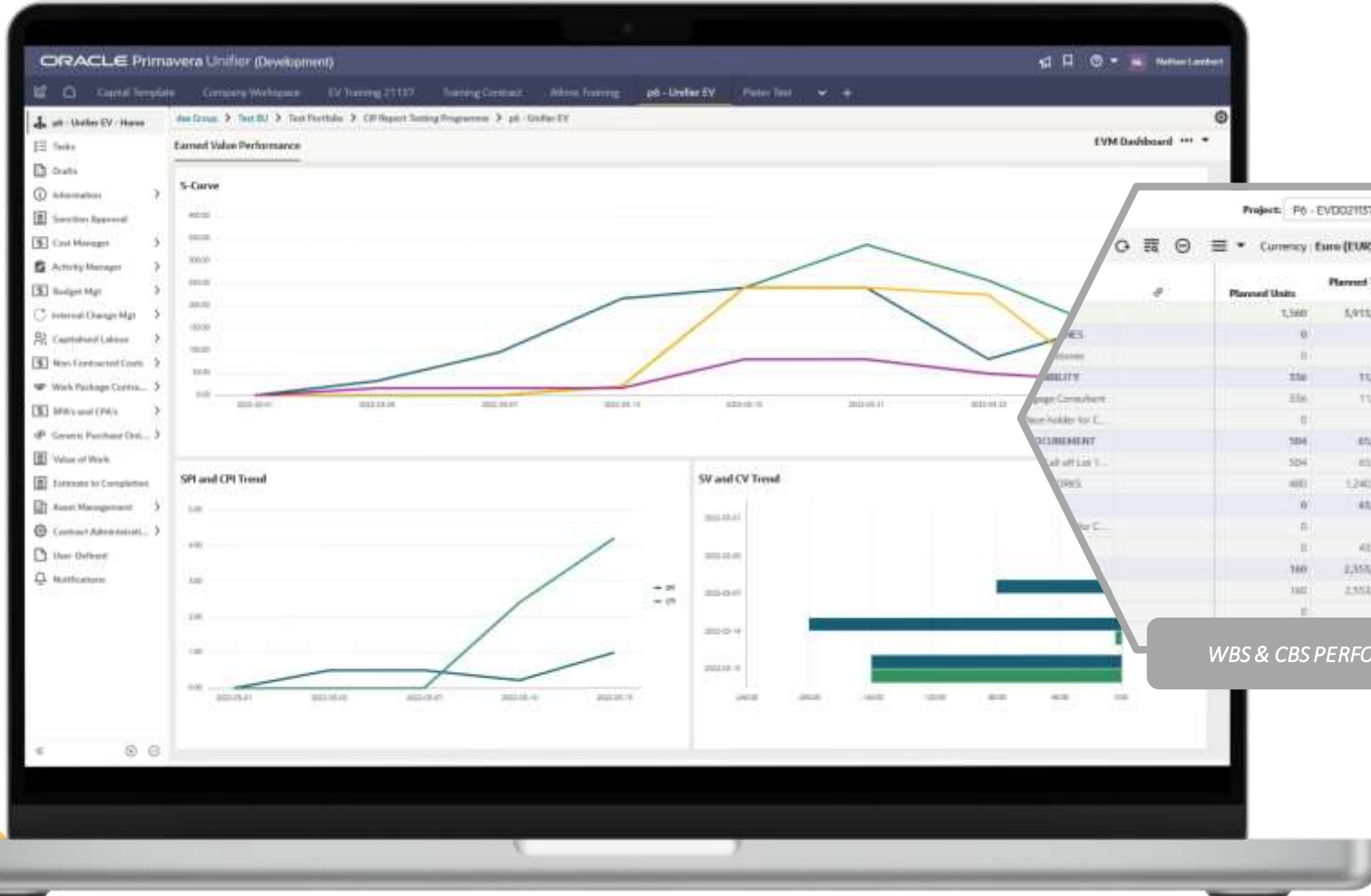
Cost Management



Earned Value Management

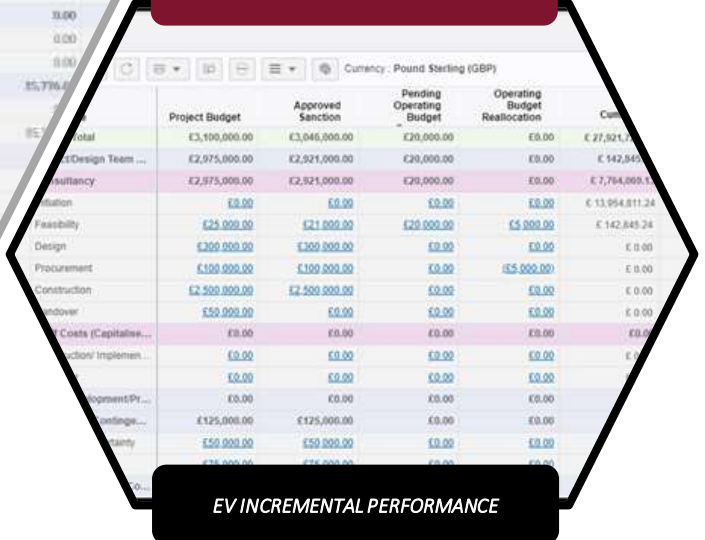


Earned Value Management



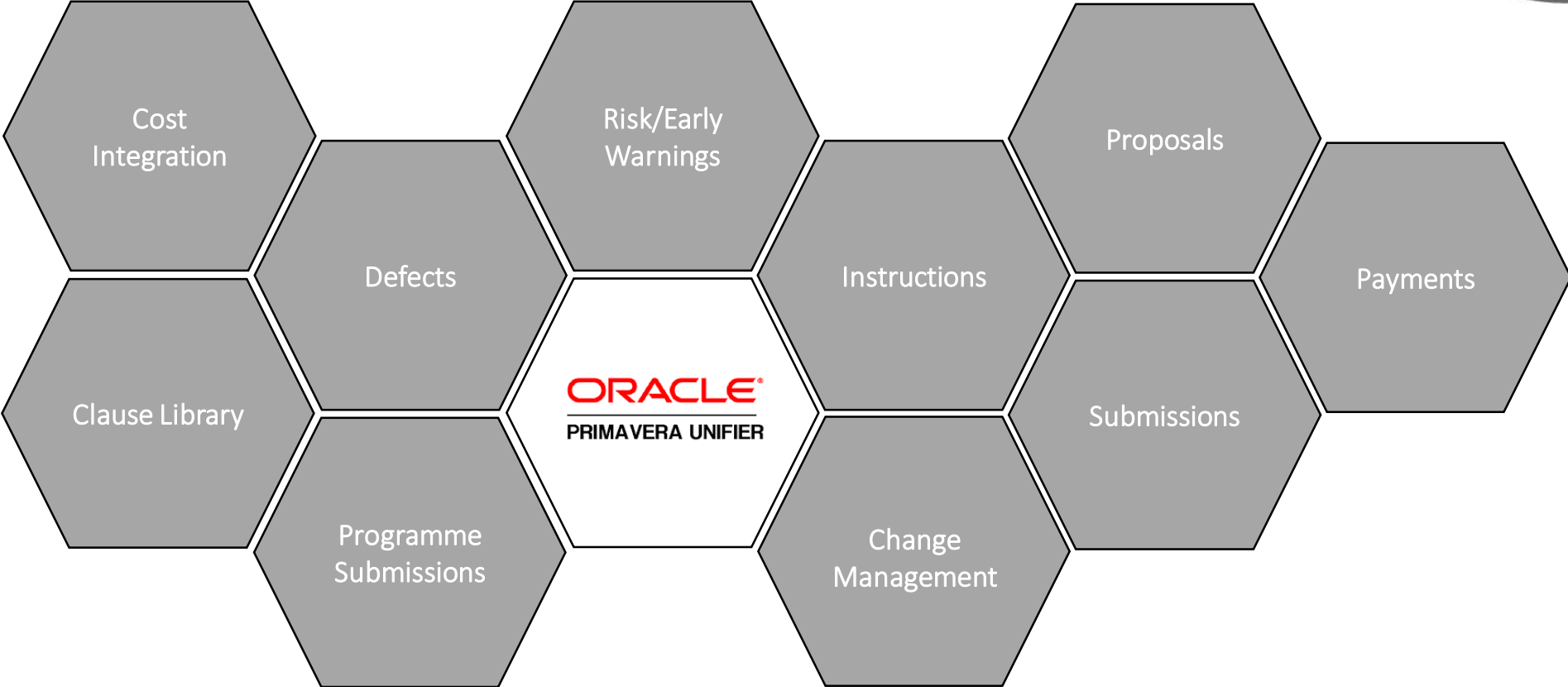
EV CUMULATIVE PERFORMANCE

WBS & CBS PERFORMANCE

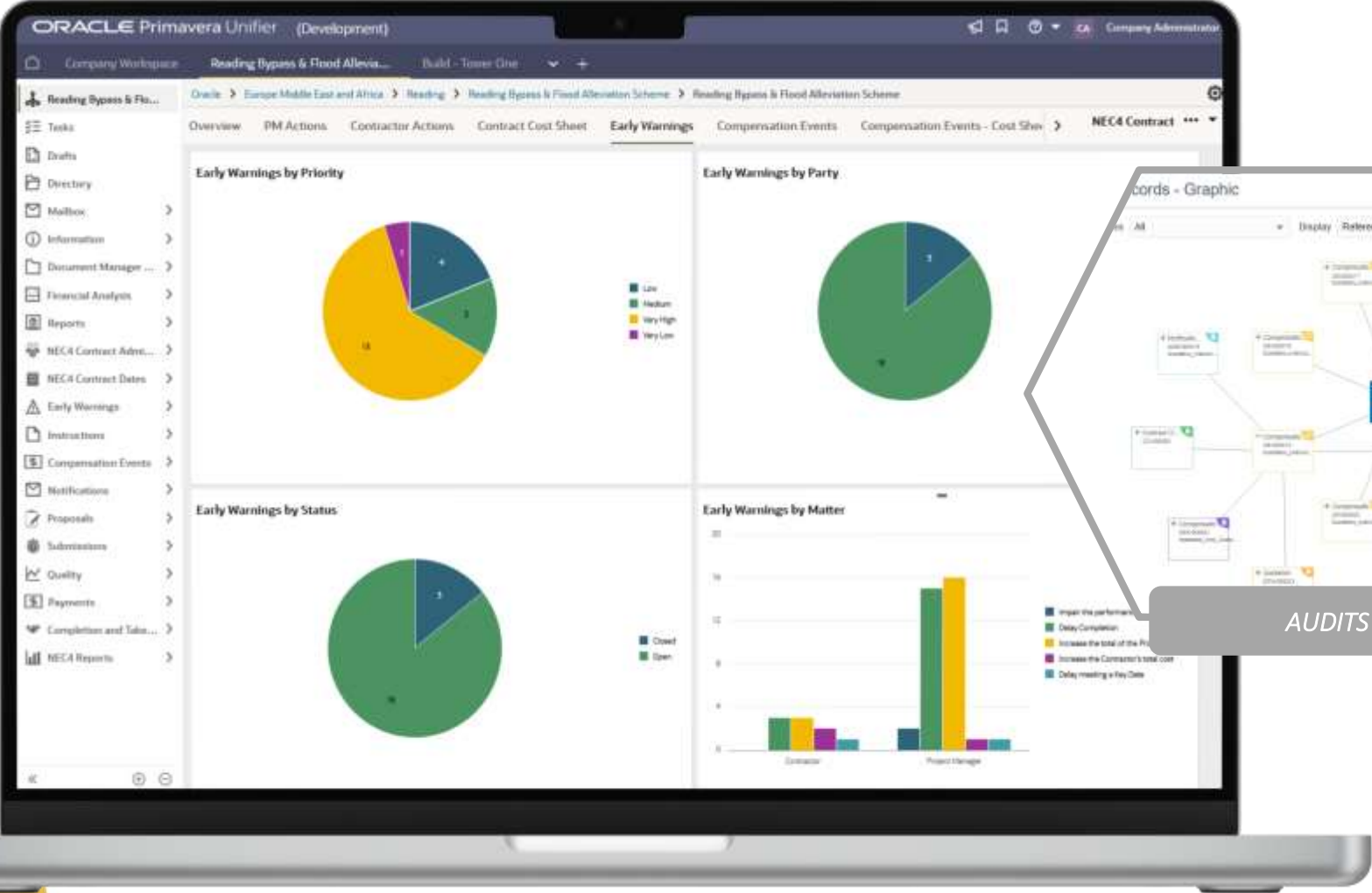


EV INCREMENTAL PERFORMANCE

Contract Management



Contract Management



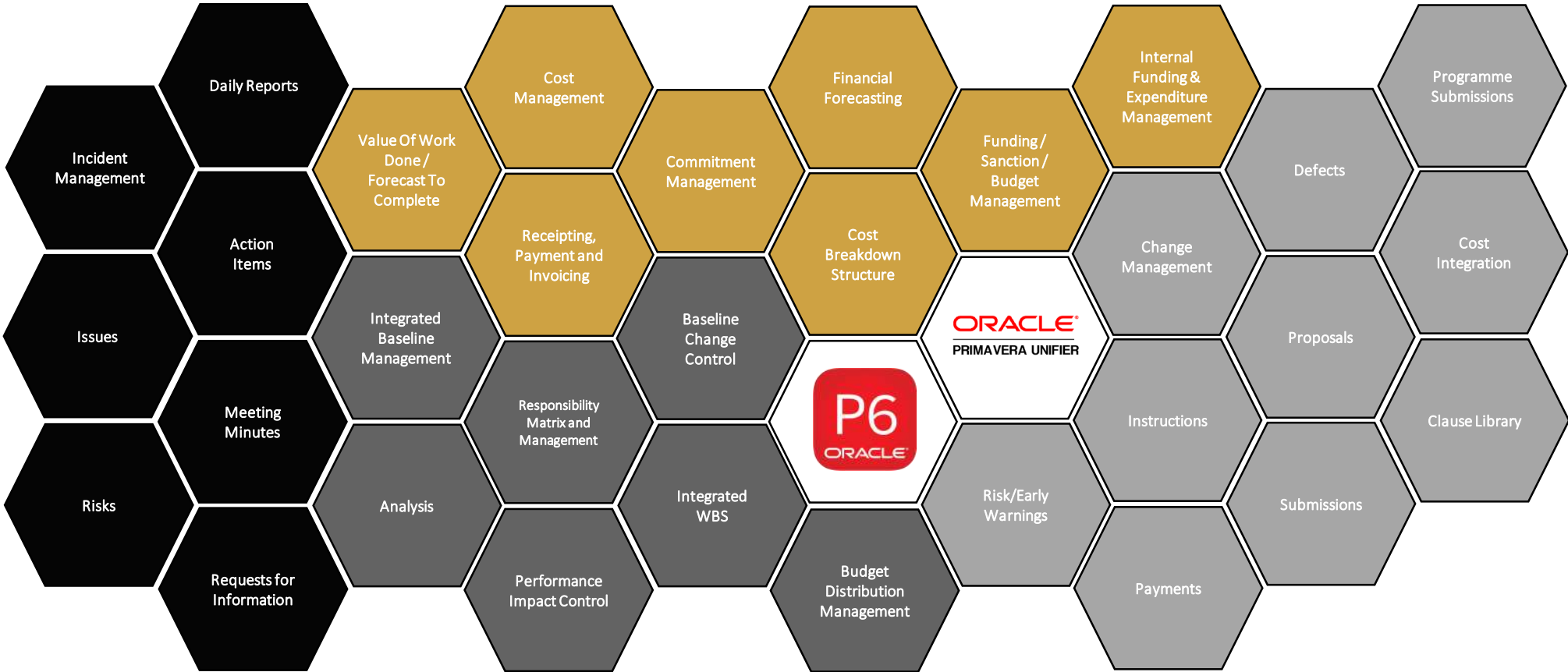
Approved Contract Financial Breakdown	Accepted Proposals	Accepted Quotations	Accepted Assessments
10,000.00	10,000.00	10,000.00	10,000.00
20,000.00	0.00	0.00	0.00
30,000.00	0.00	0.00	0.00
40,000.00	0.00	0.00	0.00
50,000.00	0.00	0.00	0.00
60,000.00	0.00	0.00	0.00
70,000.00	0.00	0.00	0.00
80,000.00	0.00	0.00	0.00
90,000.00	0.00	0.00	0.00
100,000.00	0.00	0.00	0.00
110,000.00	0.00	0.00	0.00
120,000.00	0.00	0.00	0.00
130,000.00	0.00	0.00	0.00
140,000.00	0.00	0.00	0.00
150,000.00	0.00	0.00	0.00
160,000.00	0.00	0.00	0.00
170,000.00	0.00	0.00	0.00
180,000.00	0.00	0.00	0.00
190,000.00	0.00	0.00	0.00
200,000.00	0.00	0.00	0.00
210,000.00	0.00	0.00	0.00
220,000.00	0.00	0.00	0.00
230,000.00	0.00	0.00	0.00
240,000.00	0.00	0.00	0.00
250,000.00	0.00	0.00	0.00
260,000.00	0.00	0.00	0.00
270,000.00	0.00	0.00	0.00
280,000.00	0.00	0.00	0.00
290,000.00	0.00	0.00	0.00
300,000.00	0.00	0.00	0.00
310,000.00	0.00	0.00	0.00
320,000.00	0.00	0.00	0.00
330,000.00	0.00	0.00	0.00
340,000.00	0.00	0.00	0.00
350,000.00	0.00	0.00	0.00
360,000.00	0.00	0.00	0.00
370,000.00	0.00	0.00	0.00
380,000.00	0.00	0.00	0.00
390,000.00	0.00	0.00	0.00
400,000.00	0.00	0.00	0.00
410,000.00	0.00	0.00	0.00
420,000.00	0.00	0.00	0.00
430,000.00	0.00	0.00	0.00
440,000.00	0.00	0.00	0.00
450,000.00	0.00	0.00	0.00
460,000.00	0.00	0.00	0.00
470,000.00	0.00	0.00	0.00
480,000.00	0.00	0.00	0.00
490,000.00	0.00	0.00	0.00
500,000.00	0.00	0.00	0.00

CONTRACT COST

AUDITS

COMMUNICATIONS

Project Controls Platform



Project Controls Platform

Single Source of Truth

1

Audit Trail



One Platform for Cost, Contract & Earned Value



Improved Visibility across Portfolio

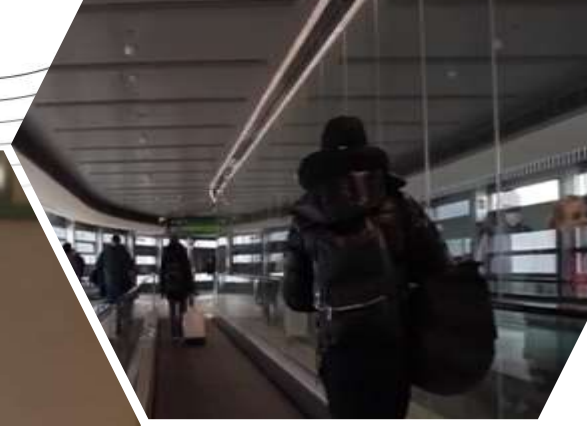


Project Controls Platform

A short video detailing our work with Dublin Airport is available to view on our website. Please visit the below URL or ask at the end of the presentation for a link to be emailed to you.



www.rpc.uk.com/case-studies/daa-case-study-video





THANK YOU