

Africa Petroleum Data Management forum: Sharing experience among African Countries

BY KATHLEEN ASENSA
STEERING COMMITTEE, APDMf



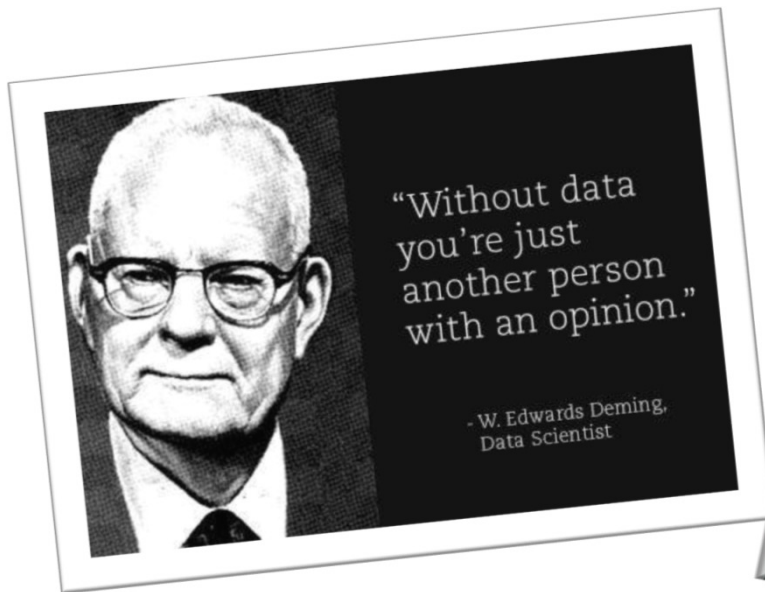
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NDR 2019 UTRECHT, THE NETHERLANDS
National Data Repository

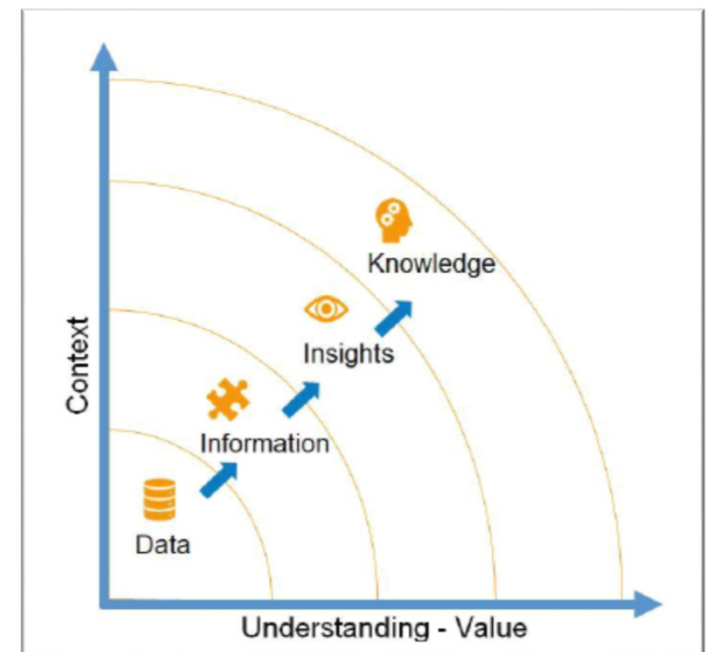
Presentation Outline

- Introduction
- History of APDMf
- What we face
- Objectives
- Our Organization
- Achievements
- Future Plans
- Conclusion

Introduction

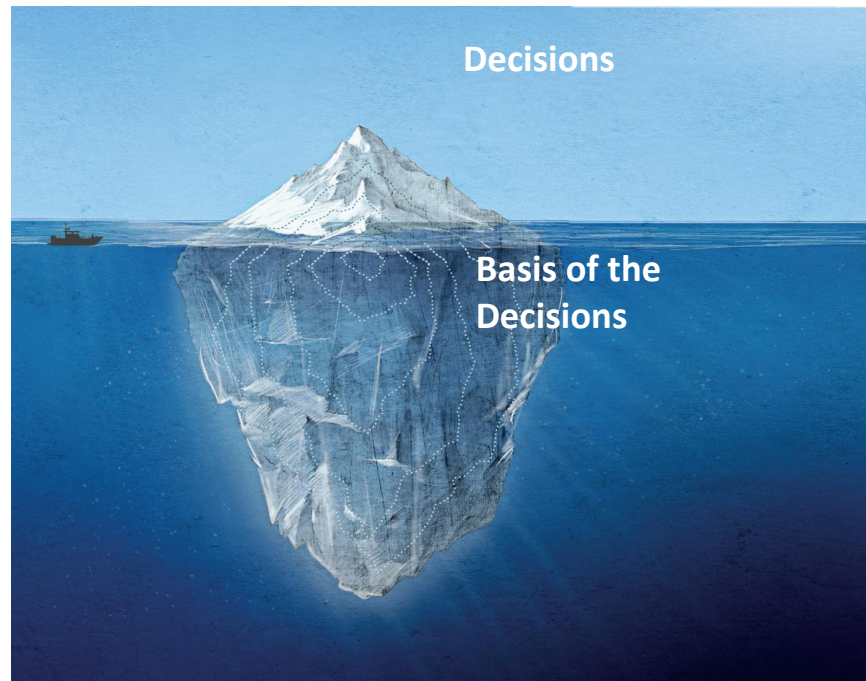


**The World's most valuable resource
is no longer Oil, but Data!
– The Economist 2017**



Unused/Missing data is of no value

What We face





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- Some African Countries are Prospecting or have Discovered Oil and Gas.
- Similar challenges require Common Solutions.
- Engender effective development through the sharing of ideas, experiences and achievements.

- 7 Current members:
(Tanzania & Zanzibar returned in 2019 with Sudan exiting later in the year)



APDMf: The Story

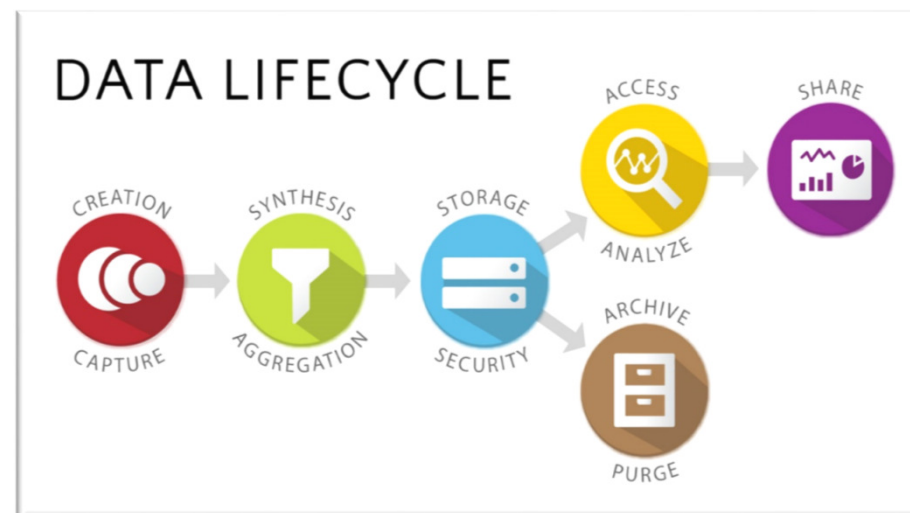


APDM Workshop, Kampala, 2016



APDM Workshop, Maputo, 2019

What We face



Objectives



Awareness – Of ongoing Petroleum Data and Resource Management Activities



Share – Petroleum Data Management Best Practices, Achievements and Challenges



Synergy – Identify synergies between different Countries and Areas of Collaborations



Leverage – Fully utilize available Technical and Financial Support for various activities and initiatives

Challenges

Legal Framework

- Regulations and Policies on DM
- Enforcement mechanisms
- Data governance



Organizational Set up

- Organization's Operations and Culture
- Place of DM in Organizational Structure



Professional Competences

- Required Skills and experts
- Minimum DM activities and functions
- Required Data Standards to implemented

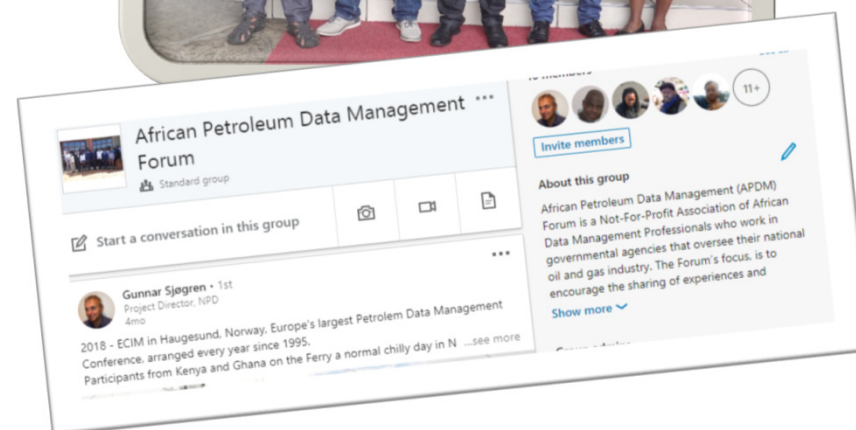


Steering Committee

SC meets at the beginning of every year to **review** and **plan the activities** of APDMf

Roles of Committee Members

- Represent the needs and share experiences of member country
- Formulating Strategies
- Monitoring Progress
- Advising on Issues of DM & Planning Future Events



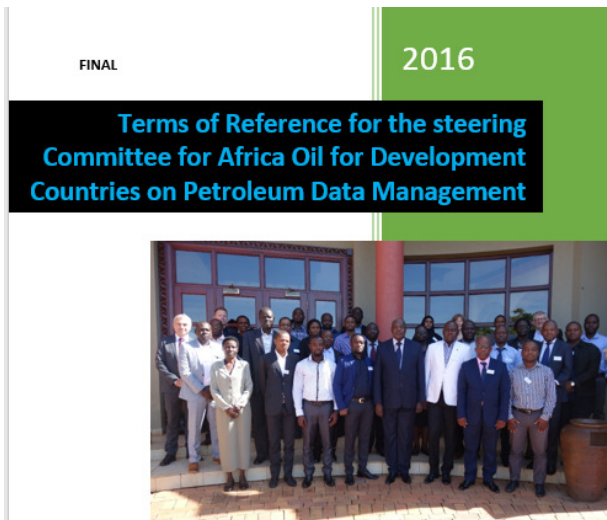


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APDM Operations



Terms Of Reference



Steering Committee's Mandate and Scope

- Making Global footprints through publication in relevant media
- Liaison between NPD and PDM professionals

Roles of Committee Members

- Represent the needs and share experiences of member country
- Understand the implications and advocate for initiatives pursued by the SC

Membership

- One Member from each OfD country
- Chairman and Secretary will be elected
- All SC members will serve a 2 term, except when a member country does not nominate a new representative
- The Chair or Acting Chair shall convene meetings

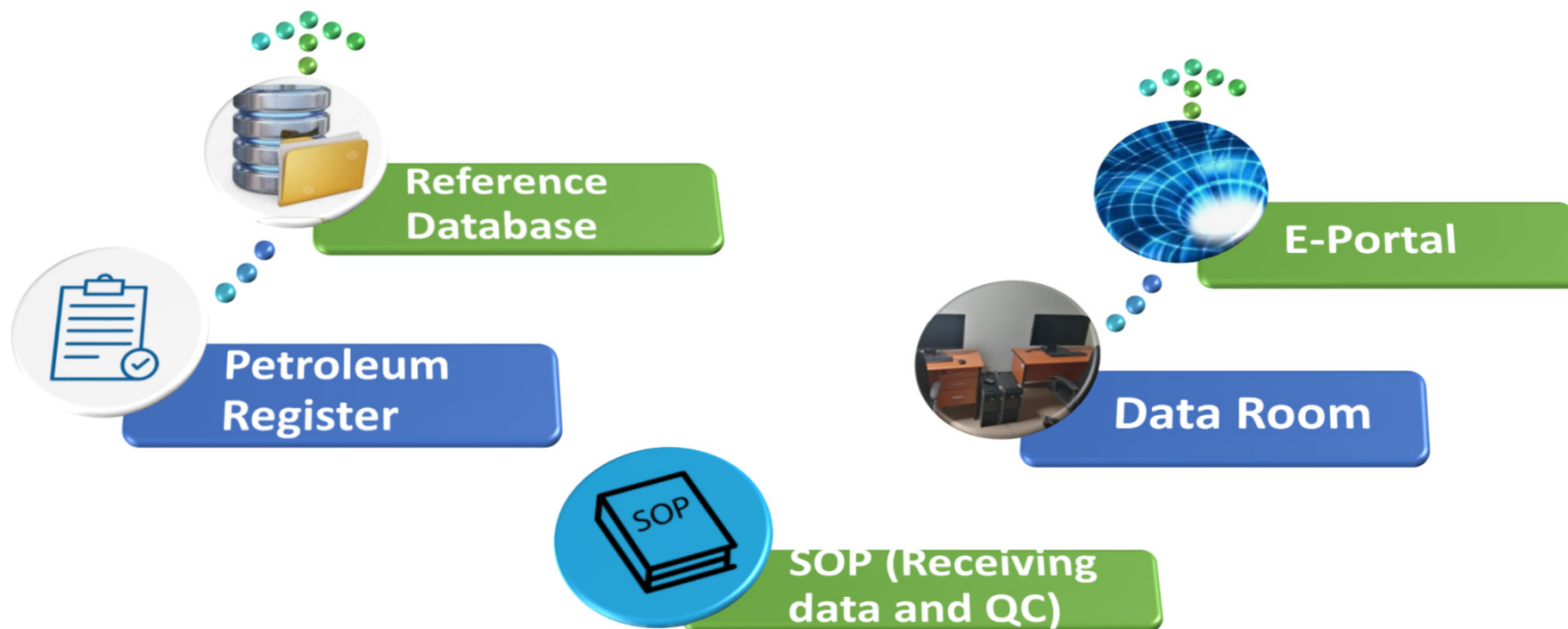
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Key Notes:

- Details the status of DM for each country
- The strengths of each country
- DM Challenges categorized into:
 - Terminology/ Naming Conventions
 - Reference Database
 - Production Data
 - ICT/ IT infrastructure and Support
 - Seismic Data Management
 - Reporting Petroleum Data – Well data
- Way Forward

DM Success in Africa: Ghana





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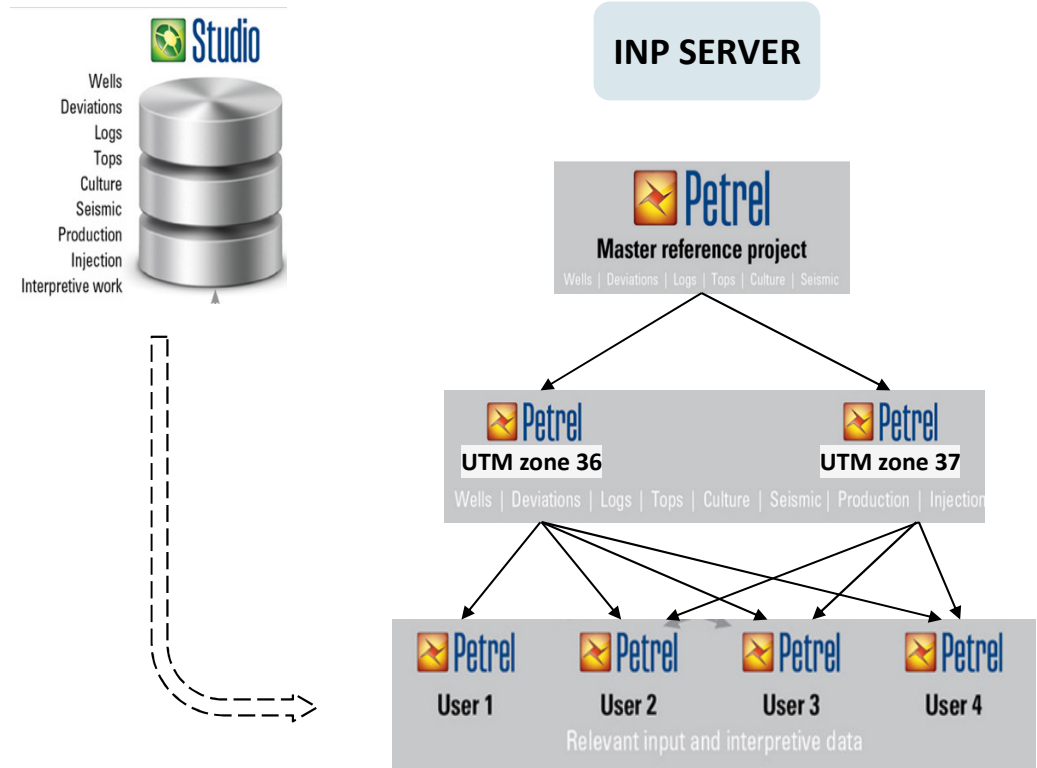
DM Success in Africa: Mozambique



NORWEGIAN PETROLEUM
DIRECTORATE

INP: Reference Database and Geodatabase Integration

The screenshot displays the Petrel software interface. The top window, titled 'Well', shows details for 'MZID well'. The left pane lists various wells, including 'Agua Dourada-1', 'Agulha-1', 'Agulha-2', 'Amparo-1', 'Atum-1', 'Atum-2', 'Atum-3', 'Balane-1', 'Bandua-1', 'Barquentine-1', 'Barquentine-2', 'Barquentine-3', 'Barquentine-4', 'Barracuda-1', 'Buzi-1', 'Buzi-2', 'Buzio-1', 'Cachalote-1', 'Cachalote-1A', 'Camarão-1', 'Chaimel-1', 'Chermira-1', 'Chicuir-1', 'Chipondene-1', 'Chite-1', 'Coller-1', 'Columbia-1', 'Coral-1', 'Coral-2', 'Coral-3', and 'Coral-4'. The main pane shows the 'General info' tab for 'MZID well', including fields for Well short name, Well long name, Well kind, Well purpose, Well status, Well content, Field using, Basin, Drillconcession, Partners, Latitude (S), Longitude (E), Longitude (E in Decimal Degrees), Datum, Easting (X), Northing (Y), UTM zone, and Comments (Position). The bottom pane shows a 'Table of Contents' for a 'GIS PROJECT' with a list of layers: Seismic, Magnetics and Gravity, Pipeline, Bathymetry, Environment, Prospects, Geographic, Geology, Licensing, Hydrography, Fields, Wells, and Background. A map of Mozambique is visible in the bottom right corner.





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DM Success in Africa: Uganda



Reference Database

Wellbores (F9: Refresh List)	
Wellbore Name	Wellbore Official Name
Jobi-East-1	2N31E/91-1
Jobi-East-2	2N31E/91-3A
Jobi-East-5	2N31E/103-4
Jobi-East-5A	2N31E/103-4A
Jobi-East-6	02N31E/91-4
Jobi-East-7	02N31E/91-5
Jobi-East-7A	02N31E/91-5A
Kajubili-1	1N30E/117-1
Kajubili-1A	1N30E/117-1A
Kajubili-1B	1N30E/117-1B
Kajubili-2	1N30E/105-1
Kajubili-3	1N30E/117-2
Kajubili-3A	1N30E/117-2A
Kajubili-4	01N31E/105-2
Kajubili-4A	01N31E/105-2A
Kajubili-4B	01N31E/105-2B
Kajubili-4C	01N31E/105-2C
Kanywataba-1	00N30E/6-1

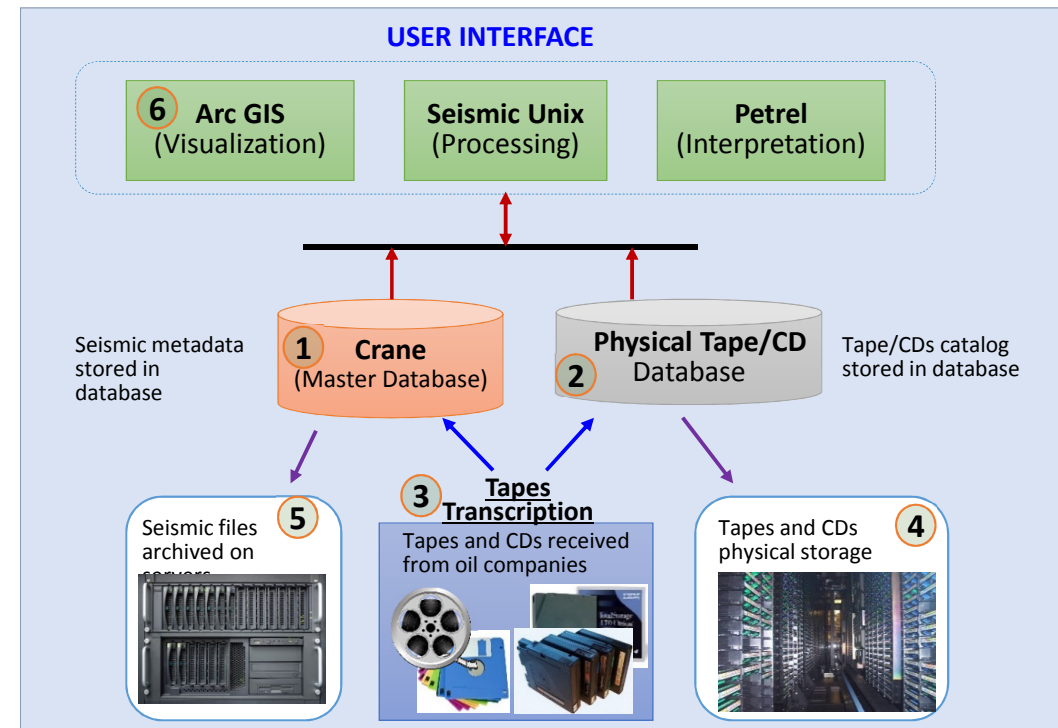
General Information	
PAUID	7
WellboreName	1N30E/117-1
LocalName	Kajubili-1
Alias name	Kingfisher-1
WellborePurpose	Wildcat
Prospect	Kingfisher Prospect
Discovery	
Wellbore Type	Exploration
Wellbore Content	Oil & Gas
Wellbore Status	Suspended
Wellbore License	EL-2/2004
License operator	Heritage Oil and Gas Ltd
Drilling contractor	Dafora Medias AS

Wellbore StratLitho	
LithoStrat Unit	MinMD
Record: 1 of 1	No Filter
Test Results	Well tested and flowed 4170 bbl/d (1783m-1790 m; 1792m-1795m)
RCI taken?	<input checked="" type="checkbox"/>
Planned Cost	
Actual Cost	17,854,756.000
DSTTestCost	
Compl/P&A Date	
Comments	Costs include those for Kinfisher-1, 1A and 1B

Wellbore Cores	
Document Hyperlink	DocumentType
KINGFISHER-1_Biostratigraphy_Report.pdf	Biostratigraphy
KINGFISHER-1_Discovery_Report.pdf	Discovery report
KINGFISHER-1_DST_Report.pdf	End of Well test report
KINGFISHER-1_Final_Well_Report.pdf	End of well report/Completion report
KINGFISHER-1_Geochemical_Report.pdf	Wellbore Geochemical report
KINGFISHER-1_Palynological_Report.pdf	Wellbore palynology report
KINGFISHER-1_Palynology_Range_Chart.pdf	Wellbore palynology report
KINGFISHER-1_Petrophysics_Report.pdf	Petrophysics



Seismic Data Management

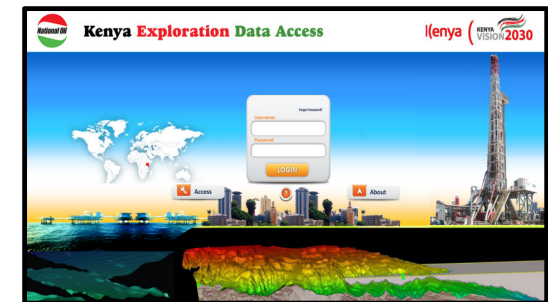
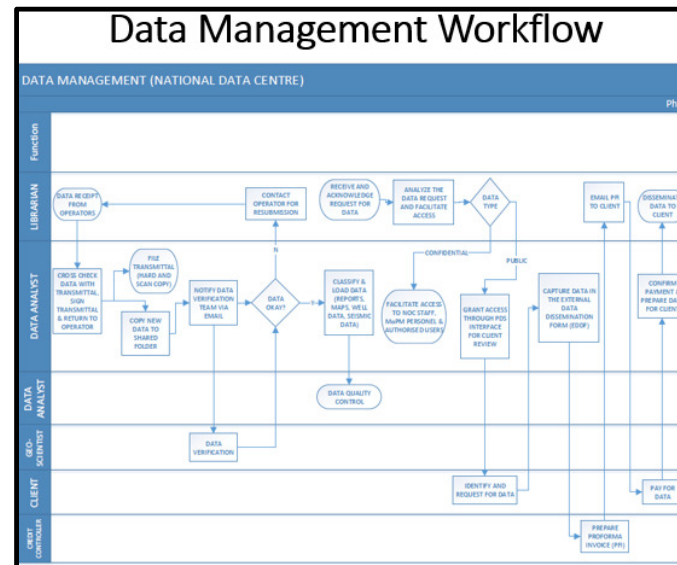




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DM Success in Africa: Kenya

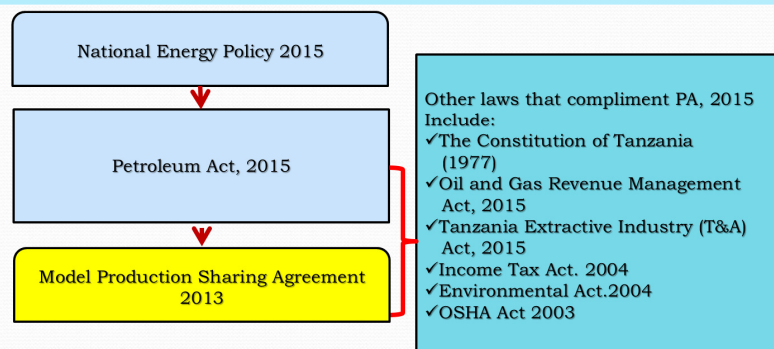
- Well documented procedures for the running of the NDC
- Secure National Asset
- Centralized and Integrated E&P Data Management Solution
- Easy and Secure Access
- Informed Decision Making



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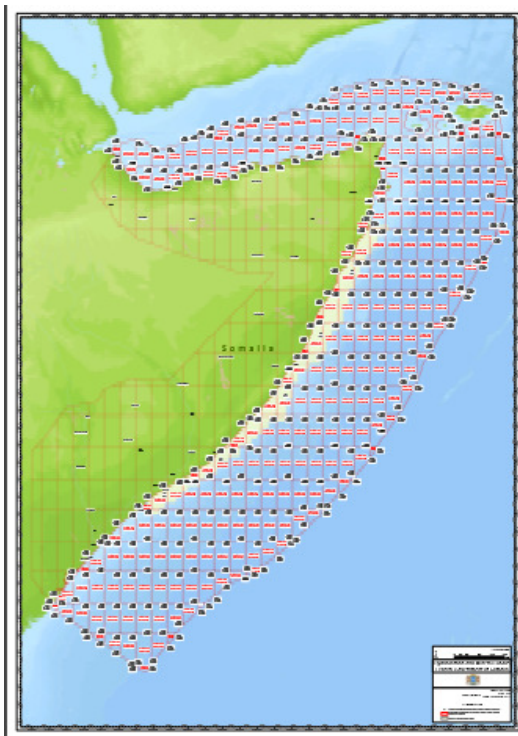
DM Success in Africa: Tanzania

KEY INSTRUMENTS GOVERNING THE PETROLEUM UPSTREAM SUBSECTOR IN TANZANIA



- Detailed upstream institutional structures
- Strong legal framework that govern data management processes
- Petroleum resource account
The 1st workshop for the petroleum resource account with the creation of a worksheet for this purpose
- Reference database

DM Success in Africa: Somalia

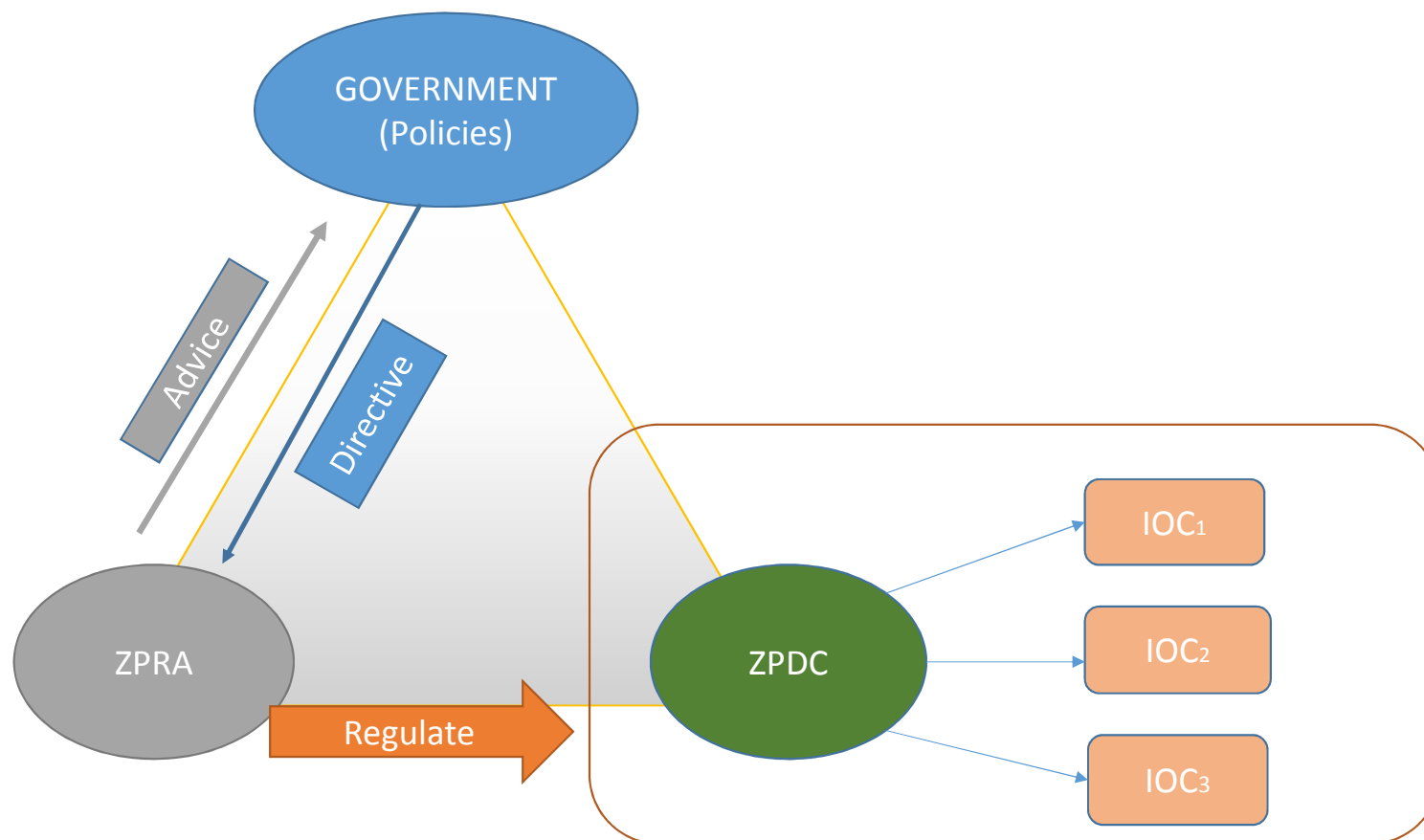


Developments in Legal and Regulatory Framework

- Petroleum Bill 2017;
- Production Sharing Agreement Model Somalia (PSA)
- The Petroleum Environmental Regulations;
- The Health and Safety Regulations;
- The Downstream Regulation;
- Resource sharing agreement (Oil, Gas and Minerals)

Working towards a simple PDM System

DM Success in Africa: Zanzibar



Achievements

❑ Peer To Peer Collaborations

- Identify synergies between the different countries and areas of collaboration
- Leverage Technical and Financial support for the various activities and initiatives

❑ Industry Engagement

- Advocate for Capacity Building through Secondments and Field work
- Being update-to-date with industry trends

❑ End User Engagement

- User needs assessment and forecast
- Understand the Organization's business model



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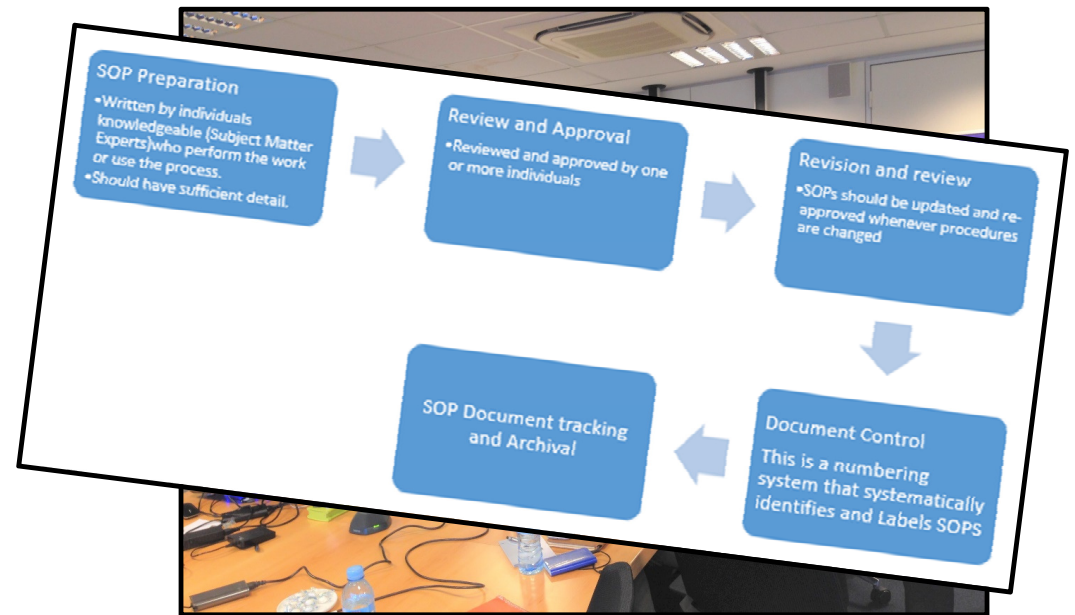
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2	OfD Country	xxx				
3	Name of Regulator/Government Institution	xxx				
4						
5	NB.	%	Y/N			
6	Strong	100	Yes			
7	Weak	0	No			
8						
9	DM Function/Activity	Kenya Mozambique Uganda Somalia				
10		MoPM	NOC Kenya			
11	Part of Project/PSA/PDO/FDP Team	100	0	Yes 20%	Yes	0
12	Receives Data Notice/Report		30	Yes 100%	Yes	0
13	Receives E&P Digital Data		100	Yes 100%	Yes	5%
14	Receives Geological Data (Cores, Samples, etc)	0	100	Yes 100%	Yes	0
15	Acknowledges Data Receipt		100	Yes 100%	Yes	0
16	Responsible for QA/QC of Submitted Data	0	100	Yes 100%	Yes	0
17	Licenses Data to Operators/IOCs	100	0	Yes 100%	No	0
18	Run/Manage the NDR	0	100	Yes 100%	Yes	0
19	Responsible for Data Ownership	100	0	Yes 100%	No	0
20	Existing DM Regulations/Guideline (Data format & Stds)	100	0	No 25%	Yes/No	0
21	Existing DM Standard Operating Procedures (SOPs)	0	100	No 25%	No	0
22	Responsible for DM Budgetting/Financing	50	50	Yes 100%	Yes	0
23	Responsible for Data Transcription	0	100	Yes 100%	Yes	0

Future plans

- Participation in Data Management and Petroleum related Conferences
- Promote Data Management Regulations to member countries
- Share on how to manage Production Data
- IT/ICT Infrastructure and Importance



Conclusion



“.....there can be NO Optimal Resource Use and Governance without proper Data Management”



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THANK YOU



African Petroleum Data Management Forum

 Standard group

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