



Enabling Organizational Decision Quality with Digital Technology

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OMV Exploration & Production

Enabling Organizational Decision Quality with Digital Technology

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Acknowledgements:

We are grateful to Galvin Singh, Sonali Roy, Ning Hao and Maksim Luhouski (all SLB) for their excellent support and responsiveness during our co-development!

OMV started DigitUP Program to fully capitalize on digitalisation

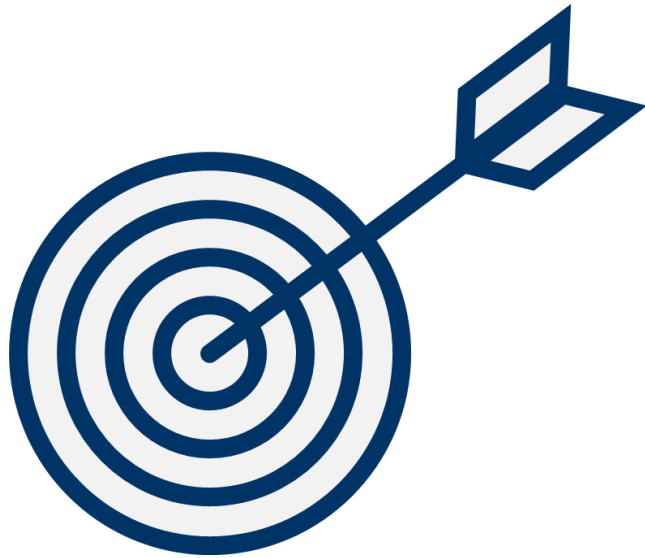
One value driver: Value-driven, data-based decision making



- ▶ Decision Quality supports all three strategic pillars
- ▶ Implementation a.o. through partnerships e.g. with SLB

Value-driven, data-based decision making

A fundamental part of Field Development Planning

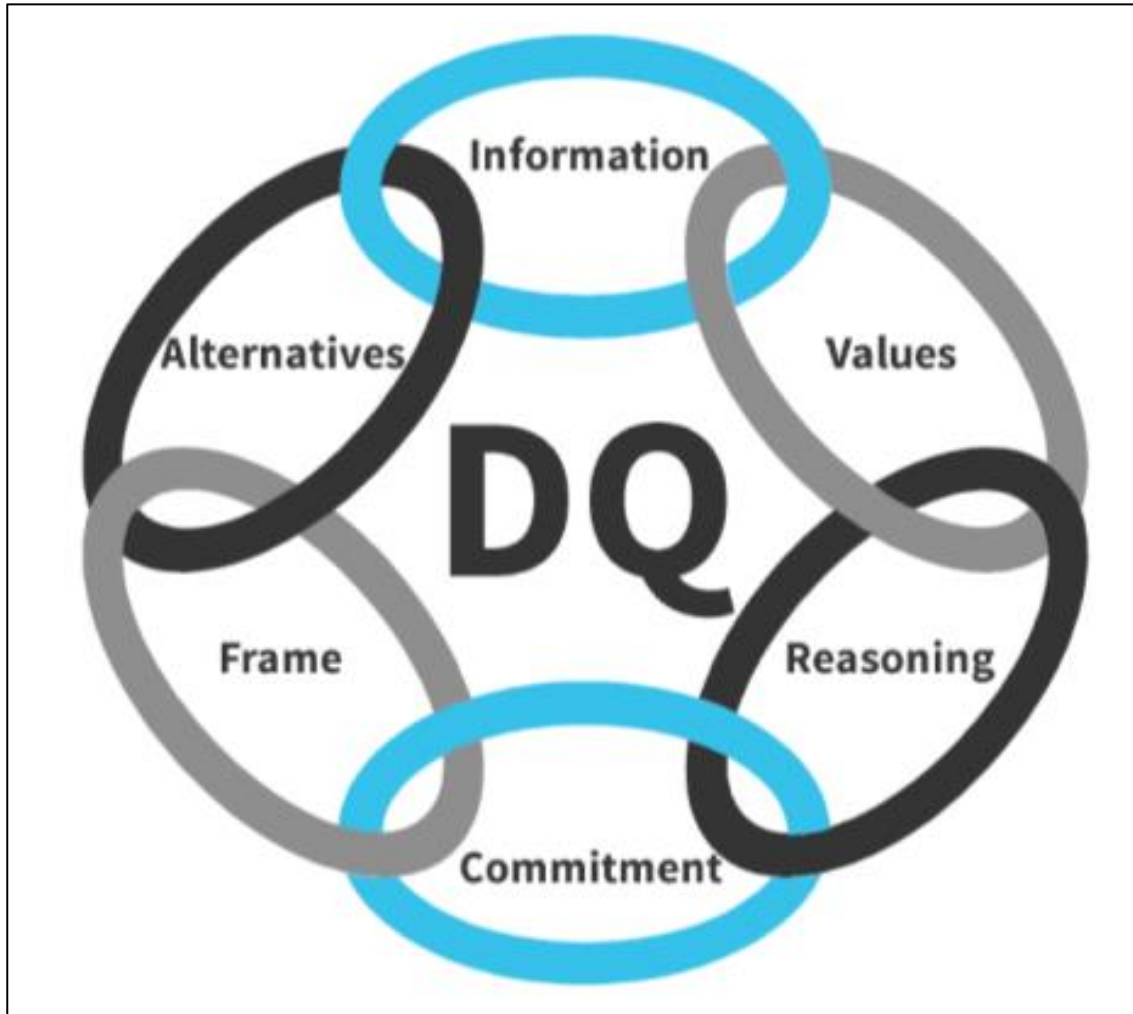


Agenda

- ▶ **WHY** – Benefit of a Decision Process
- ▶ **HOW** – Decision Quality Implementation in FDPlan
- ▶ **WHAT** – Features and Vision

Complex decisions require a clear and efficient process

Based on Decision Quality (DQ) framework

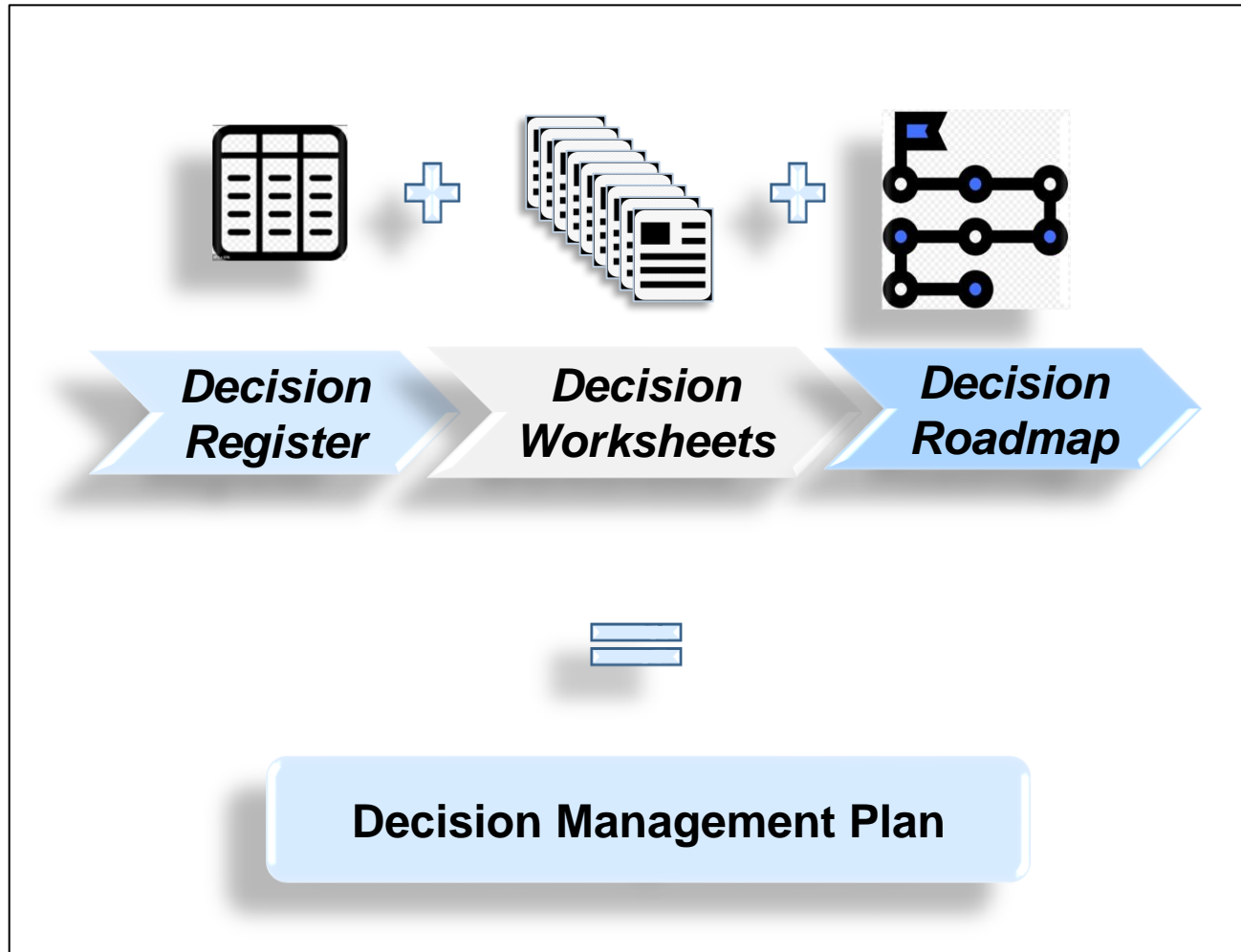


Benefits of a Decision Quality process:

- ▶ Improved **speed, value, consistency**, and **transparency** of OMV's project portfolio
 - ▶ Structuring decisions to capture more upside and mitigate downside risks
 - ▶ Clear sight of value in line with company strategic and financial objectives
- ▶ Clarity in **ownership & accountability** combined with **empowerment & integration**
 - ▶ Teams are gaining cross-functional understanding leading to real integration and acceleration through less conflicts
- ▶ **DQ** to become a “culture”, **a mindset**

OMV's Decision Management Plan comprises 3 main elements

Register – Worksheets – Roadmap



Elements of Decision Management Plan

1) Decision Register

- ▶ List of important decisions including metadata such as due dates, responsible parties, stakeholders, etc.

2) Decision Worksheets

- ▶ Planning and tracking of activities to attain the 6 elements of DQ

3) Decision Roadmap

- ▶ Integrated scheduling of important decisions

SLB & OMV Co-Development – Implementation of DQ in FDPlan Project Timelines and Deliverables

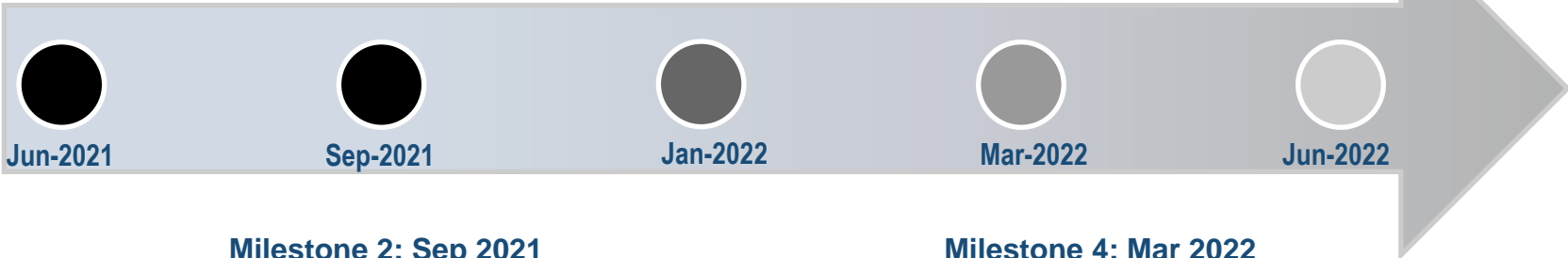
Milestone 1: Jun 2021

- Review DQ workflows
- Discover high level user journeys DQ Workflows (Persona & as-is journey)
- Agreed designs for Decision Register

Milestone 3: Jan 2022

- Project entity design
- Decision Register workflow implementation part 2 with Project
- Decision Worksheet workflow implementation initiated

Project Kick-off
26 May 2021



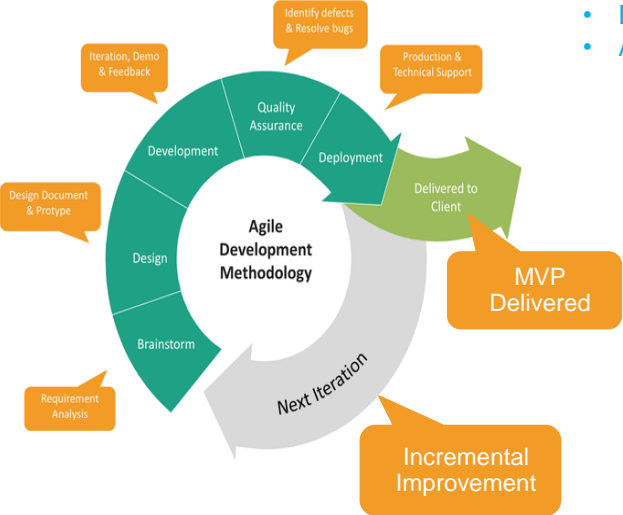
Project close-out
30 Jun 2022

Milestone 2: Sep 2021

- Decision Register workflow implementation part 1
- Designs for Decision Worksheet
- Agreed high level user journeys for DQ Workflows

Milestone 4: Mar 2022

- Decision Worksheet workflow implementation
- Documented discovery exercise for “Advanced Framing Workshop”
- Decision Quality Roadmap for follow-up phase.



Agile
Collaboration
Framework

Agile Project

- ▶ Delivered Decision Register and Worksheet workflows as MVP’s
- ▶ Lifted DQ from FDPlan Study to Project level



DQ in FDPlan – User Experience video

The screenshot displays the FDPlan web application interface. At the top, there is a dark header with the FDPlan logo on the left and the text "Data Partition: codev-lab" and "OMV EXPLORATION & PRODUCTION G..." on the right. Below the header, the main content area is titled "Studies" and includes a "Projects" tab. A navigation bar shows "Showing 7 studies", "Filters", and a "Create Study" button. The main area contains a grid of study cards. Each card features a map, a stage name, a country, and a field name. The cards are:

- ODQ Development Decision Register**: Stage Select, Country Norway, Field Name Hades & Iris
- ODQ demo exploration**: Stage Identify, Country Austria, Field Name -
- Pelican - Exploration**: Stage Identify, Country Austria, Field Name Pelican, Project Pelican Field De...
- Pelican - Assess**: Stage Assess, Country Austria, Field Name Pelican, Project Pelican Field De...
- Pelican - Concept Select**: Stage Select, Country Austria, Field Name Pelican, Project Pelican Field De...
- Pelican - FEED**: Stage Define, Country Austria, Field Name Pelican, Project Pelican Field De...
- First Study**: Stage Assess, Country -, Field Name -, Project Eagle Project

A vertical "FDPlan Assistant" button is located on the right side of the interface.



Decision Register

Visible, logic-based decision tracking

FDPlan Data Partition: codev-lab OMV EXPLORATION & PRODUCTION G...

Projects / Pelican Field Development Pelican Field Development

Overview Decisions

+ Add Decision

ID	Name	Predecessor Decisions	Function	Decision Maker	Owner	Project Stage	Due Date	Actual Date	Status	
D1	Well Count		Subsurface	volker.otto@omv.com	jost.puettmann@omv.com	Identify	Mar 31, 2022		New	...
D2	Processing strategy	D1	Facilities	jost.puettmann@omv.com	volker.otto@omv.com	Assess	Aug 15, 2022		New	...
D3	Well Trajectory Type	D1	Well Engineering	yannick.boisseau@omv.c...	jost.puettmann@omv.com	Assess				
D4	FPSO Location	D2 D5	Facilities FPSO	yannick.boisseau@omv.c...	jost.puettmann@omv.com	Select				
D5	FPSO Type	D2 D6	Facilities FPSO	simon.hobbs@omv.com	severin.secklehner@omv...	Select				
D6	Phasing	D1		ross.northover@omv.com	yannick.boisseau@omv.c...	Identify				

Decision Register = The big project picture

- ▶ Enter decisions
- ▶ Assign roles and responsibilities
- ▶ Make explicit the co-dependencies between and sequencing of decisions
- ▶ Automatically log changes/ updates

Edit Decision

Name *
Well Count

Description
Number of wells to be included in development

Key Decision ⓘ

Function
Subsurface

Decision Maker *
Volker Otto

Owner
Jost Püttmann

Due Date *
31/03/2022

Status
New

Project Stage
Identify

Predecessor Decisions
Search

D1 - Well Count

Decision Worksheet (1)

Applying Decision Quality

FDPlan Data Partition: codev-lab OMV EXPLORATION & PRODUCTION G...

← Return to Decisions in project Pelican Field Development
D5 - FPSO Type Overview Knowledge

General

Function Facilities FPSO	Decision Owner SS severin.secklehner@omv.com	Decision Maker SH simon.hobbs@omv.com	Project Stage Select
Due Date Sep 1, 2022	Actual Date -	Status In Progress	

Description
We need to decide FPSO floater type

Predecessor Decisions (2)

ID	Name	Function	Decision Maker	Owner	Project Stage	Due Date	Actual Date	Status
D2	Processing strategy	Facilities	jost.puettmann@omv.com	volker.otto@omv.com	Assess	Aug 15, 2022		New
D6	Phasing		ross.northover@omv.com	yannick.boisseau@omv.com	Identify	Jun 29, 2022		New

Choices (4)

- C5.1 Circular FPSO
- C5.2 Ship Shaped FPSO
- C5.4 Barge
- C5.3 Other
Reason: Not needed

Selection Criteria (9)

- Environment
Energy efficiency
- Schedule flexibility
- Environment: Energy efficiency

Decision Worksheets = The details of a specific decision

- ▶ Tracks the activities and information against the 6 Decision Quality elements
- ▶ Enables assessing the quality of a decision on an ongoing basis

Decision Worksheet (2)

Applying Decision Quality

FDPlan

Data Partition: codev-lab
OMV EXPLORATION & PRODUCTION G...

← Return to Decisions in project Pelican Field Development

B5 - FPSO Type

Selection Criteria (9)

- Environment
Energy efficiency
- Schedule flexibility
- Environment: Energy efficiency
- Technical: Flexibility for well count and placement system
- Technical: Flexibility for offloading solutions
- Cost / Value: Hardware cost
- Field life operability
Flow Assurance and Productivity (recoverable volumes)
- Technical: Fitness for purpose
- Economics

Analysis (3)

- Perform PRM feasibility study
- Produce Layout drawings for each alternative
- Internal assessment on provided well count and placement flexibility
Subsurface

Commitment To Action (2)

- Operations
Keep continuously informed through meetings
- Project/operations alignment
Keep partners involved during concept studies

Information

Values

Reasoning

Commitment

Frame

Alternatives

DQ

Decision Worksheets = The details of a specific decision

► Workflow logic follows Decision Quality elements

- Creative Alternatives = “Choices”
- Values & Trade-offs = “Selection Criteria”
- Logically Correct Reasoning = “Analysis”
- Commitment to Action = “Commitment to Action”
- Reliable Information = “Knowledge Board”

Decision Worksheet (3)

Applying Decision Quality – Linking Knowledge to Decisions

The screenshot shows the FDPlan interface for a project named 'Pelican Field Development'. The top navigation bar includes 'Overview' and 'Knowledge', with 'Knowledge' highlighted. Below the navigation, there is a 'Reference Data' section with a sort dropdown set to 'Relevance (High to Low)'. The main content area is titled 'Knowledge' and contains a grid of knowledge cards. These cards include 'Memory gauge Services Report - Page 1', 'EOS Fluid Characterization Study Nawara and Ahl em - Page 1', 'KB B: Asset Nawara field', and 'Field overview'. Below the knowledge cards is an 'Indexed Document' section with two document thumbnails. At the bottom left, there is a 'Project' section with a card for 'Small_test_DPpet'. A diagram is overlaid on the bottom right of the screenshot, showing a central 'DQ' (Decision Quality) surrounded by five interconnected loops labeled 'Information', 'Values', 'Reasoning', 'Commitment', and 'Frame'. A 'Plan Assistant' button is visible on the right edge of the interface.

Decision Worksheets = The details of a specific decision

- ▶ Linking Knowledge Board functionalities as powerful tool to provide “Reliable Information”



Projects

Managing decisions across the Project Lifecycle

The screenshot displays the FDPlan interface for a project named 'Pelican Field Development'. At the top, the breadcrumb navigation shows 'Projects / Pelican Field Development'. The main navigation bar includes 'Overview' (selected) and 'Decisions'. The 'Overview' section features a project lifecycle timeline with stages: Start (Mar 1, 2022), Identify, Exploration (Mar 31, 2022), Assess (highlighted with a red oval), TG2 (Sep 30, 2022), Select, TG3 (Oct 1, 2023), Define, TG4 (Feb 1, 2024), Execute, and End (Dec 31, 2025). Below the timeline is a 'Project Info' table:

Project Info	
Name	Pelican Field Development
Stage	Assess
Description	Demo for Project Functionality

Below the project info is a 'Study (4)' section with two study cards:

Pelican - Exploration	
Stage	Identify
Country	Austria
Status	Completed

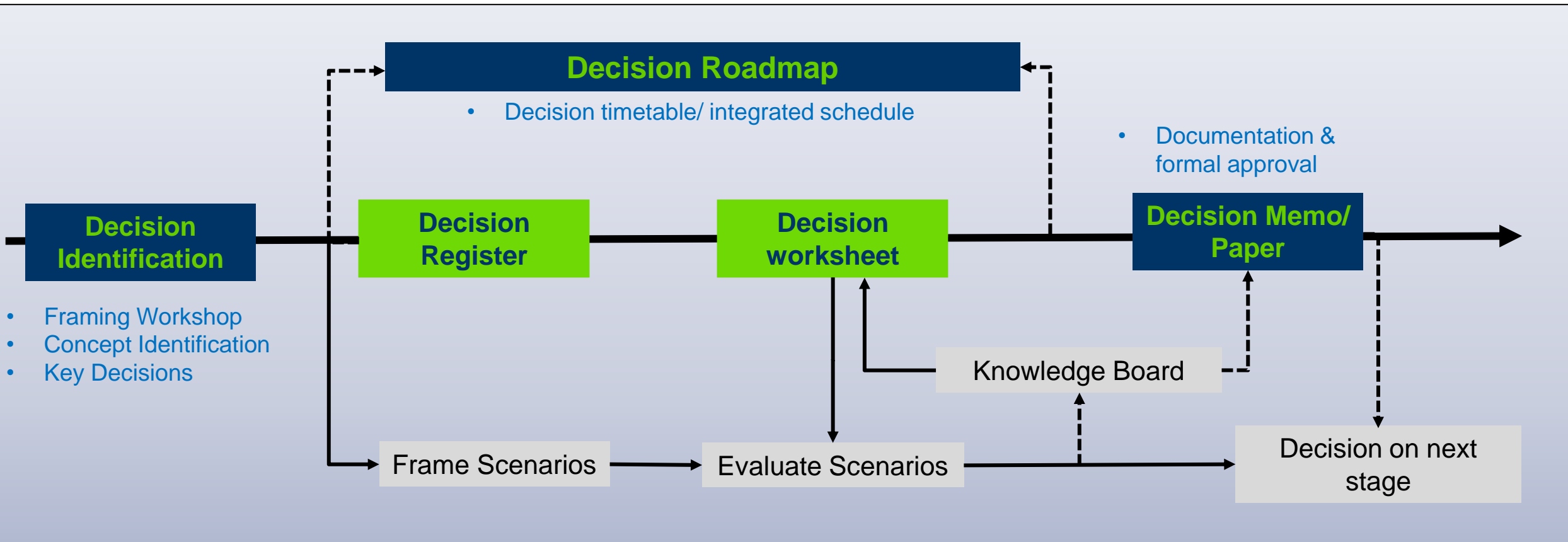
Pelican - Assess	
Stage	Assess
Country	Austria
Status	Ongoing

Decisions implemented now on FDPlan project level

- ▶ Decisions in early project phases will be linked with subsequent decisions ⇔ **decisions shall be traceable throughout a project lifecycle**
- ▶ Lifted from study to project level

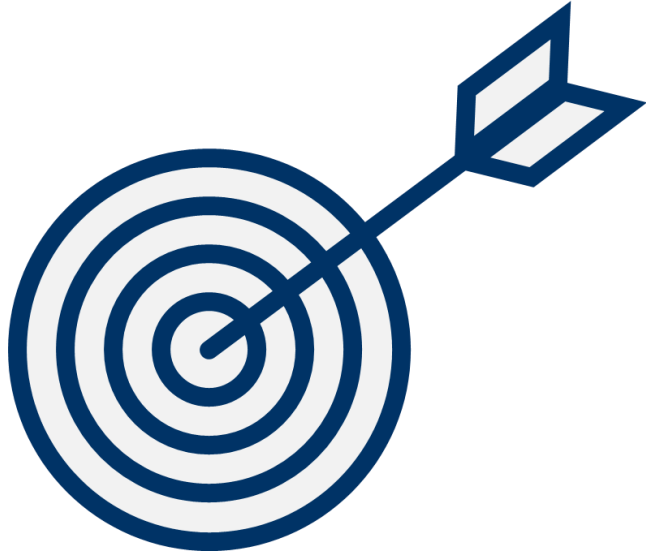
Decision management lifecycle in FDPlan

DQ Co-Dev achievements, existing and envisaged functionalities



Value-driven, data-based decision making

A fundamental part of Field Development Planning



More features to come

↔ Stay tuned !

Summary

- ▶ **WHY** – A Decision Process supported by data-based decision making enables a clear sight of value in line with company strategic and financial objectives
- ▶ **HOW** – We implemented in FDPlan intuitive-to-use features to track decisions and assess their quality, guiding a user through the Decision Process
- ▶ **WHAT** – We successfully realized Decision Register and Worksheets on FDPlan project level to capture full project lifecycles

**The energy
for a better life.**



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