Under the Patronage of His Excellency **Eng. Abdulrahman bin Abdulmohsen AlFadley**
Minister of Environment, Water & Agriculture

منتدى المياه السعودي
saudi water forum SWF 2024

Artificial Intelligence and Modern Tools in The Water Industry, Vision and Experiences

29 April – 01 May 2024

Hilton Riyadh Hotel & Residences
Riyadh, Saudi Arabia

Organized by

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Ministry of Environment Water & Agriculture

المؤسسة العامة لتحلية المياه المالحة
Saline Water Conversion Corporation (SWCC)

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منظم المياه
Water Regulator

المركز الوطني لكفاءة وترشيد المياه
NATIONAL WATER EFFICIENCY AND CONSERVATION CENTER
MAEE ماي

Agenda

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01 Artificial Intelligence Overview

02 Artificial Intelligence Developing Phases

03 Artificial Intelligence Uses in the Water Sector

04 Walkthrough Potential AI Platform

05 AI Applications, Case Studies and MEWA Prototype

01
Artificial Intelligence Overview

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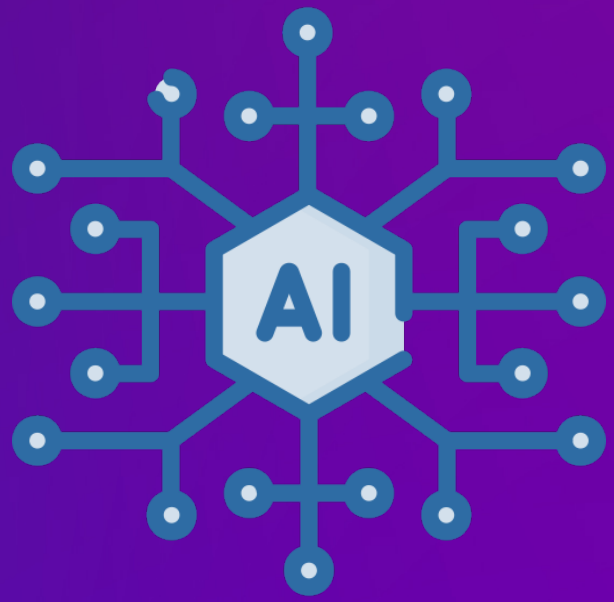
Artificial Intelligence

Artificial Intelligence
create intelligent machines that can replicate or exceed human intelligence.

Machine Learning
enables machines to learn from existing data including decisions and improve upon that data to make future decisions or predictions.

Deep Learning
a machine learning technique in which layers of neural networks are used to process data and make decisions.

Generative AI
using prompts to create, improve, and interact with text, images, video, and sound using large trained models



AI's journey from 1950s experiments to today's generative marvels signals a seismic shift, continuously redefining the possible

1950s-1980s:
Early AI Research and Expert Systems

The field of Artificial Intelligence (AI) was founded in the 1950s, with researchers exploring symbolic reasoning and expert systems. During this period, AI focused on rule-based systems and knowledge representation.

1990s:
Machine Learning and Data Analysis

In the 1990s, Machine Learning (ML) techniques began to gain traction, and researchers started developing algorithms that could analyze data and make predictions. This decade saw the emergence of data-driven approaches in AI.

2000s:
Machine Learning Advancements

The first decade of the 2000s marked significant progress in ML techniques. AI researchers and companies started harnessing the power of ML techniques in analyzing vast amounts of online data, extract insights, and automate tasks.

2010s:
Deep Learning and Perception

Deep learning, a subset of ML, gained prominence in the 2010s. Breakthroughs in deep learning led to advancements in computer vision, enabling applications like image classification and object detection.

2020s:
Generative AI and Language Mastery

In the 2020s, Generative AI, or GenAI, took center stage. GenAI models like GPT-4 revolutionized language understanding and generation, impacting various aspects of business, including institutional knowledge, communication, and processes.

Beyond 2020s:
Future of AI and GenAI

The future of AI and GenAI promises further advancements in natural language understanding, reasoning, and problem-solving. These technologies are expected to continue transforming industries, automating tasks, and enabling new forms of human-computer interaction.

The explosive growth of Large Language Models (LLMs) and GenAI marks a radical shift, disrupting norms and testing limits

New GenAI and ML Tools

>1500

AI and ML tools and vendors solutions in the market

AI Startups

100+

New startups introduced globally every month

New LLMs

10+

New LLMs introduced every week

Investment in GPUs

KSA, UAE and the UK governments have made significant investment in GPU in the past few months

02

Artificial Intelligence Developing Phases

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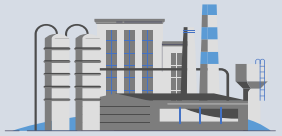
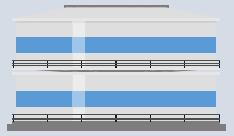
Water Sector Stakeholders

Production	Transmission	Storage	Distribution	Collection	Treatment	Reuse
						
• Desalination Plants • Groundwater • Dams	• Transmission Lines and Pipes	• Strategic Storage	• City Gates • Distribution Network • Treatment Plants	• Wastewater Network	• Wastewater Treatment Facilities	• Agriculture • Farming

Legislative Entities	MEWA Water Regulator					
Supply Entities	NWC SWCC MEWA	SWCC WTTCO	SWPC	NWC	SIO	SWPC
Demand Entities	Ministry of Hajj & Umrah Ministry of Interior / General Authority of Statistics • Royal Commissions / Development Authorities • Development Project Owners				MEWA Agriculture Agency Ministry of Industry and Mineral Resources	

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The water sector is expected to adopt AI capabilities through three stages in the near future.

AI AUGMENTATION

- AI-Powered Tools to enhance decision making processes in water resource allocation and management
- AI-driven predictive analytics to support proactive maintenance planning and optimize operations

AI AUTOMATION

- Automated systems utilizing AI algorithms to streamline water planning and estimation processes to reduce manual efforts and errors
- AI-driven monitoring systems to detect anomalies in water infrastructure in real-time, enabling prompt response and maintenance

AI AT CORE

- Robust AI infrastructure as the foundation of water management systems, enabling seamless integration and scalability of AI technologies
- Innovative culture & continuous improvement by leveraging AI as a core component in decision-making and strategy development

Ideation sessions will provide a long list of use cases, which feeds into the assessment phase

Strategic Facilitation Capability

The water sector will leverage innovation and idea exploration through collaboration and engagement between senior or large groups of people. By using a collaboration methodology that has been developed and applied.

Learn from leading organizations tackling their most complex challenges

Learn from **outstanding results across industries**

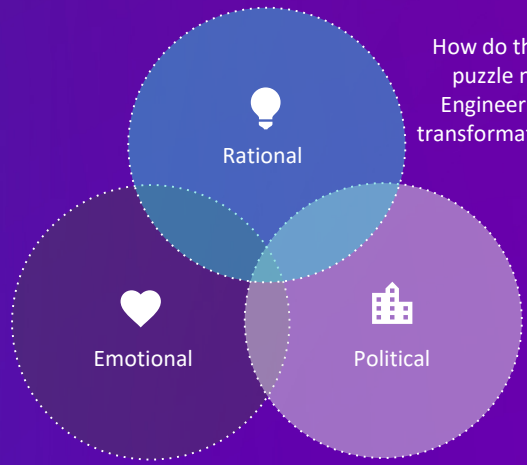
Take a 'citizen-lead' approach which helps educate your people, align them around vision and intent, emotionally buy-in and will give you the best solution outcomes

Deliver productive and engaging sessions that promote open communication, break through functional and hierarchical divides, and generate alignment and commitment to solutions

Aligning Vision & Purpose | **Setting Strategy & Innovation** | **Engineering Organization Solutions** | **Shaping People & Culture** | **Designing & Accelerating Transformation**

solving complex, multifaceted problems by focusing on more than simply the 'rational' complexity. addressing organizational politics, and building adoption into AI approach.

How do we help people to overcome personal challenges like fear of change? How do we help them buy into an uncertain future?



How do the moving parts of the puzzle need to fit together? Engineering the elements of a transformational or strategic issue.

How do we make the right trade-offs and compromises that benefit our customers and the organization as a whole?

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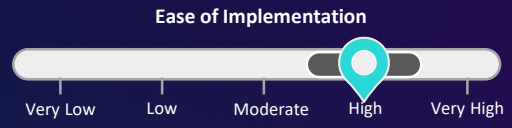
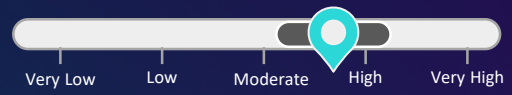
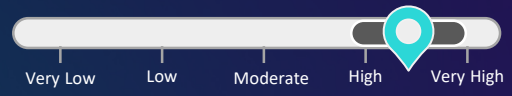
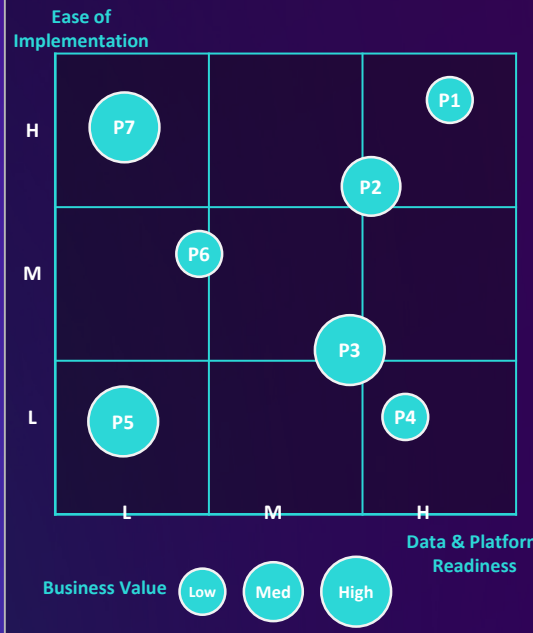
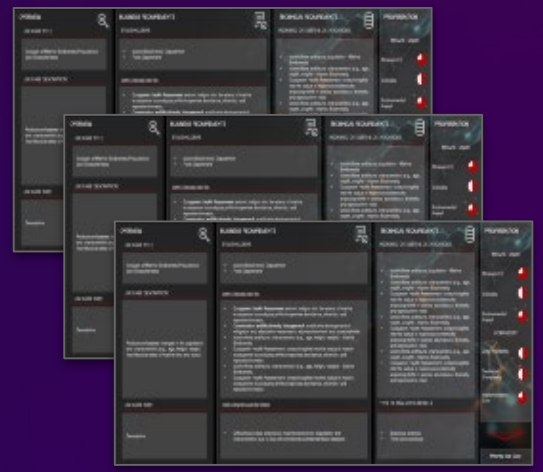
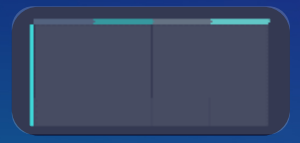
The water sector will leverage the Analytics Use Case Prioritization Framework to propose, review, and prioritize AI use cases

	Ideation	Assessment	Prioritization	Draft Initiative Cards
ACTIVITIES	 1. Ideation Sessions  2. External Benchmarking  Global Best Practices  Longlist of Use Cases	  		
DESCRIPTION	The Team of Data Analytics & AI experts consider and leverage global best practices and external benchmarks when engaging with stakeholders through ideation sessions. These ideation sessions provide a long list of use cases, which feed into the assessment phase.	After the long list of Use Cases has been generated through ideation sessions, The team will conduct an assessment of each Use Case from the perspective of Ease of Implementation, Data Platform & Readiness, and Business Value.	After all use cases are assessed and scored across the 3 dimensions (Ease of Implementation, Data Platform & Readiness and Business Value), they will be plotted into a prioritization matrix to provide quantified and prioritized Use Case recommendations.	Once use cases have been prioritized, draft use case initiatives cards will be developed. The initiative cards may include use case title, description, type, stakeholders, expected benefits, challenges addressed, type of analytics models, prioritized, data sources and datasets required.

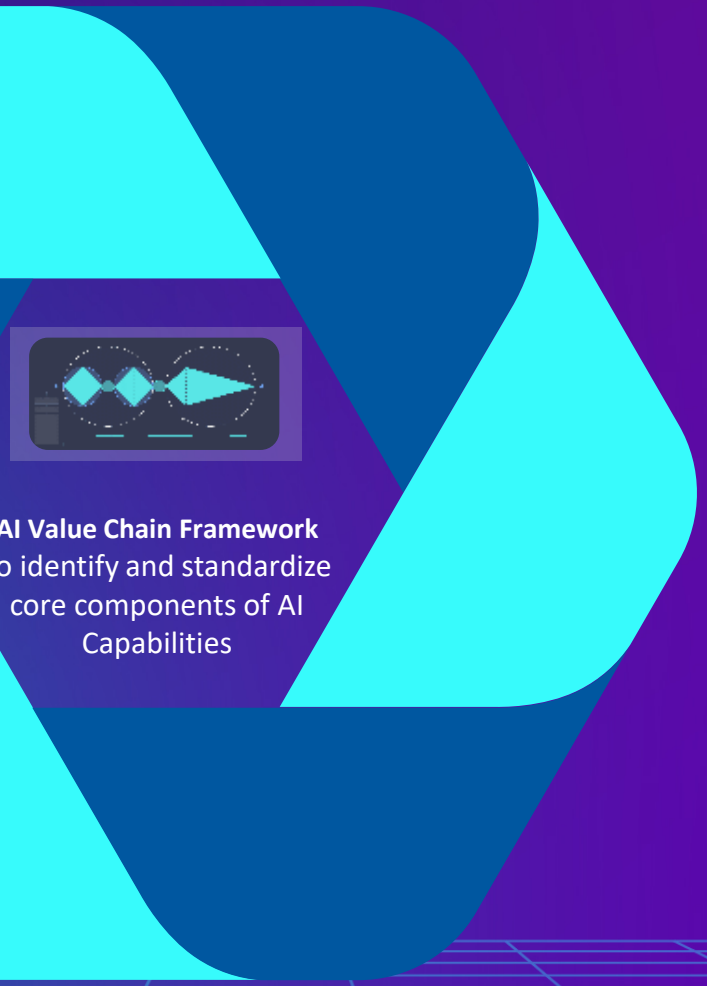
Validated frameworks are brought in to cover all aspects of AI capabilities, ensuring accelerated delivery and high-quality outcomes

AI/ML Use Case Prioritization Framework
To identify and focus on high impact AI use cases



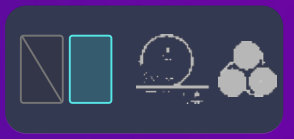
Change Management Approach
To apply industry best practices and standards to drive AI adoption and enablement

Responsible AI Framework
Ensuring all AI use cases are following Responsible AI principles and guidelines



AI Value Chain Framework
To identify and standardize core components of AI Capabilities

Agile Delivery Framework
To apply the best delivery approach to rapidly deliver AI use cases



Data Ops Best Practices Framework
To apply the best Data Ops practices to build data assets

AIOps Best Practices Framework
To apply the best AIOps practice to deliver scalable AI products

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03

Artificial Intelligence Uses in the Water Sector

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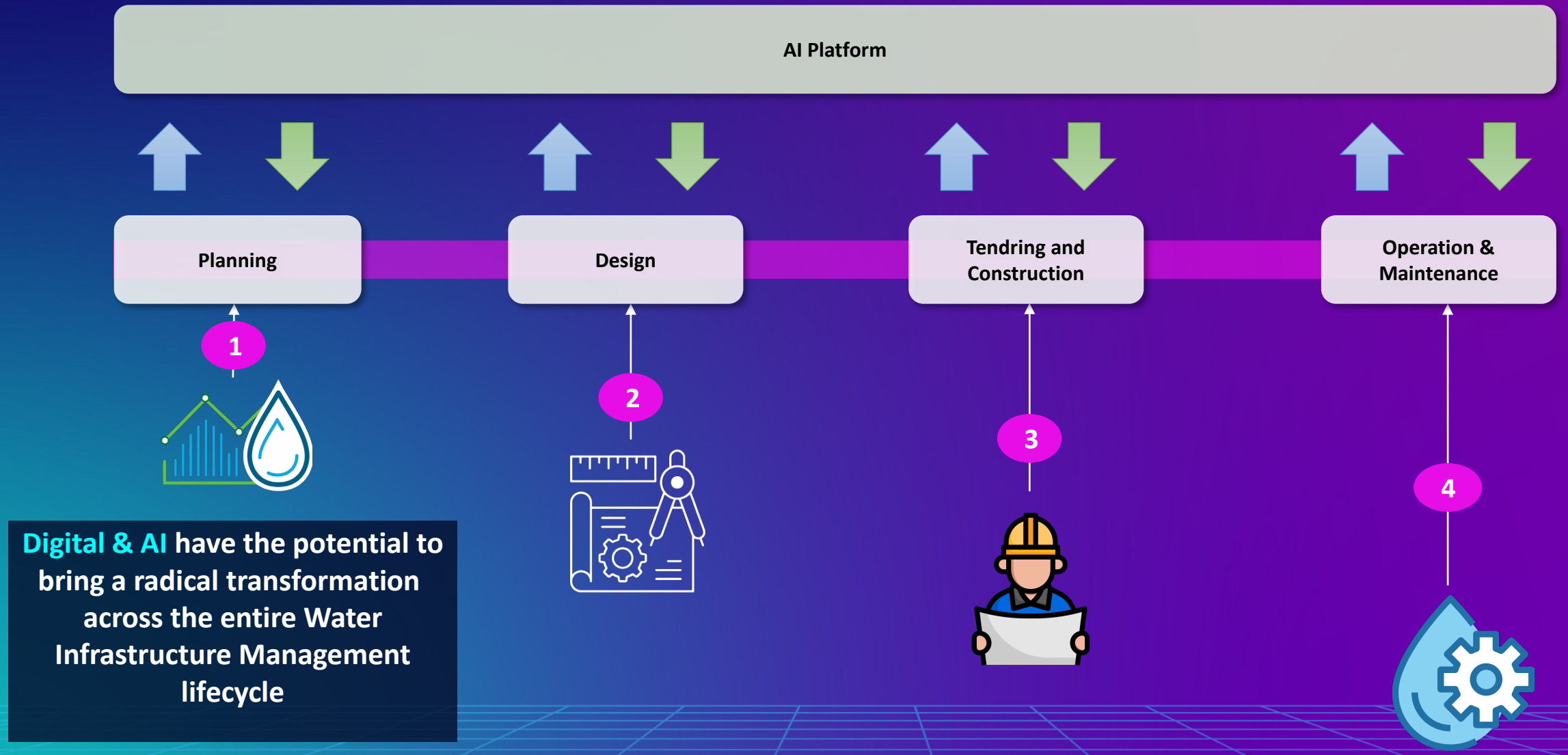
Water Service Lifecycle Diagram



Digital & AI have the potential to bring a radical transformation across the entire Water Infrastructure Management lifecycle

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Planning | Design | Tendring and Construction | Operation & Maintenance

Demand forecasting and Water Balance

- AI develops predictive models using historical data to forecast future water demand based on various factors such as demographic changes, urbanization, and climate variability
- AI simulates different scenarios to help policymakers evaluate interventions and planning effectiveness in meeting current and future demands.

Integrative planning for the supply chain

- The optimum solution for water resources Best alternative for the supply chain
- Best alternative for strategic storage -
- The supply chain Project synchronization
- High Priority Spots

Live Budget Estimation

AI algorithms can analyze large datasets, identify patterns, and make predictions based on historical data, economic trends, and other relevant factors. This helps businesses and organizations make informed decisions and better allocate resources.

Emergency and crisis Planning

- AI analyzes data to assess risks related to water resource limitations and environmental threats, enabling the development of adaptive strategies for resilience

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Planning | **Design** | Tendring and Construction | Operation & Maintenance

Optimum Supply chain elements design

- Site/route selection
- Selection of storage
- Hydraulic performance
- Electro-mechanical design

Tendering documents and RFP

- AI can analyze historical tender documents, industry standards, and project specifications to provide insights and recommendations for creating competitive tender documents.
- AI can generate standardized templates for tender documents, ensuring consistency and compliance with regulations and requirements.

Hazard Studies (HAZID and HAZOP)

- AI can analyze vast amounts of historical data on hazards, incidents, and near misses to identify patterns and potential risks
- AI-powered simulation tools can simulate different hazardous scenarios, allowing engineers to assess the potential impact and plan preventive measures.
- AI algorithms can predict potential hazards and their likelihood based on various parameters such as weather conditions, equipment status, and human factors.

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Planning | Design | **Tendring and Construction** | Operation & Maintenance

Project prioritization, synchronization and Tendering evaluation

- Using AI for project prioritization can be highly effective. You can leverage machine learning algorithms to analyze various factors such as project scope, resources, deadlines, and potential impact to determine the optimal order of execution. This approach can help maximize efficiency and ensure that projects align with overall strategic goals

Construction project management

- AI in construction project management offers numerous benefits, such as predictive analytics for scheduling, risk management, and cost estimation, enhancing efficiency and reducing errors. AI can also optimize resource allocation, improve safety protocols, and facilitate better stakeholder communication.

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Planning | Design | Tendring and Construction | Operation & Maintenance

Smart Supply chain assets

- Non-revenue water and leak detections
- DMZ and DMA
- Pressure management based on real-time readings
- Water Quality Online Monitoring and Prediction
- Despatch orders and incidents responses
- Implementation of Emergency and crisis Plans

Asset management

- Preventive maintenance
- conditional assessment

Efficiency improvement and cost reduction

- Developing cost reduction scenarios based on live & Historical data
- Resources Optimization
- Power efficiency
- Water allocation efficiency
- Water quality improvement

Customer satisfaction

- Automated Customer Service Processes
- Proactive Customer Support
- Customer Feedback Analysis

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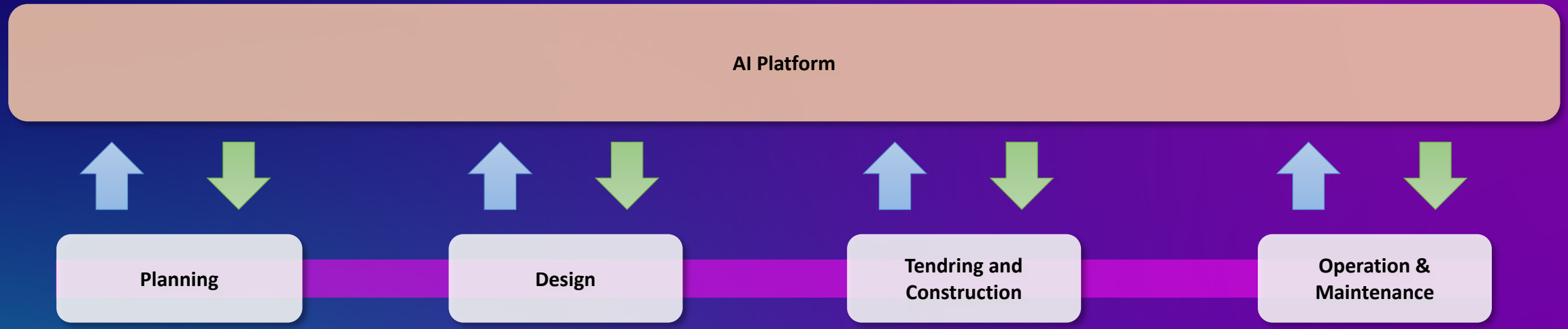
04

Walkthrough Potential AI Platform



The water sector envisions the development of **State-of-the-Art Capabilities** powered by **Artificial Intelligence**, by bringing **Thought Leadership and Excellence in Technology**, to drive innovation in this field, management of the water sector and achieve the Kingdom of Saudi Arabia's Vision 2030

The main purpose of the feedback to the AI platform from different steps is to **empower its machine learning** capabilities and **optimise all it's future outputs in an itereative process** that would lead eventually to AI at core state.

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Target State Data Architecture

Data

1 Data Sources

MEWA Internal Applications
- EPM
- Demand Forecasting
- GIS
- etc.

External Stakeholder Applications
- NWC
- SWPC
- SWCC
- SIO
- WTTCO
- WR

Other Data Sources
- Excel
- Data Entry Portal
- Email
- Other Applications

Integration Platforms

2 Data Extraction and Curation
- Data Extract
- Data Transform
- Data Load

3 Data Processing
- Data Marts
- Data Warehouse[2]/ Lakehouse
- Metadata
- Master Data Management
- Operational Data Store

4 Data Visualization & AI / ML
- Interactive Dashboards
- Alerts and Notifications
- KPI and SLA tracking
- Regulatory Compliance
- Scenario Modeling
- Predictive Analytics[2] & ML

5 External Data Sharing

External Applications
- NWC
- SWPC
- SWCC
- SIO
- WTTCO
- WR

Data Exchange APIs / Gateways

6 Data Management and Governance
- Data Quality[1,2]
- Metadata Management[2]
- Data Lineage

New component added to target architecture

Component retained from current architecture

...and Data Governance Policy ...owners, hence significant updates are required

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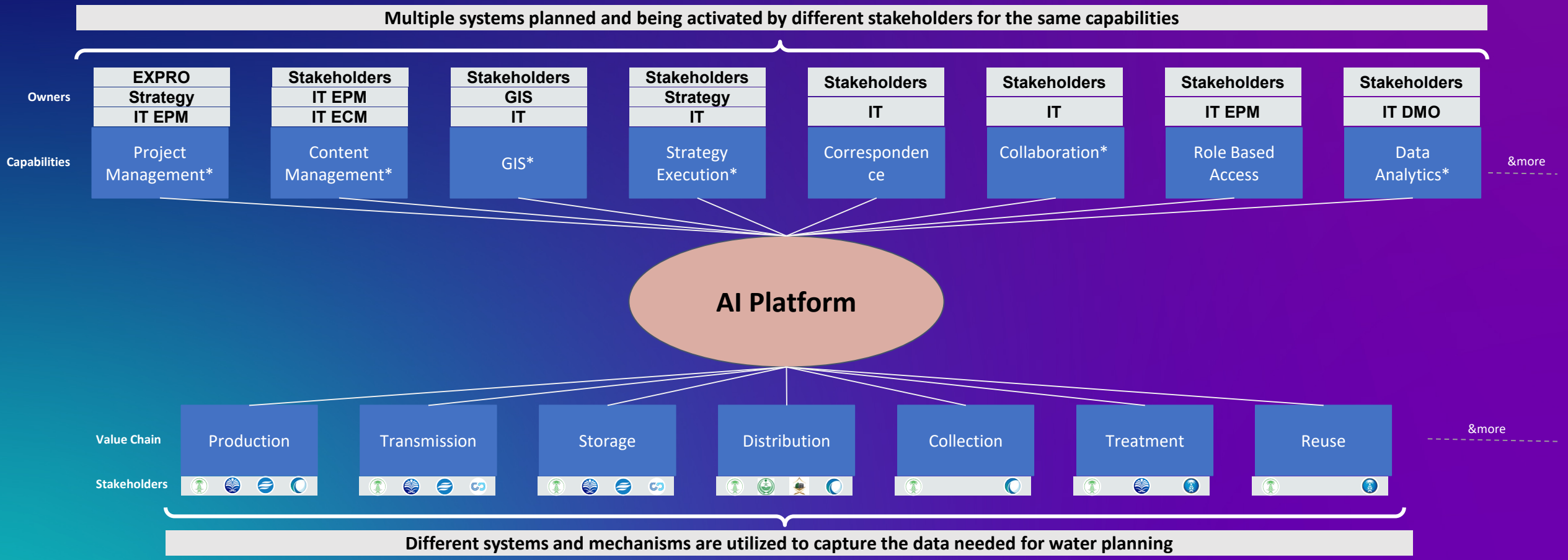
Water Planning AI Platform - dependencies and integrations



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Business leaders are expecting GenAI to significantly change the way they operate and deliver value soon

1.

Improving Water Operational Efficiency

Boosting water planning & demand-supply forecast estimation efficiency by streamlining and automating these processes through the adoption of GenAI.

2.

Facilitating Decision-Making

Integrating AI-powered decision support systems to provide real-time insights and analysis, enabling informed and timely decisions for effective water management and losses reduction along the water supply chain.

3.

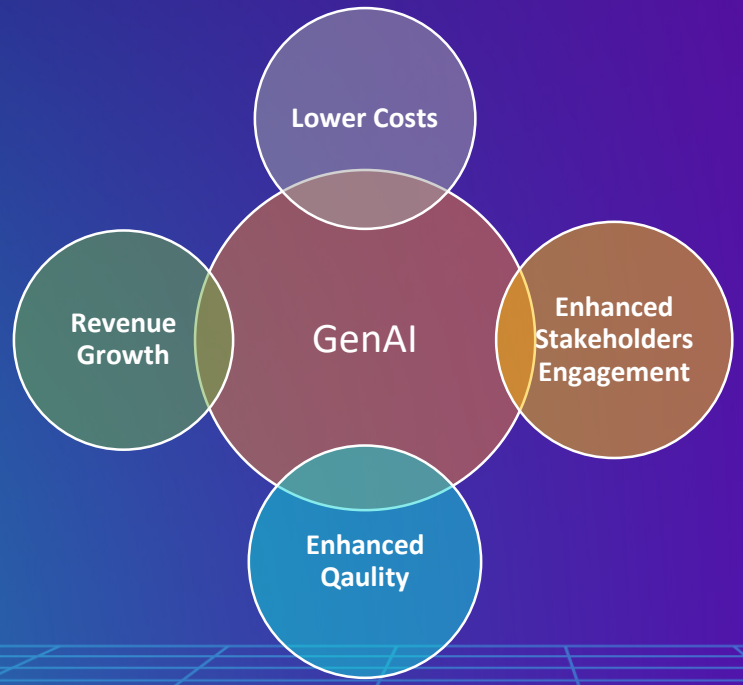
Real-Time Monitoring and Feedback:

AI enables continuous monitoring of water usage and provides real-time feedback for proactive management of water resources

4.

Strengthening Predictive Maintenance

Implementing AI predictive models to proactively identify and address potential issues in water infrastructure, minimizing downtime and maximizing reliability.



5.

Promoting Conservation Practices

Leveraging GenAI technologies to develop personalized conservation plans for water consumers, encouraging responsible usage and sustainable practices.

6.

Enhancing Resource Allocation

Utilizing GenAI to optimize water resource allocation strategies, ensuring equitable distribution and efficient utilization across the value chain.

7.

Fostering Innovation

Encouraging the adoption of GenAI solutions to foster innovation in water management practices, driving continuous improvement and adaptation to changing environmental conditions.

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05

AI Applications, Case Studies and MEWA Prototype

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AI capabilities require a fulsome tools ecosystem to address end-to-end activities across the AI Value Chain

AI Automation - Business Insights Dashboards	POSTMAN, plotly	Product and Scale Team
AI Applications - App Integration - AI Monitoring	Streamlit, mlflow	
Model Training - Fine Tuning - Orchestration	data iku, NVIDIA	Model and Data Team
LLM Models Library - AI/ML Algorithms Library	Hugging Face, scikit learn	
Data Processing - Data Pipeline - Data Assets	Apache Airflow, DVC	
Compute - Scale - Resource Orchestration	Apache Spark, RAY	Infra and Scale Team

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International Case studies

Water network monitoring and management

TaKaDu (Sydney, Singapore)

partnered with utilities worldwide to deploy its AI-powered platform for real-time water network monitoring and management. Case studies from various cities, including Sydney, and Singapore, demonstrate how TaKaDu's system helped utilities detect leaks, reduce non-revenue water, and improve operational efficiency.

Predictive Analytics for Water Distribution

Xylem (Michigan, USA)

Xylem implemented AI-based predictive analytics for water distribution in the city of Grand Rapids, Michigan, USA. By analyzing data from sensors and historical maintenance records, Xylem's AI algorithms predicted equipment failures and optimized maintenance schedules, resulting in reduced downtime and improved operational efficiency.

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International Case studies

Leakage Detection

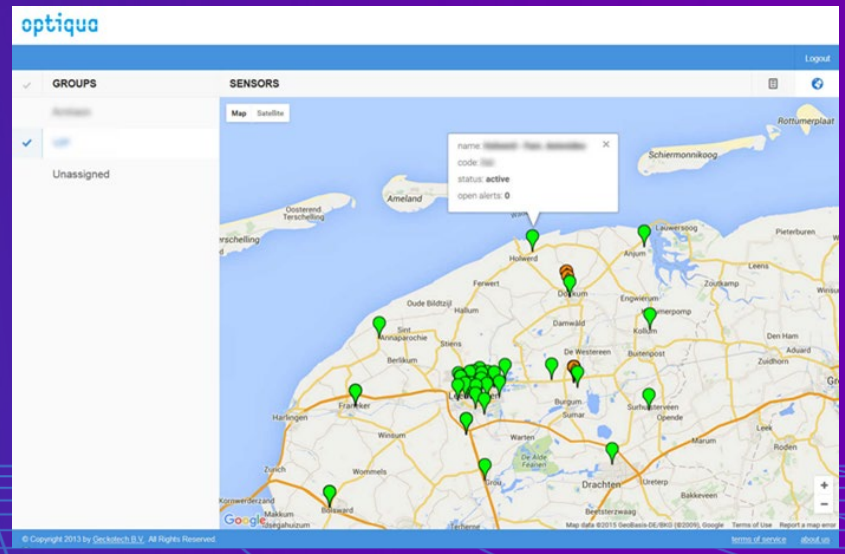
Thames Water (UK)

Thames Water, one of the largest water utilities in the UK, implemented an AI-based leakage detection system to identify and prioritize leaks in its distribution network. By analyzing acoustic sensor data and historical leakage patterns, Thames Water reduced water loss and improved the efficiency of its leak detection efforts

Water Quality Monitoring

Optiqua (Amsterdam)

ptiqua Technologies collaborated with water utilities and municipalities to deploy sensor-based solutions for water quality monitoring. Case studies from cities such as Amsterdam and Singapore highlight how Optiqua's AI algorithms detected contaminants and provided early warning of water quality issues, enabling proactive management, and safeguarding public health.



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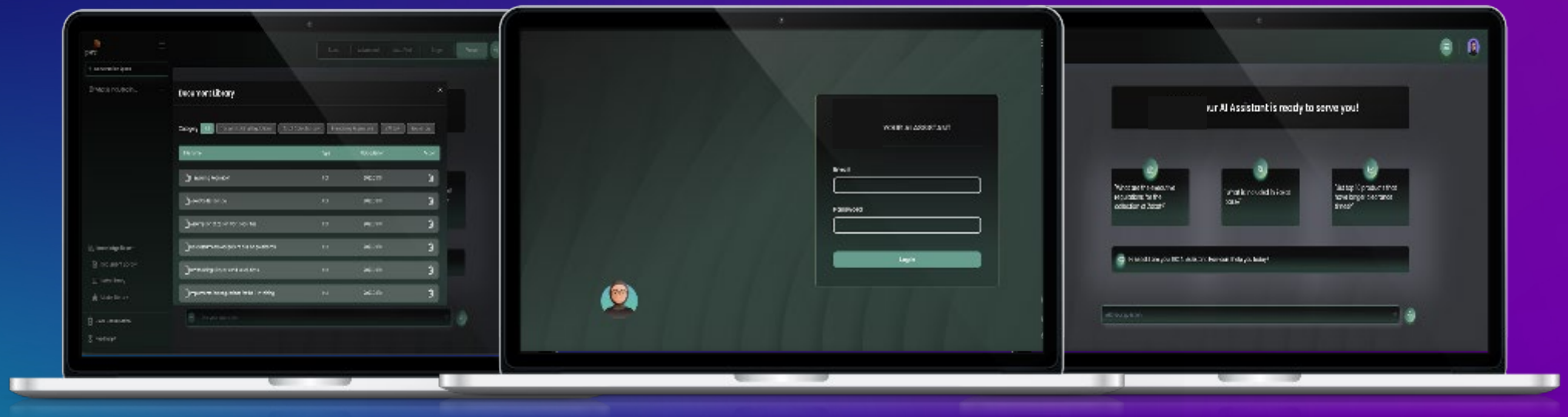
The water sector will leverage a GenAI platform as a baseline canvas to rapidly drive and deliver GenAI uses.



Generative AI Assistant

An AI platform to empower end-users with rich insights from Knowledge Base to foster innovation and growth culture

Intuitive Experience

The platform shall offer an intuitive user-friendly interface, making it easy for users to navigate, interact, and accomplish tasks effortlessly

Data Insights Clarity

Clear and actionable insights from data and content to ensure users quickly grasp the critical information and knowledge specific to theirs day-to-day work and beyond

Seamless Collaboration

Built-in collaborative and transparency settings to foster teamwork and knowledge sharing. Empowering users to work together effectively with full trust and transparency

User-Centric Evolution

prioritized end-user needs by leveraging feedback to drive the platform's evolution and deliver a tailored and impactful user experience

MEWA
Automation System
Prototype Screenshots

Login Page Screenshot

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Ministry of Environment Water & Agriculture

Water Planning System

Government Email

Password
••••••••

Forgot password

Need help?

Login

Don't have an account? Request Access

Home Page Screenshots

22 October 2023
MEWA Minister inaugurates the 40th edition of the International Exhibition for Agriculture and In...

18 October 2023
The Conference of Environment Ministers in the Islamic World issues the...

02 November 2023
MEWA sponsors the International Organic Products Exhibition on November 19

22 October 2023
MEWA & KAUST Discuss the Saudi Food Futures

22 October 2023
MEWA Minister inaugurates the International Exhibition

Overview

Year: 2024

Development Projects: All | Region: All | City: All

Demand Forecast
15.11
million cubic meters / day
↑7%
w.r.t. previous year

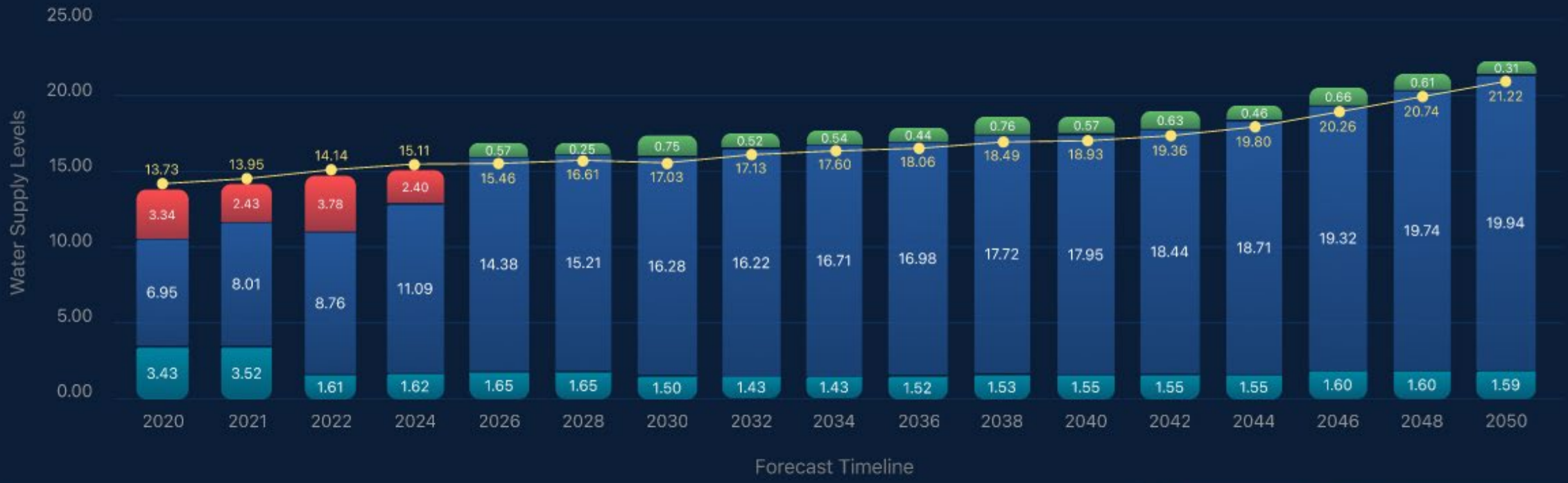
Supply Forecast
12.71
million cubic meters / day
↑23%
w.r.t. previous year

Gap
-2.40
million cubic meters / day
↓37%
w.r.t. previous year

Water Planning Interactive Map

Year: 2024

Water Supply and Demand Forecast Timeline



This gap (deficit) is a total arithmetic result at the level of regions of the Kingdom, and it may change when descending in detail at the level of the governorates which number (149), as well as at the level of administrative centers (1,517).

Supply from Wells | Supply from Desalination Plants | Deficit (Gap) | Surplus | Demand

5 year project portfolio highlights

View All

Deficit (Gap) Surplus Demand

5 year project portfolio highlights

View All

List of water planning projects

Year: 2023 Status: All Region: All

Project No.	Entity	Project Name	Region	Status	Delivery End Date	Docs	Actions
0643	NWC	Contract for completion of sewerage lines for the city of Khaybar (main lines and networks)	Medina	IN PROGRESS	01 Jul 2024		
DAMS-F-0056	DAMS	Repairing, restoring and raising the efficiency of Wadi Jazan Dam In Jazan region	Jazan	DELAYED	31 Dec 2025		
SIO.PF.CRI.S&D.1070	SIO	Statistical studies of the irrigation sector in the Kingdom	Several regions	ON HOLD	30 Jun 2024		
CSE-PPF--00003	SWCC	Reconstruction of the Jubail - Riyadh line A, B	Riyadh	PLANNING	01 Jul 2025		
WA-F-0026	WA	Water Management and Control Building (design, supervision and implementation)	Riyadh	COMPLETED	03 Oct 2023		

1000 Projects 1 2 3 ... 100

News and Updates

View All

1000 Projects 1 2 3 ... 100

News and Updates

View All

02 November 2023

MEWA sponsors the International Organic Products Exhibition on November 19

22 October 2023

MEWA & KAUST Discuss the Saudi Food Futures

22 October 2023

MEWA Minister inaugurates the 40th edition of the International...

20 October 2023

The Conference of Environment Ministers in the Islamic World issues the...

02 Novem

MEWA sponso Organic Produ November 19

Simulation Page Screenshot

Simulation

Supply and Demand | Transmission Systems | Distribution Capacity | Collection Capacity | Wastewater Treatment Capacity | TSE Transmission | TSE Storage and Distribution

Simulation

Year: 2023

Region: All

Demand | Supply

0% 25% 50% 75% 100%

Enter %: 25

Simulation Results

Water Planning

Supply (Weight: 35%) Increase

70%

Demand (Weight: 15%) Reduce

30%

Gap (Deficit: 15%)

30%

Map Page Screenshots

Map Layers

Region: **All**

SUPPLY AND DEMAND

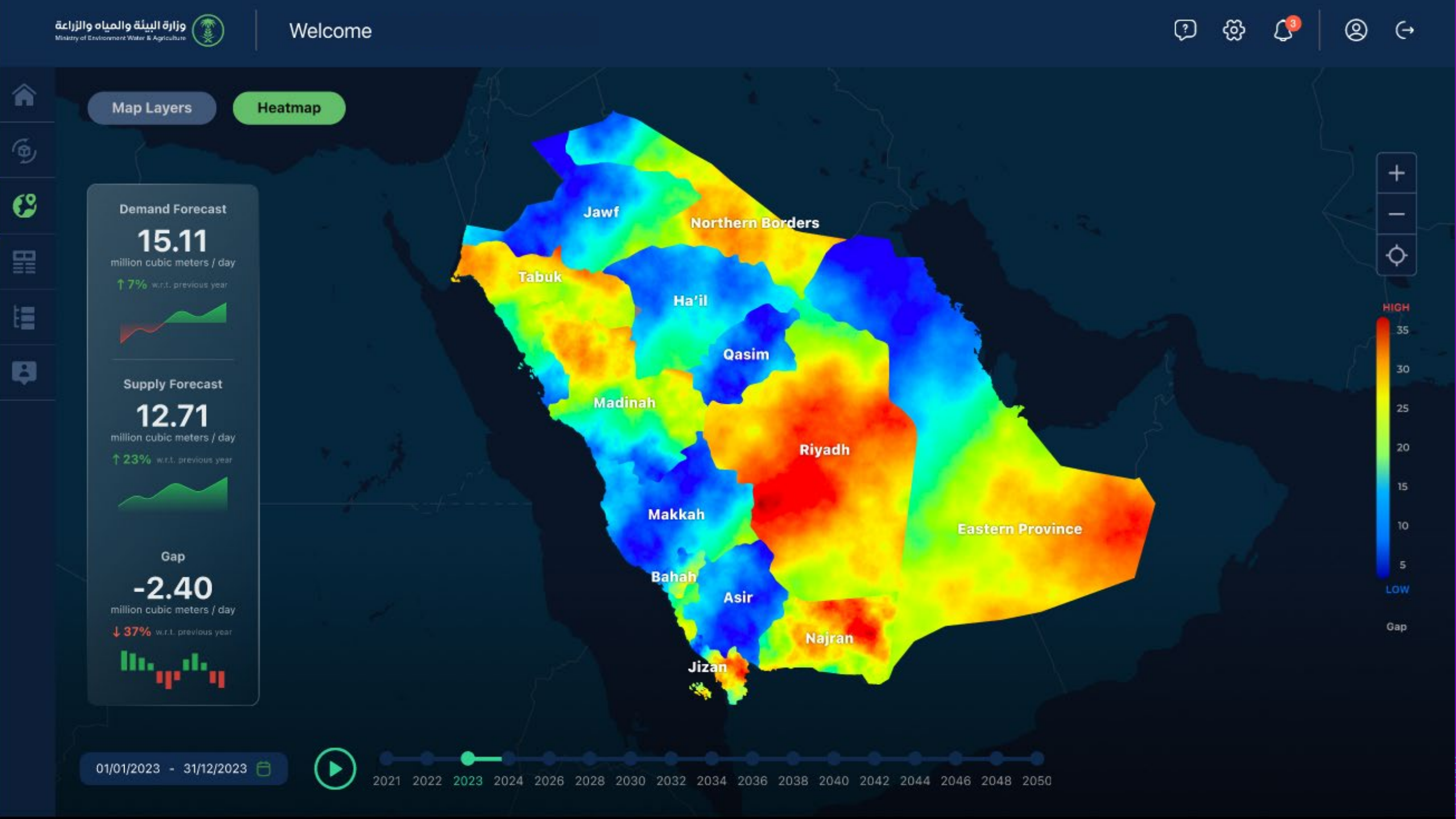
- Demand
- Supply

WATER PRODUCTION INFRASTRUCTURE

- Desalination Plants
- Wells
- Pumping Stations
- Treatment Stations
- Transmission Lines

SOCIAL FACTORS

- Population
- Development Projects


وزارة البيئة والمياه والزراعة
Ministry of Environment Water & Agriculture
Welcome
Map Layers
Heatmap
Demand Forecast
15.11
million cubic meters / day
↑ 7% w.r.t. previous year
Supply Forecast
12.71
million cubic meters / day
↑ 23% w.r.t. previous year
Gap
-2.40
million cubic meters / day
↓ 37% w.r.t. previous year
Jawf
Northern Borders
Tabuk
Ha'il
Qasim
Madinah
Riyadh
Makkah
Eastern Province
Bahah
Asir
Najran
Jizan
HIGH
35
30
25
20
15
10
5
LOW
Gap
01/01/2023 - 31/12/2023
2021 2022 2023 2024 2026 2028 2030 2032 2034 2036 2038 2040 2042 2044 2046 2048 2050

Project Management Page Screenshots

Projects

Create New Project

Tasks

Due Date	Task name	Actions
01 Dec 2023	Monitor the progress and status of water infrastructure project	
05 Dec 2023	Develop project schedule for the development of new desalination plant	
13 Dec 2023	Allocate budget for new water planning project	
19 Dec 2023	Define roles and responsibilities of new project team	
24 Dec 2023	Identify risks and dependencies of planned water project	

Projects by Status

Entities: All

Projects by Entity

Status: All

Project Portfolio

Search

Year: 2023

Status: All

Region: Medina

Project No.	Entity	Project Name	Region	Status	Delivery End Date	Docs	Actions
0643	NWC	Contract for completion of sewerage lines for the city of Khaybar (main lines and networks)	Medina	IN PROGRESS	01 Jul 2024		
DAMS-F-0056	DAMS	Repairing, restoring and raising the efficiency of Wadi Jazan Dam In Jazan region	Jazan	DELAYED	31 Dec 2025		
SIO-RF-CRLS&D-1070	SIO	Statistical studies of the irrigation sector in the Kingdom	Several regions	ON HOLD	30 Jun 2024		

Project Portfolio

Search | Year: 2023 | Status: All | Region: Medina

Project No.	Entity	Project Name	Region	Status	Delivery End Date	Docs	Actions
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DAMS-F-0056	DAMS	Repairing, restoring and raising the efficiency of Wadi Jazan Dam In Jazan region	Jazan	DELAYED	31 Dec 2025		
SIO.PF.CRI.S&D.1070	SIO	Statistical studies of the irrigation sector in the Kingdom	Several regions	ON HOLD	30 Jun 2024		
CSE-PPF--00003	SWCC	Reconstruction of the Jubail - Riyadh line A, B	Riyadh	PLANNING	01 Jul 2025		
WA-F-0026	WA	Water Management and Control Building (design, supervision and implementation)	Riyadh	COMPLETED	03 Oct 2023		
O643	NWC	Contract for completion of sewerage lines for the city of Khaybar (main lines and networks)	Medina	IN PROGRESS	01 Jul 2024		
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شركة المياه الوطنية
National Water Company

25% Completion

Project Name

Contract for completion of sewerage lines for the city of Khaybar (main lines and networks)

Project Description

Contract for completion of sewerage lines for the city of Khaybar (main lines and networks)

Project Manager	Ahmed Abdullah
Start Date	01 Jan 2023
Completion Date	01 Jul 2024
Region	Medina
City	Khaybar
Current/New	Current
Is a VRP project?	No
Asset Category Level 1	Gathering

Objectives

- Expand the existing sewer infrastructure to cover the growing areas, ensuring comprehensive coverage for the community
- Increase the capacity of the sewer system to accommodate current and future population growth and changes in wastewater volume.

Recent Milestones

- Kick Off Project
- Site Survey and Planning Approval
- Commencement of Construction

Risks

- Unforeseen environmental issues, may lead to project delays
- Adverse weather conditions, such as heavy rainfall could hinder construction progress, leading to delays in project timelines

Documents

Project Charter	01 Dec 2023	
Project Plan	02 Dec 2023	

Actions

Perform detailed site surveys to gather information about the existing infrastructure and potential obstacles that may affect the sewerage line installation	01 Dec 2023	→
Communicate with and involve key stakeholders to gather input and obtain necessary approvals	02 Dec 2023	→

Comments

Mohamed Abdullah — Department Name — 2 Oct • Mon • 2:43 PM
Approval received from local municipality, please advise if we should proceed with next steps.

Aisha Ali — Department Name — 2 Oct • Mon • 2:43 PM
Support needed with resource and budget planning, I suggest setting up a meeting to discuss.

Faisal Amin — Department Name — 2 Oct • Mon • 2:43 PM
A new risk has been identified regarding a safety incident. It has been added to the risk log

Project Activities

Under the Patronage of His Excellency **Eng. Abdulrahman bin Abdulmohsen AlFadley**
Minister of Environment, Water & Agriculture

منتدى المياه السعودي
saudi water forum SWF 2024

THANK YOU!

29 April – 01 May 2024

Hilton Riyadh Hotel & Residences
Riyadh, Saudi Arabia

Organized by

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Ministry of Environment Water & Agriculture

المؤسسة العامة لتحلية المياه المالحة
Saline Water Conversion Corporation (SWCC)

شركة المياه الوطنية
National Water Company

Organizing Partners

الشركة السعودية لشراكات المياه
Saudi Water Partnership Company

المؤسسة العامة للري
Saudi Irrigation Organization
المملكة العربية السعودية

شركة نقل وتقنيات المياه
WATER TRANSMISSION AND TECHNOLOGIES CO.

منظم المياه
Water Regulator

المركز الوطني لكفاءة وترشيد المياه
NATIONAL WATER EFFICIENCY AND CONSERVATION CENTER
MAEE ماي