

# Effect of PMIS in PMO Success for Infrastructure Projects

Presented by **Mohamed Elfouly**



## Speaker BIO

- **Phd. in Project Management, Cairo University**
- **Master of Engineering in Project Management, Helwan University in Cairo.**
- **PMP® ,PMI-RMP® ,PMI-SP®**
- **PRINCE2® , P3O ®, ITIL-4® , PMO-CP®**
- **Association of The Chartered Institute of Arbitrators (ACI Arb Membership No. 6091334)**
- **Association of Planning Engineers (AAPE Membership No. 120047)**
  
- **Contributed to Review of The Practice Standard for Scheduling 3rd Edition (Refer to Appendix X2.2.2 Final Exposure Draft Review).**
- **Contributed to Review of The Practice Standard for Work Breakdown Structures 3rd Edition (Refer to Appendix X2.2.2 Public Exposure Draft Review).**
- **Contributed to Review of The Standard for Project Management and A Guide to the Project Management Body of Knowledge – Seventh Edition (Refer to Appendix X1 Contributors and Reviewers).**

# AGENDA

**1**

Introduction to Project Management Information System (PMIS)

**2**

Project Controls Scope in PMO Projects

**3**

PMIS Role to Support Project Controls in PMO

**4**

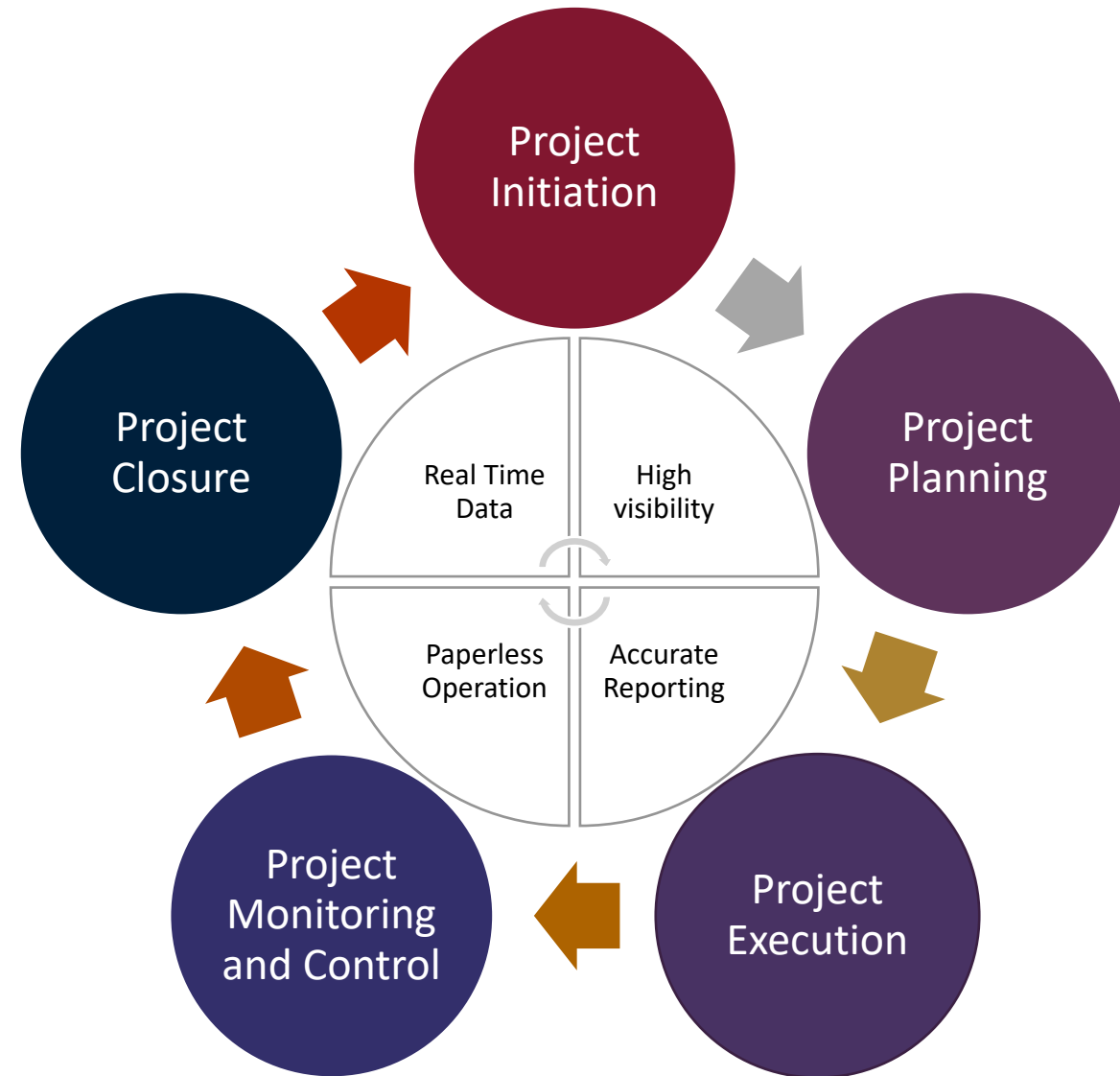
Reporting to support decision making using PMIS with 4D Planning and Business Intelligence.

# Introduction to Project Management Information System (PMIS)

- What is PMIS
- Why PMIS?
- PMIS Benefits
- Characteristics of a PMIS
- What is PMIS Capabilities?
- Types of PMIS?

## What is PMIS?

- a group of Project Management integrated applications that assists the organization to manage and control a project through its lifecycle from Project initiation to Closure.



## Why PMIS?

Isolated Systems with unshared data

Lack of Documents Management

Manual Reporting and Dashboards

Multi data source with unverified data

Lack of effective tool that facilitate PMT collaboration and communication

Lack of achieving organizational strategic goals

Lack of Support all aspects of project management and the information they monitor or collect



## PMIS Benefits

01.

Business Process  
Automation

02.

Ability to retrieve  
historical data

03.

Engineering Drawing  
Review/Markup

04.

Single source of truth

05.

Reducing documentation  
cycle approvals duration

06.

Transparency &  
Accountability information

## Characteristics of a PMIS

1

Schedule and Planning

2

Resource Management

3

Cost Estimation and Control

4

Control and Performance

5

Reporting and Communication

6

Integration and Ease of Use

7

RISK Management

8

Quality Control

9

Document Control



# What is PMIS Capabilities?

- PMIS should support Most of the communication and Collaboration needs of a project environment.

**1. Analyze & Forecast**

**2. Monitoring & Control**

**3. Governance**

**4. Reliability**

**5. Rapidity**

**6. Adaptive**

## Types of PMIS?

- There are different types of PMIS software, but most share feature sets that include tools for scheduling, work authorization, information collection and distribution, etc..
- PMIS may differ in scope, design and features depending upon an organization's operational requirements.
- PMIS can vary from something as simple as a File containing Microsoft Excel documents, to a full-blown enterprise PMIS software.
- PMIS has two types in terms of utilization:
  - Custom Made PMIS such as SharePoint.
  - On-Shelf PMIS such as Primavera Unifier.

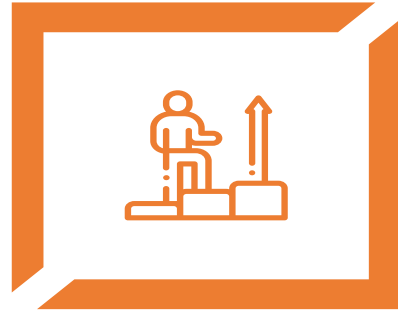
# Project Controls Scope in PMO Projects

- PMO Major Success Factors
- Project Controls Main Elements

# 10 key and recurring themes in successful PMOs



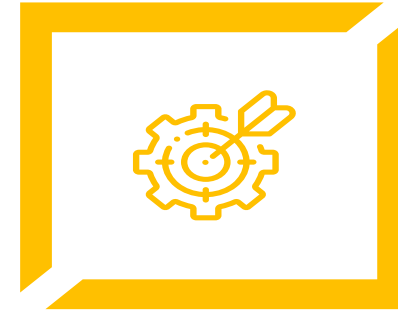
- The level of engagement by senior decision makers within the organisation;



- Use of skilled resources actively managed with Project Management expertise



- Clear business objectives;



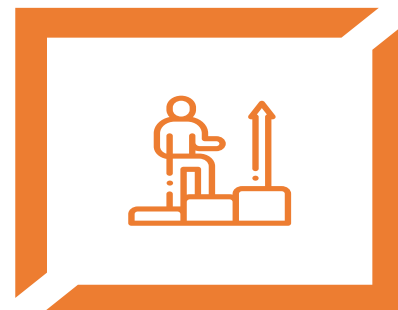
- Agility, speed and adaptability



- Scope optimisation



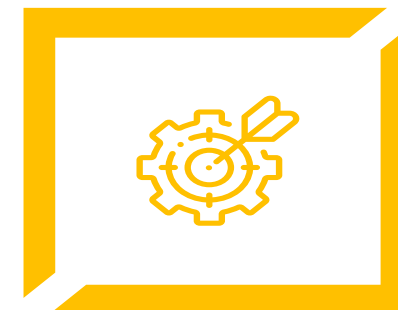
- Organizations understanding at the outset what benefits they were aiming to achieve



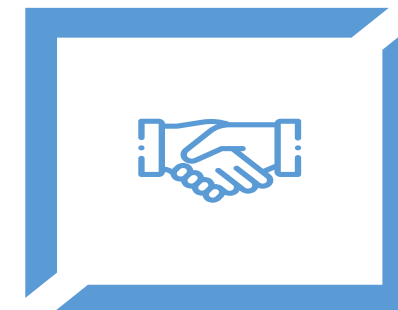
- Projects controls expertise



- Integrated Project management tools (PMIS)



- Financial management
- Risk management



- A formal, robust methodology for project delivery

# Project Controls Main Elements

01

Planning and Scheduling  
(includes Developing & Monitoring)

03

Risk Management  
(includes identification & assessment)

05

Earned Value Management

07

EPC Performance Tracking

09

Reporting and forecasting

02

Cost estimating and management

04

Scope and Change Management

06

Document Control

08

Building Information Modelling (BIM)

10

Information Management System (PMIS)

# PMIS Role to Support Project Controls in PMO (Case Study)

- PMIS Development Processes

# PMIS Development Processes

01

Pre-Implementation

- Gap Analysis
- Gathering Information & Requirements
- Road Map & Scoping

02

Implementation

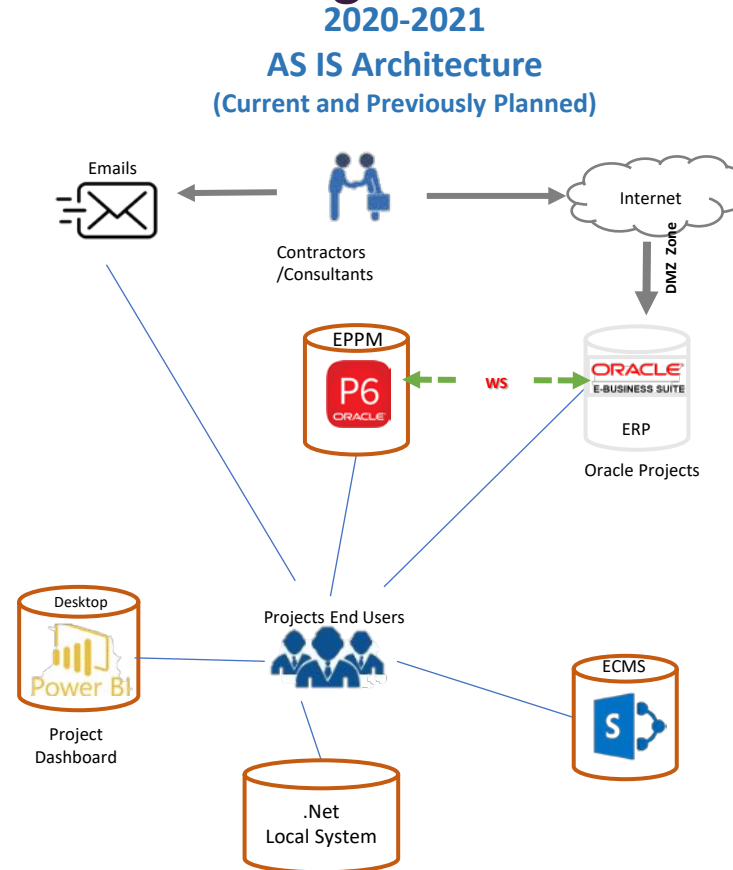
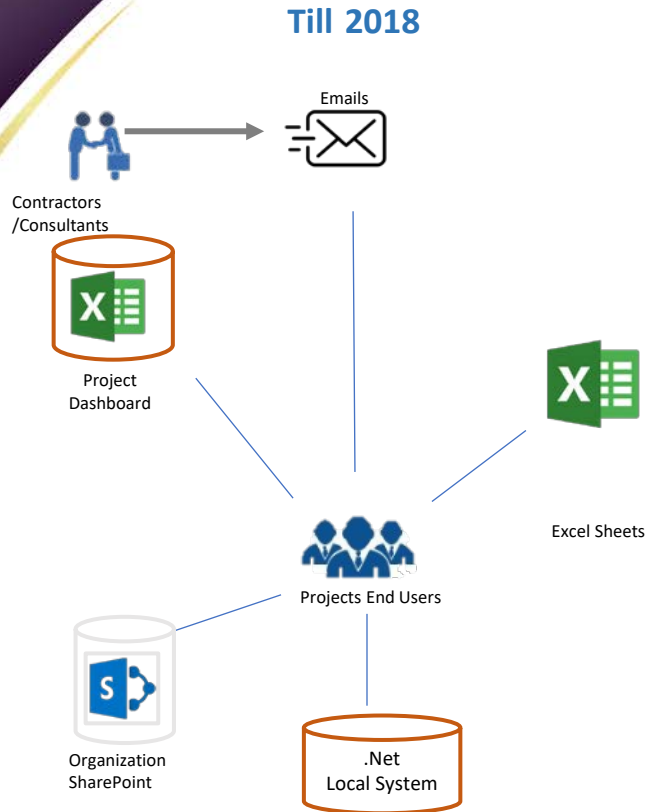
- Design & Development
- UAT & Operation

03

Post-Implementation

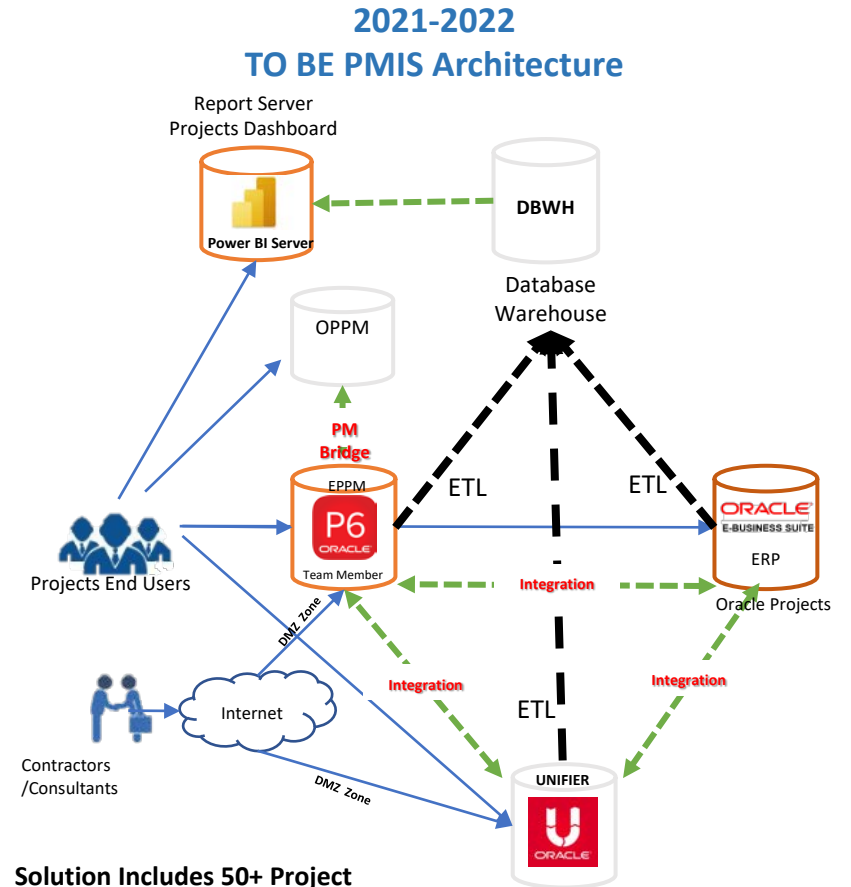
- Monitoring & Evaluation of Outcomes
- Sustain the operation
- System Support
- Training & Knowledge Transfer

# 1. Pre-implementation Gap Analysis / Gathering Information & Requirements



## New Identified Required Solutions:

- Strategy Planning Portfolio
- Cost Estimation
- Risk Management
- Contract Management (Scope & Change Management)
- Quality Management
- Lessons Learned & Issue Logs



## Solution Includes 50+ Project Management Business process after Gathering Requirements:

Project Documents ,Correspondences, Preparation ,Contract Management  
Payment Applications, Inspections, ,Change Orders, Payment requests,  
Submittals, Capital Plan ,Cost Estimates, Testing & Commissioning, Site  
Handover , Work inspection request Initial and final Acceptance, etc..  
New Project registration , Project Closure, Project Charter , RFP



# 1. Pre-implementation Road Map & Scoping

## Strategic Planning



- Masterplan
- Class 5 Cost Estimate

## HQ / Cluster Strategic Planning



- Project ID Generation
- 5Y PPP Plan
- Annual Capital Works Plan
- Business Case
- Level 1 Schedule
- Fund Approval
- Class 5 Cost Estimate

## Strategic Planning



- Project Registration
- NPMO Project No.

## Directorate (Cluster)



- Project Planning
- Project Charter
- Estimation

## TS (HQ)



- Design RFP
- Tender Design

## Procurement



- Contract Package
- Design PO

## TS (Design Consultant)



- Project Design Submittals

## Projects (Contractor)



- Construction Works

## TS



- RFP Preparation
- Tendering & Awarding

## TS (Design Consultant)



- Class 2-3 Estimation
- BOQ

## TS



- Design Approval
- Payment & Invoicing

## TS

- Design Review
- Value Engineering

## TS (Contractor)

- Quality Control, Commissioning, Acceptance

## Projects & Finance



- Payment Application

## Finance



- Contractors Invoices

## Projects & Assets



- Project Closeout, Asset Capitalization and Handover



- Analytics Reporting



Analytics & Dashboards

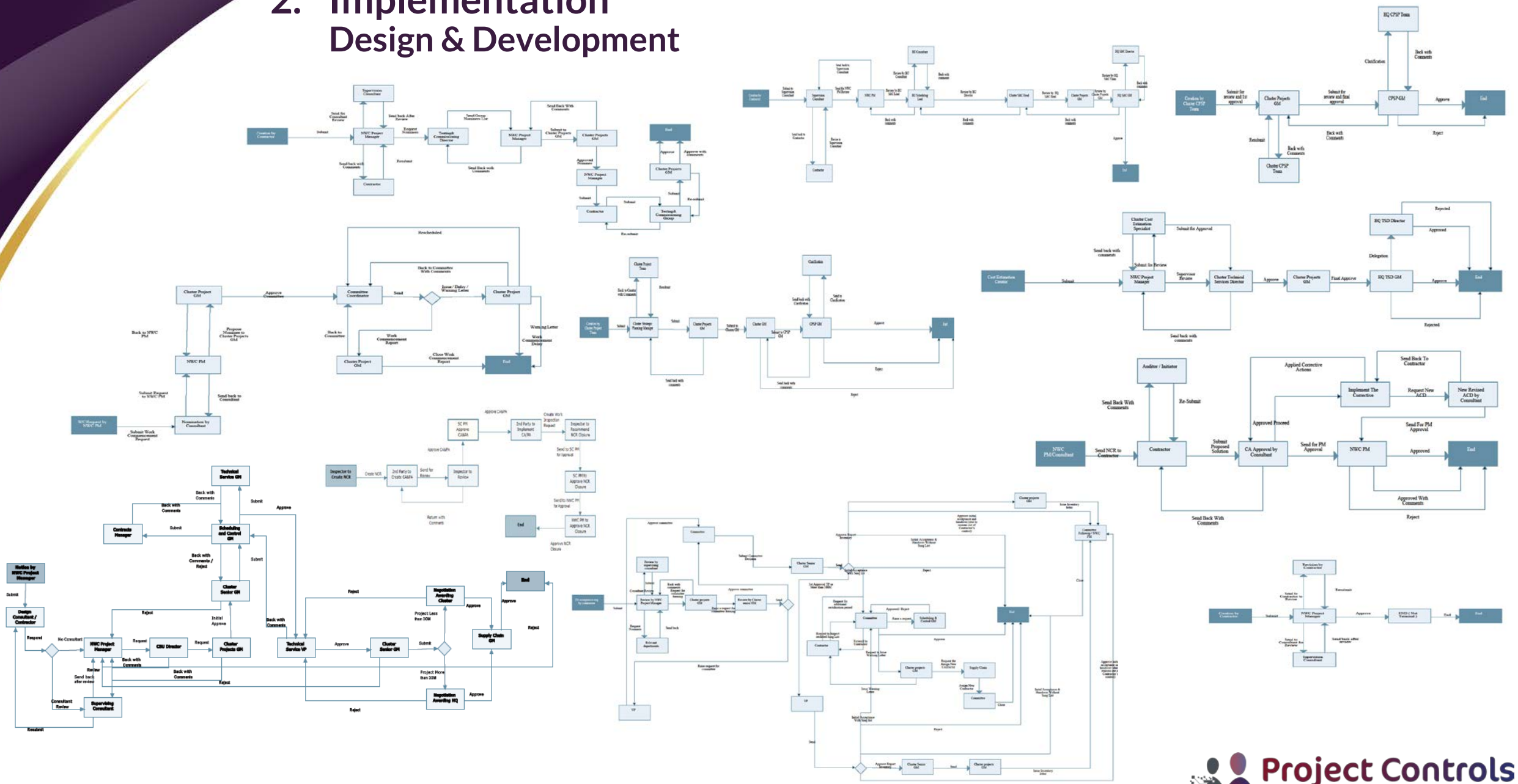
TS: Technical Services ■ Oracle Primavera Unifier / EPPM / OPMP ■ Power BI/DBWH ■ ERP ■ GIS

# 2. Implementation Design & Development



Business Case	New Project Registration	Project Management Plan	RFP Preparation	Design Management Plan	level 2 Schedule for Construction	Construction Management Plan	Pre-commissioning	Initial Handover Inspection
Scope Of Work	Project Registration Checklist	Project Charter	Tech. Evaluation Committee Nomination	Level 3 Schedule for Design	Tech. Evaluation Committee Nomination	Level 3 Schedule Submission/Update	Testing & Commissioning	Initial Acceptance
Level 1 Schedule		Analyze Business Case	Tech. Evaluation	Design Submittal / Review	Tech. Evaluation	Site Handover		Final Handover Inspection
Class 5 Cost Estimate		Cost Estimate (Order of Magnitude Class 4)	Risk Management Plan	Value Engineering workshop	Risk Management Plan	Permit to Work (PTW) , Inspection and Testing Plan (ITP)		Review, Approve and process Final Payment
		Environmental Impact Assessment (EIA)	Develop level 2 Schedule for Design	Cost Estimate (Class2 and 3)	PO/Contract Package	Work Inspection Request (WIR), Material Inspection Request (MIR)		Final Acceptance
			PO/Contract Package	Change order	Tender Queries and Responses	Submittals		Lessons learned Report
				Risk Management	Approve Class 1 Cost	Request for Information (RFI)		Project Closure
				Payment Request		Construction Performance Reporting, NCRs		
				Contract Management		Health Safety & Env. (HSE)		
				Design Performance Reporting		Risk Management		
				Claims		Change Order & Claims		
				Project Withdrawal		Payment Request		
				Suspension & Resumption		Contract Management		
						Project Withdrawal		
						Suspension & Resumption		

# 2. Implementation Design & Development



## 2. Implementation Design & Development P6 EPPM Technical Enhancements

Current Phase : **Completed**

### Project Duration

- Start Date: 1<sup>st</sup> May 2021
- Finish Date: 31 Jul 2021
- Duration: 3 Month

### Project Stakeholders

- Project Controls Department
- Project Cost Controls

Remarks

### Project Overview and Requirement

The Project Controls division of Organization requires the implementation of new P6-EPPM solution infrastructure version and apply required patches correctly to be suitable with the business needs and requirements, and to create security profiles (global and projects) with privileges suitable to end user's roles.

Technical enhancements are mandatory for integration with oracle unifier, oracle EBS and the full PMIS solution

### Scope

- Create new EPPM infrastructure and apply required patches.
- Implement new EPPM setup (EPS, OBS, Profiles, users, .....)
- Reviewing and testing data migration.
- Upgrading P6-EPPM application and P6 Professional to latest version 20.12.xx and apply all required patches for database, EPPM application and P6 Professional.
- Upgrading database to Oracle database enterprise edition 12C.
- Filtering, updating user's security profile.
- Filtering updating "cleansing" project list and OBS,
- Reconfiguring application settings .
- Activating integration layers BIP for reports release.
- Upgrading the current hardware resources for the P6 EPPM solution servers

### Required Resources

Primavera Technical Specialist

### In House / Outsourced

In House

### Dependencies / Assumptions

Hardware Servers  
Access permission

### Outcomes

- Upgrading to latest version in the market.
- Supporting new features and better system stability.
- Full support for Arabic language and new Arabic interface.
- Resolving Performance and security issues.
- Resolving Technical issues and system bugs.
- Applying all integration prerequisites.

## 2. Implementation Design & Development Unifier Phase 1

Current Phase : **In Progress**

### Project Duration

- Start Date: 19 Sep 2021
- End Date

### Project Stakeholders

- Project Controls Department
- Strategic planning
- Project Document Control
- Project Cost Controls
- Project Scheduling

Remarks :

### Project Overview and Requirement

Organization Project Controls Department requires the Automation of the critical Project lifecycle business processes that are related to the different project stages, schedules and cost. Project Business Processes should be integrated with the ERP cost data and the P6 Schedules.

### Scope

Implementation of the Oracle Primavera Unifier for the Organization. Business Processes should include the critical project lifecycle processes required to control project cost and schedule per the Organization PMM. Integration with Oracle EBS project Cost and P6 EPPM Schedules . Business processes shall include :

1. 5 YR PPP and Annual Capital Works Plan
2. level 1,2 and 3 Schedule baseline submission and updates
3. Class 5, 4 , 3, 2 and 1 Cost Estimation, Cost Sheet and Commits

4. New Project registration and Project Closure
5. Project Charter and RFP Preparation
6. Site Handover, MIR,WIR,NCRs
7. Contract Management ,Change Orders and Payment requests
8. Testing & Commissioning, Final Handover inspection and Final Acceptance

### Required Resources

Project Manager \*Primavera Technical Specialist  
 PMIS Implementation Lead  
 Unifier Developer

### In House / Outsourced

Outsourced

### Dependencies / Assumptions

P6 EPPM Schedule Enhancement  
 Oracle EBS Project Costing Implementation  
 P6 Team Member  
 P6 EPPM Technical enhancements (new infrastructure , new version, applying patches, Cleansing etc.) are required and mandatory.

### Outcomes

- Implementation of the Major Organization Project lifecycle processes (23 Business process) integrated with ERP cost and P6 Schedules.
- Enhancement and Upgrade of the Enjaz system to a Unifier platform.
- Implementation of a world class project control system.
- Automation of the Schedule baseline submission process.
- 200 Unifier Users (90 Organization employees – 30 Consultants – 80 Contractors)

## 2. Implementation Design & Development EBS (ERP) Projects

Current Phase : **In Progress**

### Project Duration

- Start Date: 15 Dec 21
- End date : 1<sup>st</sup> Mar 22

### Project Stakeholders

- P&TS Department
- Project Cost Controls

### Remarks

- P6 integration should be redesigned to include Primavera Unifier

### Project Overview and Requirement

NWC P&TS Department requires the ability to capture and tracking NWC Projects costs and invoices on a detailed BOQ level. Project Cost information should be integrated with the rest of the NWC accounting cycles (Purchasing, Accounts Payable and General ledger). Project cost reports are currently generated manually and gathered through communications or systems with manual data-entry. It is required to have an end-to-end project cost solution that will be able to generate trusted project cost reports automatically.

### Scope

Implementation of the Oracle Projects Module in the Oracle E-business Suite ERP system for the NWC while interfacing project header creation and project stages with P6 EPPM. Applying validation of quantities entered in P6 as resources with the Supplier's work confirmation.

### Required Resources

Project Manager  
PMIS Implementation Lead  
Oracle Projects Consultant

### In House / Outsourced

Outsourced

### Dependencies / Assumptions

- For P6 Quantities validations with the EBS, Existing P6 EPPM schedules should be updated and assigned with latest approved baselines, projects activities update, configured proper resource as per BOQ and assigned to activities. Current status of the EPPM schedule data unprepared for EBS integration in regard to Work confirmation validation of quantities with P6 resources.

### Outcomes

- Creation of NWC Projects in the ERP system.
- Capturing and tracking NWC CAPEX Projects costs and invoices.
- Creating PR and PO with detailed project BOQ items based on the CSI Standards
- To capitalize projects assets into the ERP Fixed Assets application.
- Automation of Project Cost reports
- Automating the Approval workflows for each project stage change



## 2. Implementation Design & Development P6 Schedules Enhancement

Current Phase : **In Progress**

### Project Duration

- Start Date: 29 April 22
- End Date : 31<sup>st</sup> Jan 22

### Project Stakeholders

- Project Controls Department
- Project Scheduling

Remarks :

### Project Overview and Requirement

Organization Project Controls Department requires the activation of the EPPM Dashboards and for the project Schedules in P6 (EPPM) to be integrated with the PMIS Solution applications in an automated environment. Therefore, it is required that the Organization P6 (EPPM) Project schedules to be fully imported, updated and utilized properly and constantly.

### Scope

- Reviewing and Approving Organization Projects Baseline Schedules.
- Assuring Compliance with Organization Resources Directory
- Importing and Assigning Approved Baseline Schedules
- Review and Improvement of updating approved Baseline Schedules Process.
- Monitoring of schedules updating status
- Utilizing the P6 features
- Assessing required additional planning resources and providing accordingly.
- Data Cleaning (If Any)
- Review and Applying required access controls and configuration to the P6
- Application to assure schedule import/update controls.
- Work instructions / Guidelines and workshops.

### Required Resources

Project Manager  
PMIS Implementation Lead  
Primavera Technical Consultant

### In House / Outsourced

In House

### Dependencies / Assumptions

Primavera Team member is required during the Execution of this project as per the PMIS Roadmap's 1<sup>st</sup> Release.

P6 EPPM Technical enhancements (new infrastructure , new version, applying patches, Cleansing etc.) are required and mandatory.

### Outcomes

- Organization Projects P6 fully updated schedules for all projects.
- Applying required controls and process updates for schedules to be updated constantly on a monthly basis

## 2. Implementation Design & Development P6 Team Member

Current Phase : **Not Started**

### Project Duration

- Start Date: 19 SEP 2021
- Duration: 4 Month

### Project Stakeholders

- Project Controls Department
- Project Cost Controls
- Project Scheduling

Remarks :

### Project Overview and Requirement

Organization Project Controls Department requires the ability for the Organization project clusters and contractors to update the project p6 schedules with the true progress while enablement of reviewal and approval of the updates by the Project Controls Department to ensure project integrity.

### Scope

- Implementation of the Primavera P6 Team member application for the Clusters & Contractors.
- Configuring approval workflows for project updates

### Required Resources

Project Manager  
PMIS Implementation Lead  
Primavera Technical Specialist

### In House / Outsourced

Outsourced

### Dependencies / Assumptions

P6 Schedules Enhancement

P6 EPPM Technical enhancements (new infrastructure , new version, applying patches, Cleansing etc.) are required and mandatory.

### Outcomes

Organization project clusters and contractors can easily update project schedules using web or mobile platforms while allowing workflow Review and Approval by management



## 2. Implementation Design & Development Unifier Phase 2,3

Current Phase : **Not Started**

### Project Duration

- Start Date: 1 Aug 2022
- End Date : 30 Nov 22

### Project Stakeholders

- Project Controls Department
- Strategic planning
- Project Document Control
- Project Cost Controls
- Project Scheduling

Remarks :

### Project Overview and Requirement

Organization Project Controls Department requires the Automation of the remaining Project lifecycle business processes that are related to the different project stages while integrating to the previously developed schedules and cost business processes in the Unifier phase 1 project.

### Scope

Implementation of the Oracle Primavera Unifier for the Organization. Business Processes should include the remaining project lifecycle processes per the Organization PMM. Integration with Oracle EBS project Cost and P6 EPPM Schedules . Business processes shall include :

1. Project Registration Checklist, Project Management Plan, Analyze Business Case
2. EIA, Tech. Evaluation , Evaluation Committee Nomination

3. Risk Management Plan, Risk Management
4. Design Submittal / Review, Value Engineering workshop
5. Claims, Project Withdrawal, Suspension & Resumption
6. Tender Queries and Responses ,PTW ,ITP, submittals, RFI,NCR,HSE
7. Pre-commissioning, Initial Handover Inspection, Initial Acceptance
8. Approve final payment, lessons learned, Project Closure

### Required Resources

Project Manager  
PMIS Implementation Lead  
Unifier Developer

Primavera Technical Specialist

### In House / Outsourced

Outsourced

### Dependencies / Assumptions

P6 EPPM Schedule Enhancement

Unifier Phase 1

Oracle EBS Project Costing Implementation

### Outcomes

- Implementation of the remaining Priority PMM Organization Project lifecycle processes integrated with ERP cost and P6 Schedules

## 2. Implementation Design & Development BI Projects Dashboard Phase 1,2

Current Phase : **Not Started**

### Project Duration

- Start Date: 1 Dec 21
- End Date : 31 Aug 22

### Project Stakeholders

- Project Controls Department
- Project Cost Controls
- Project Scheduling

Remarks :

### Project Overview and Requirement

Organization Project Controls Department requires the development of Realtime highly advanced business intelligence projects dashboards and implementing Performance KPI dashboards for the major implemented Unifier business processes.

### Scope

- Implementation of the Database Warehouse solution with ETL (Extract-Transform- Load) capabilities configured to extract project related information from the Unifier, P6 and EBS Project costing databases and setting up the required staging tables.
- Development BI Power Dashboards loaded with project cost, schedule and scope data from the DBWH environment.

### Required Resources

Project Manager  
PMIS Implementation Lead  
Primavera Technical Specialist

### In House / Outsourced

Outsourced

### Dependencies / Assumptions

P6 EPPM Schedule Enhancement  
  
Unifier Phase 1  
  
Oracle EBS Project Costing Implementation

### Outcomes

- Advanced data drill down and historical information trends.
- Highly sophisticated custom made KPIs that assists the Organization in decision making.

## 2. Implementation

### Design & Development

### Oracle Project Portfolio Management Implementation

Current Phase : **Not Started**

#### Project Duration

- Start Date: 1 Apr 2022
- Duration: 5 Month

#### Project Stakeholders

- Project Controls Department
- Strategic Planning
- Project Cost Controls
- Project Scheduling

Remarks :

#### Project Overview and Requirement

Organization Project Controls Department requires the implementation of Portfolio Management solution to propose, plan, control and strategically analyze Organization investment portfolios.

#### Scope

OPPM Implementation to include:

- 1- Project categorization and scoring and allowing the setup of project dependencies and prioritization.
- 2- The configuration of Scorecards to allow analysis of projects using Organization metrics to measure investment performance
- 3- Integration with Primavera P6 EPPM to allow publishing/update of Projects from OPPM and to synchronize project information update from P6.
- 4- Alignment of Portfolio Capital Plans with targeted budgets using what-if scenarios.
- 5- Development of the Business Case, Scope of Work Business process that reflect into the big picture formats (investor maps, Scorecards)

#### Required Resources

Project Manager  
PMIS Implementation Lead

#### In House / Outsourced

Outsourced

#### Dependencies / Assumptions

P6 EPPM Schedule Enhancement

#### Outcomes

Solution will allow the Strategy team to propose initiatives that align with the Organization's strategy and mission.

Automation of the Business Case, Scope of work.

Capital Planning using Scenario based and graphical Analysis

## 2. Implementation Design & Development ECMS Repository Setup for Unifier

Current Phase : **Not Started**

### Project Duration

- Start Date: 1<sup>st</sup> Oct 2021
- Duration: 2 Month

### Project Stakeholders

- P&TS Department
- Project Document Control

Remarks :

### Project Overview and Requirement

NWC P&TS Department requires the ability for non-Unifier NWC users to easily access and search for Unifier automated business processes project content and documentation using the existing ECMS System currently being utilized in NWC.

### Scope

Configuration/development of the existing ECMS environment to integrate with the Primavera unifier solution as a content repository.  
Configuration of the Primavera Unifier environment content repository to SharePoint (ECMS) settings.

### Required Resources

Project Manager  
PMIS Implementation Lead      SharePoint Developer  
Primavera Technical Specialist

### In House / Outsourced

Outsourced

### Dependencies / Assumptions

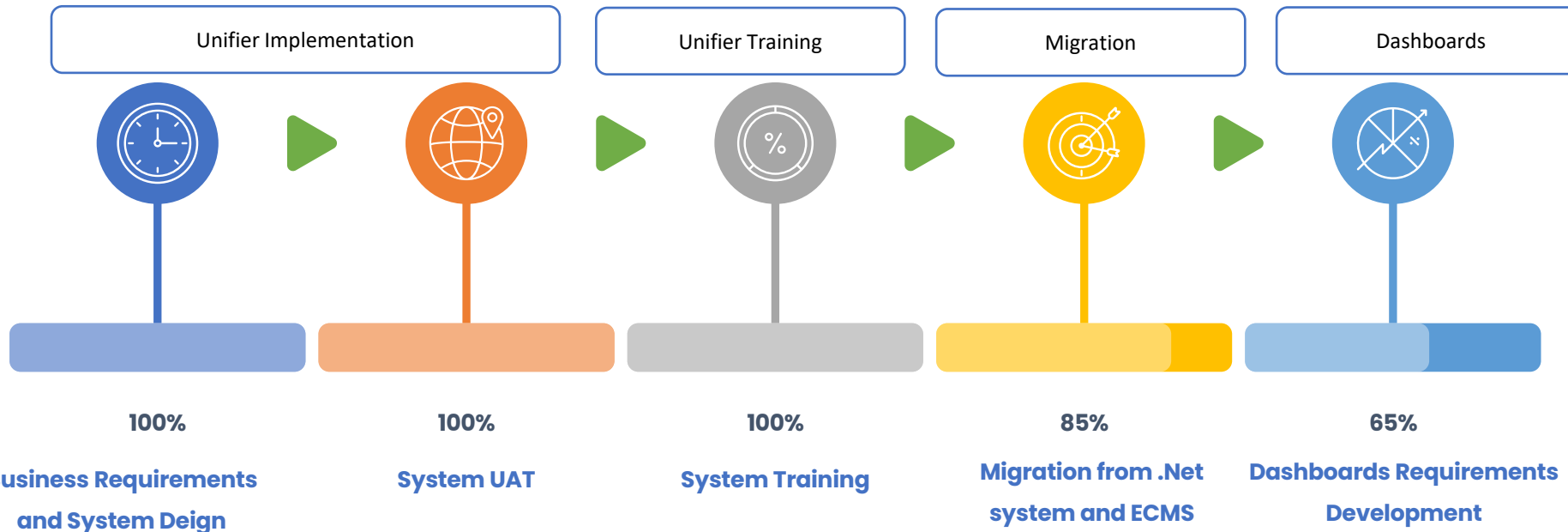
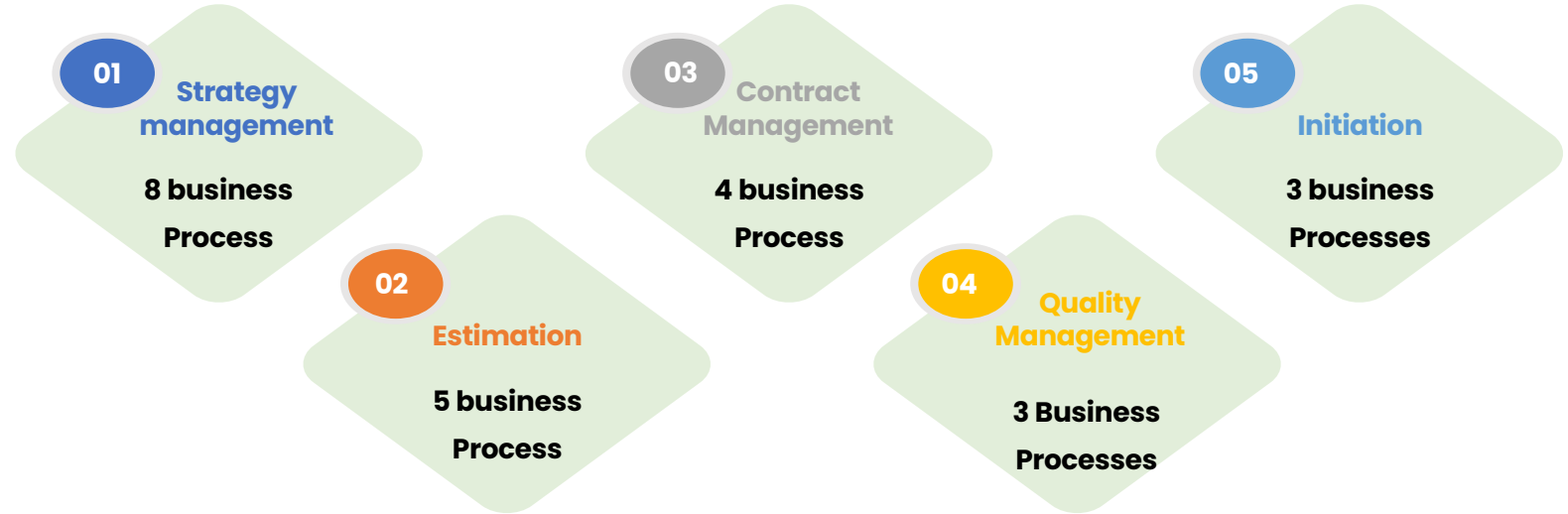
Unifier Phase 1

### Outcomes

Having the ECMS as a content repository integrated with Primavera Unifier will avoid cluttered, unstructured content and will enable having an organized catalog, access, search, and reuse for the project documentation.

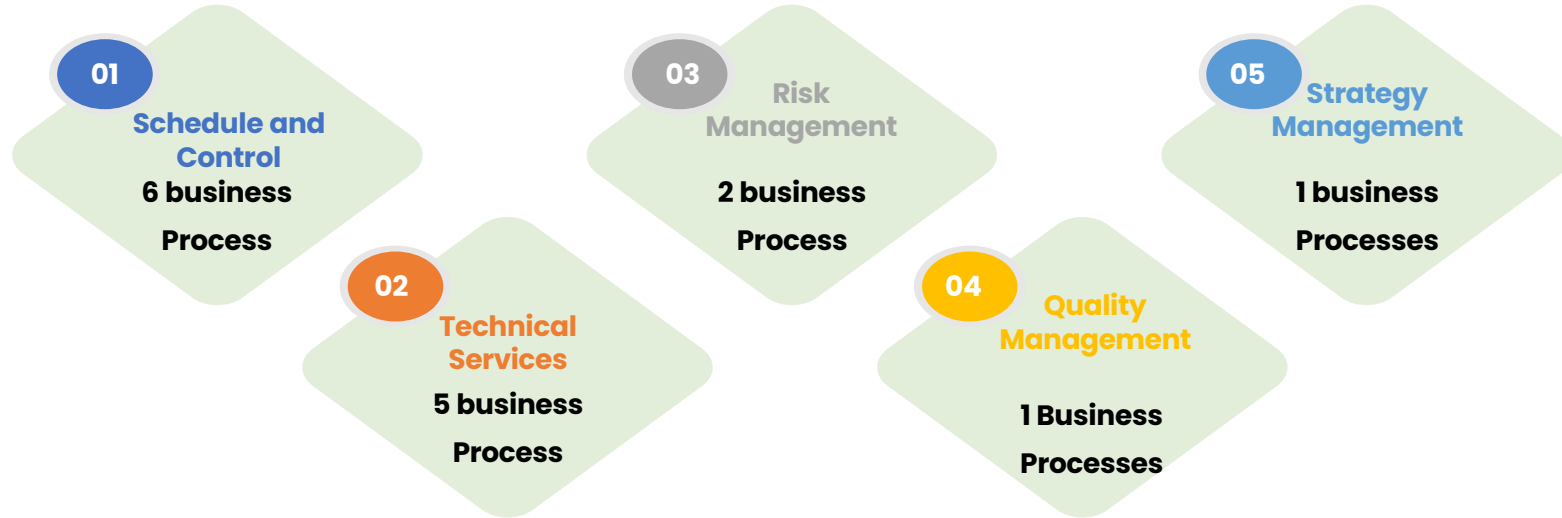
## 2. Implementation UAT & Operation Unifier Phase 1 Deliverables

20 BP



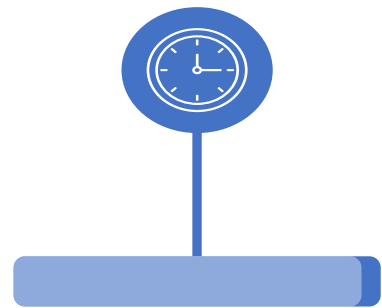
## 2. Implementation UAT & Operation Unifier Phase 2 Deliverables

**15 BP**



Unifier Implementation

Integration



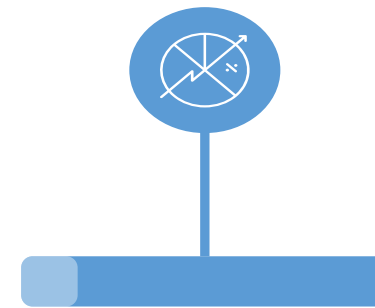
**Business Requirements and System Design**



**Phase II Development**

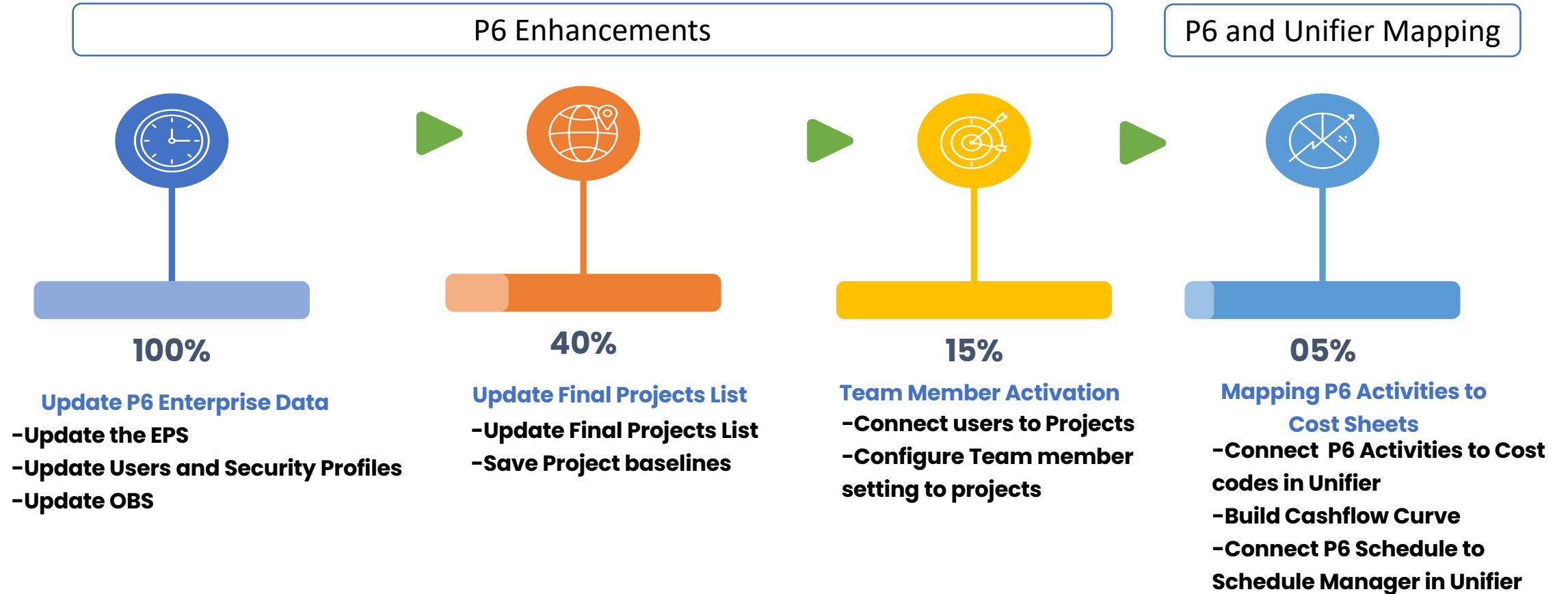


**UAT and Training**



**Integration Requirements**

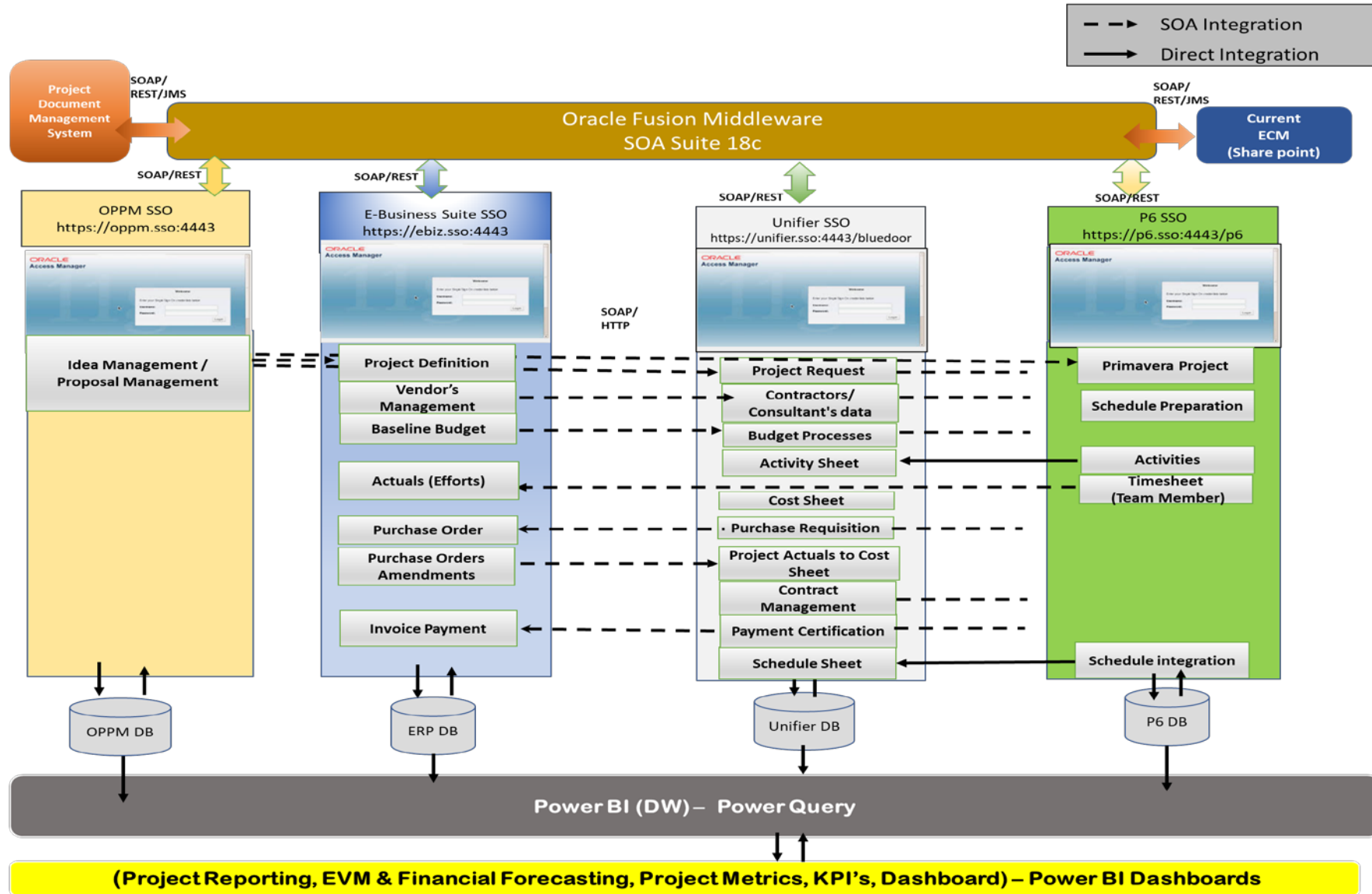
## 2. Implementation UAT & Operation P6 EPPM & Team Member



Reporting to support decision making using PMIS with 4D Planning and Business Intelligence.



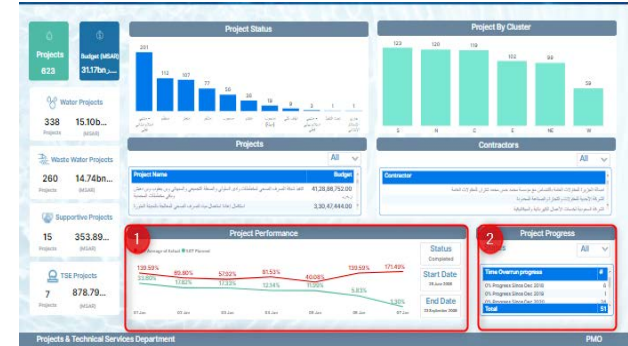
# Understanding PMIS Integration for Reporting



# Dashboard Development using Business Intelligence

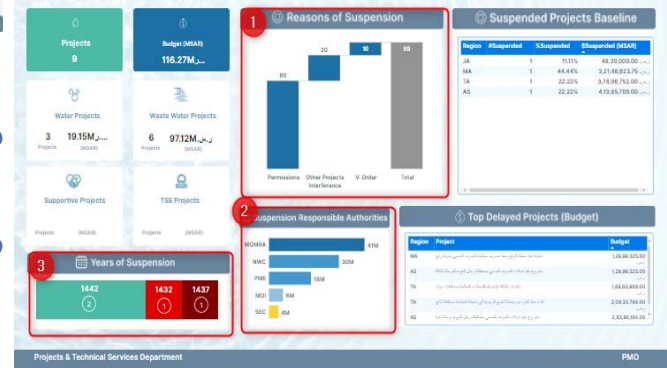


85%



- 1- Verify the Formula and Connect to Data Source
- 2-Verify the reflected Data
- 3-Perform Validation of the reflected Data and Data Sources
- 4- Perform Validation on Formulas

80%



- 1- Verify the Formula and Connect to Data Source
- 2-Verify the reflected Data
- 3-Perform Validation of the reflected Data and Data Sources
- 4- Perform Validation on Formulas

70%



- 1-Get Access to ERP Related View
- 2- Get the formula of Schedule Compliance KPI
- 3-Get the Formula of Calculating Area Served and Population
- 4- Connect to P6 Schedules

100%



- 1- Perform Validation of the reflected Data and Data Sources
- 2- Perform Validation on Formulas

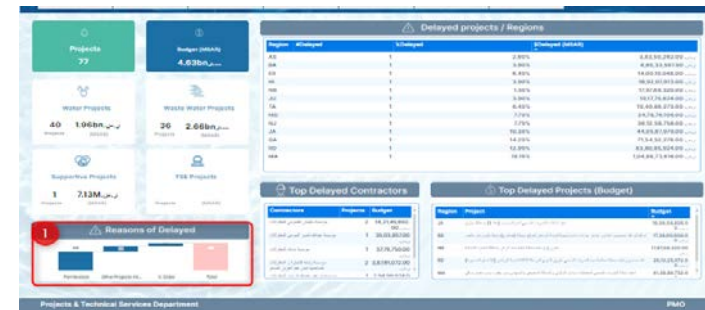
# Dashboard Development using Business Intelligence

100%



1- Perform Validation of the reflected Data and Data Sources  
2- Perform Validation on Formulas

90%



1- Verify the Formula and Connect to Data Source  
2-Verify the reflected Data  
3-Perform Validation of the reflected Data and Data Sources  
4- Perform Validation on Formulas

80%



1- Verify the Formula and Connect to Data Source  
2-Verify the reflected Data  
3-Perform Validation of the reflected Data and Data Sources  
4- Perform Validation on Formulas

40%

1- Verify the Formula and Connect to Data Source  
2-Verify the reflected Data  
3-Perform Validation of the reflected Data and Data Sources  
4- Perform Validation on Formulas





# Unifier Implementation Phase 1- Demonstration

## P6 and Team Member Implementation-Portfolio View

Oracle Primavera Unifier (Development) - Portfolio View

Navigation: Dashboards - Portfolios - Projects - Resources - Approvals - Administration

Project Statistics Table:

Project ID	Project Name	Data Date	Start	Finish	Schedule % Complete	Performance % Complete	At Completion Total Cost	Planned Value Cost	Earned Value Cost	Schedule Variance	Schedule Performance Index
		14-Sep-11	28-Aug-24		29.61%	30.08%	\$R21,627,854,758	\$R5,246,099,764	\$R5,329,000,708	\$R82,400,944	1.02
		09-Mar-18	29-Mar-19	11-Dec-21	0%	0%	\$R29,522,107	\$R0	\$R0	\$R0	
		12-Nov-19	11-Nov-19	18-Jan-22	0%	0%	\$R35,481,893	\$R0	\$R0	\$R0	
		24-Apr-18	24-Apr-18	11-Dec-21	0%	0%	\$R21,473,000	\$R0	\$R0	\$R0	
		25-Dec-20	29-Dec-20	18-Nov-23	0%	0%	\$R124,969,032	\$R0	\$R0	\$R0	
		25-Oct-20	07-Dec-17	24-Apr-23	33.49%	50.01%	\$R38,452,471	\$R17,835,391	\$R26,635,637	\$R8,830,447	1.48
		27-Apr-21	27-Apr-21	21-Oct-21	0%	0%	\$R3,503,857	\$R0	\$R0	\$R0	
		13-May-20	13-May-20	19-Apr-22	0%	0%	\$R6,560,000	\$R0	\$R0	\$R0	
		09-Jun-19	09-Jun-19	20-Jul-22	0%	0%	\$R67,039,888	\$R0	\$R0	\$R0	
		07-Jun-20	07-Jun-20	04-May-23	0%	0%	\$R30,988,683	\$R0	\$R0	\$R0	

Planned Value Cost Chart: Bar chart showing Planned Value Cost (USD) over time for various projects.

Earned Value Performance Table:

Project Name	Schedule	Cost	Forecast at Completion	Cost
	No Progress	\$R83,400,984 under	No Progress	\$R28,884,150 under
	No Progress	\$R9,830,482 under	No Progress	\$R231,865,779 under
	No Progress	No Progress	No Progress	No Progress
	No Progress	No Progress	No Progress	No Progress
	No Progress	No Progress	No Progress	No Progress
	on budget	\$R61,570 under	on budget	\$R76,717 under
	No Progress	No Progress	No Progress	No Progress
	No Progress	No Progress	No Progress	No Progress
	No Progress	No Progress	No Progress	No Progress

Project ID \* | Project Name \* | Data Date | Start | Finish | Complete | Complete | Cost | Planned Value Cost | Earned Value Cost | Schedule Variance | Performance Index

			25-Nov-21		0%	0%	\$R14,832,231	\$R0	\$R0	\$R0	
			25-Dec-22		0%	0%	\$R30,000,001	\$R0	\$R0	\$R0	
			27-May-21		0%	0%	\$R19,914,988	\$R0	\$R0	\$R0	
			07-Jan-21		88.32%	88.32%	\$R41,999,889	\$R37,094,184	\$R37,094,284	\$R0	1.00
			16-Jan-22		0%	0%	\$R69,999,907	\$R0	\$R0	\$R0	
			14-Jul-22		46.70%	46.70%	\$R38,111,435	\$R17,799,673	\$R17,799,673	\$R0	1.00
			18-Apr-23		0%	0%	\$R9,170,230	\$R0	\$R0	\$R0	
			08-Feb-23		0%	0%	\$R7,985,717	\$R0	\$R0	\$R0	
			18-Jan-23		0%	0%	\$R41,991,125	\$R0	\$R0	\$R0	
			09-Jul-21		0%	0%	\$R8,984,000	\$R0	\$R0	\$R0	

Planned Value Cost Chart: Bar chart showing Planned Value Cost (USD) over time for various projects.

Earned Value Performance Table:

Project Name	Schedule	Cost	Forecast at Completion	Cost
	on budget	\$R298,128 under	on budget	\$R57,028,979 under
	on budget	\$R17,364,334 under	on budget	\$R88,157 under
	No Progress	No Progress	No Progress	No Progress
	on budget	on budget	on budget	on budget
	No Progress	No Progress	No Progress	No Progress
	No Progress	No Progress	No Progress	No Progress
	No Progress	No Progress	No Progress	No Progress
	No Progress	No Progress	No Progress	No Progress
	on budget	on budget	on budget	on budget
	No Progress	No Progress	No Progress	No Progress
	No Progress	No Progress	No Progress	No Progress

Legend: Critical (Red), Warning (Yellow), Acceptable (Green), Exceptional (Blue)

Oracle Primavera Unifier (Development) - Contract Management

Navigation: National Water C... - Central - Contract Management

Contracts Region: Pie chart showing contract distribution by region.

Payment Applications Region: Bar chart showing payment applications by region.

Pending Change Orders: Pie chart showing pending change orders.

Change Orders Region: Bar chart showing change orders by region.

Contracts Cluster: Pie chart showing contract clusters.

Payment Applications Cluster: Bar chart showing payment applications clusters.

Pending Change Orders Cluster: Pie chart showing pending change orders clusters.

Change Orders Cluster: Bar chart showing change orders clusters.

Project Classification: Pie chart showing project classification.

Project Utilization: Bar chart showing project utilization.

## Challenges of Applying PMIS



**THANK YOU**