





Tullow Oil: Maximo and the Global Supply Chain

PCTY2011

Pulse Comes to You

Optimising the World's Infrastructure



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Tullow Oil Overview



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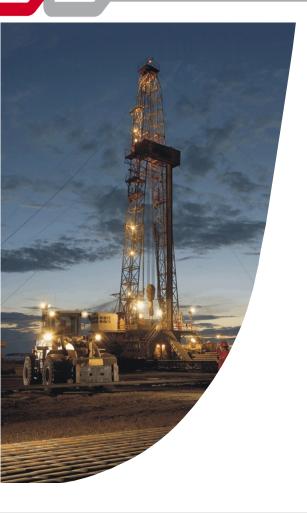


Tullow Oil story



- Tullow Oil Overview
- Supply Chain Programme
- Maximo Project
- Deployment
- Lessons and Outcomes
- Questions

Tullow Oil Growth Story

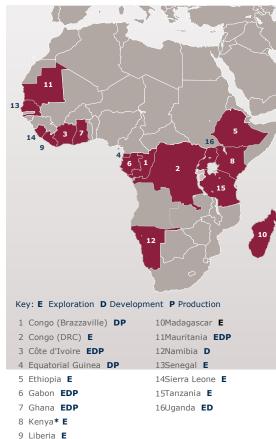


- Founded in Ireland in 1985 by Aidan Heavey who is still CEO
- First project was in Africa Senegal (1986-2001)
- 1990's: Expansion across Africa and South Asia
- 2001: Acquisition of BP's North Sea gas fields
- 2004: Acquisition of Cape Town-based Energy Africa Ltd
- 2007: Acquisition of Hardman (Uganda, Mauritania, S. America)
- 2010: Acquisition of Heritage Uganda for US\$1.45 Bn
- Uganda: Major oil discoveries since 2006 in East Africa, planned partnership with TOTAL and CNOOC
- Ghana: Major discoveries offshore Ghana since 2007
 Jubilee field, 1 Bn bbls expected; Tweneboa/Owo discovery
- Market Cap today approx. US\$18 Bn, London's FTSE 30
- Tullow has grown 15 fold in 6 years



Tullow footprint, 2010

Africa



* - subject to completion of farm-in deals.

Rest of the World







Europe

- 1 Netherlands E
- 2 United Kingdom EDP

South Asia

1 Bangladesh EDP 2 Pakistan EDP

South America

- 1 French Guiana E
- 2 Guvana E 3 Suriname E

Group highlights

Africa

- 37,500 boepd
- 16 countries
- 55 licences

South Asia

- 5,600 boepd
- 2 countries
- 8 licences
- 18 producing fields 2 producing fields 16 producing fields

Europe

- 12,700 boepd
- 2 countries
- 28 licences

South America

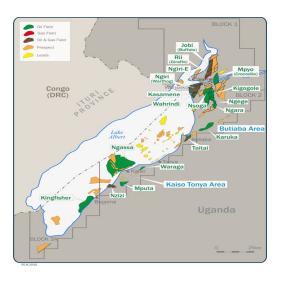
- 3 countries
- 4 licences



Tullow Footprint **Exploration Success Rates:** 2010 - 84% 2009 - 87% 2008 - 77% **Netherlands Exploration** Gabon Sierra Leone **Exploration Exploration Development Pakistan Production** Guyana **Exploration Seismic Development Production French Guiana** Seismic **Uganda Côte d'Ivoire Exploration Exploration Development Development Production** Madagascar Ghana **Seismic Exploration Development Production Tanzania** PCTY2011 **Optimising the Exploration World's Infrastructure**

Major Developments – Ghana & Uganda





- Tullow discovered The Jubilee field (60 km offshore Ghana) in 2007
- First oil has just been delivered on schedule
- This is the fastest ever full scale comprehensive deepwater development
- A production ramp up to 120,000 bopd is expected in 3 to 6 months
- World-class basin discovered
- Over \$800m spent on exploration
- 36 out of 37 Wells successful
- 1 billion bbls discovered, field potential 2.5 billion
- Uganda will be one of the top 10 oil producers in Africa

Tullow Supply Chain Transformation: Chombe

- Rationale For Project Chombe
 Chombe and Maximo Scope
 - Legacy manual processes constrained growth
 - Lack of integration across financial & SCM processes
 - Legacy IT systems weak
 - Diverse processes and ways of working
 - Absence of good MI & data
 - Insufficient controls
 - Poor visibility of suppliers, spend, materials
 - No concept of "SCM"

- SCM Transformation to upgrade SCM Processes, Systems, Organisation & Capability
- New business processes for
 - Requisitioning "the line"
 - Contracts and Procurement
 - Materials and Logistics
 - Finance integration
 - Invoices
 - Material movements
 - Master Data
- Design-Build-Operate of Maximo v7 as single global instance solution
- Global Application Support



SCM Transformation & Maximo

SCM Organisation DesignCapability DevelopmentHiring Program

- National Content
- Environment
- Health & Safety

Sustainable Supply Chain

Organisation

Transactional Process Enhancement

- Standard Optimised Processes
- ■Procedures & Controls

Maximo

- Integrated MI
- Maximo Reporting
- Spend Analytics

SCM Reporting

Contract Standards & MSA Value-Add Processes

- Demand Planning
- CategoryManagement
- ContractManagement
- **SPM/SRM**

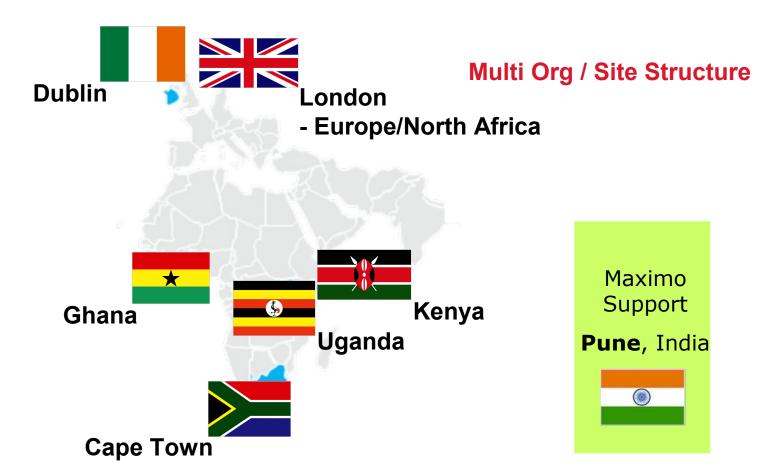
Standard Contract formsMaster ServiceAgreements for majorCategories



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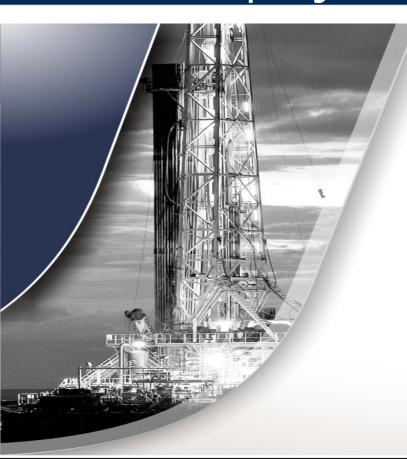
Geographic scope





Same hosted instance for all, same process for all

Maximo project

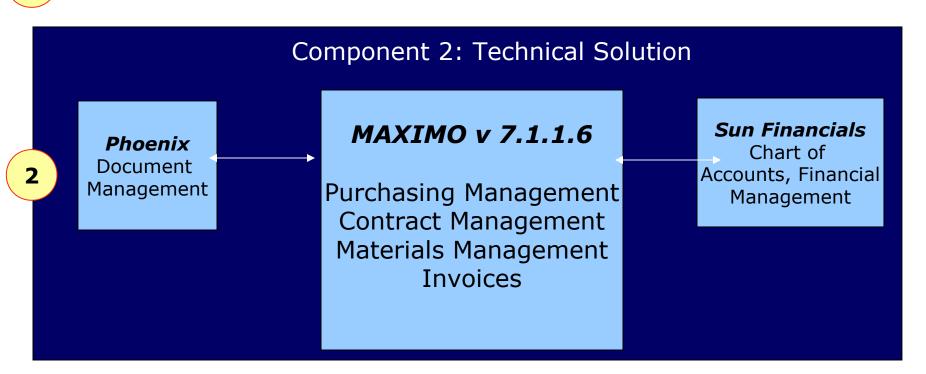


James Danaher Senior Consultant IBM Global Business Services



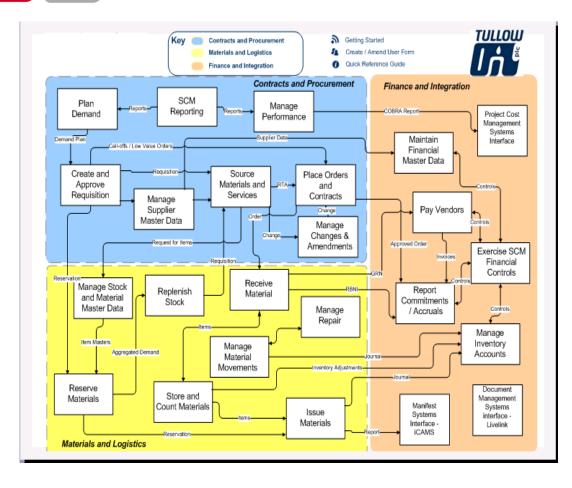
Solution Overview

1 Component 1: Supply Chain Operating Model & Business Processes



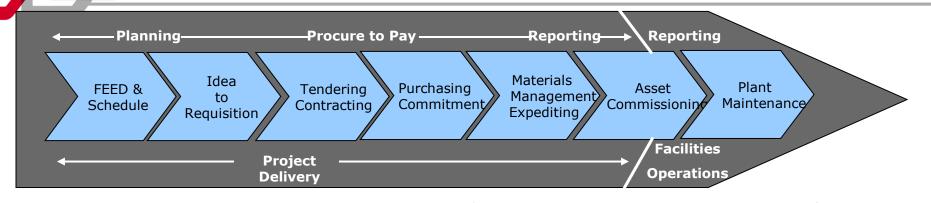
Component 3: Hosting & Support

Supply Chain Process Scope



- Unique approach
- Supply Chain focus on Contracts and Procurement and Materials and Logistics
- •A transactional backbone before emerging Asset Management needs

Maximo supporting business lifecycle



MAXIMO - In Scope

MAXIMO - Out of Scope

Purchasing

Desktop Requisitions
Purchase Requisitions
Request for Quotation
Purchase Orders
Receiving
Invoices

Contract Management

Purchase Contracts
Master Contracts
Payment Schedules

Materials Management

Item Master Storerooms Inventory Kitting Issues / Transfers Condition Codes

Asset Management

Locations
Asset
Failure Codes
Condition Monitoring
Meters
Meter Groups

Work Management

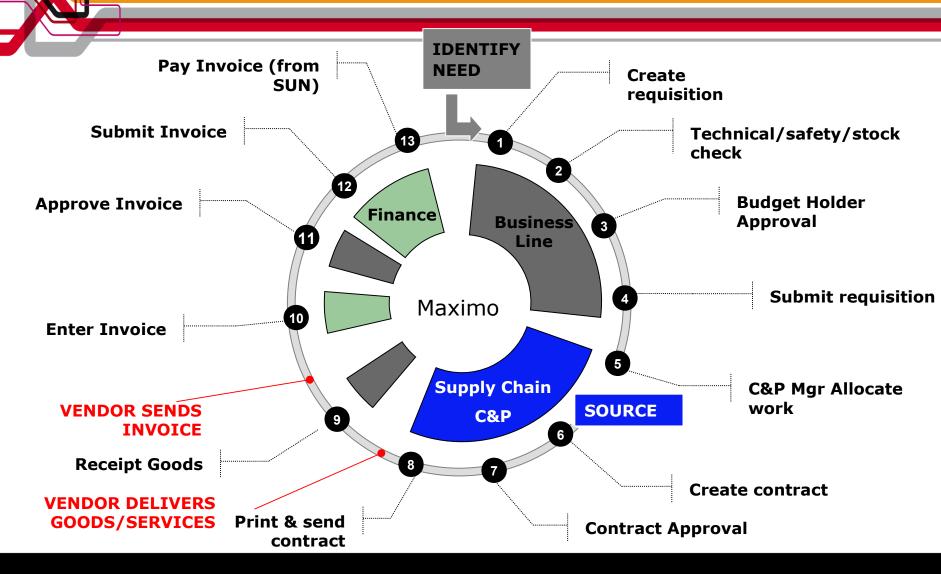
Service Management

Process Management = Workflow

Performance Management = Alerts, Reports, KPI's

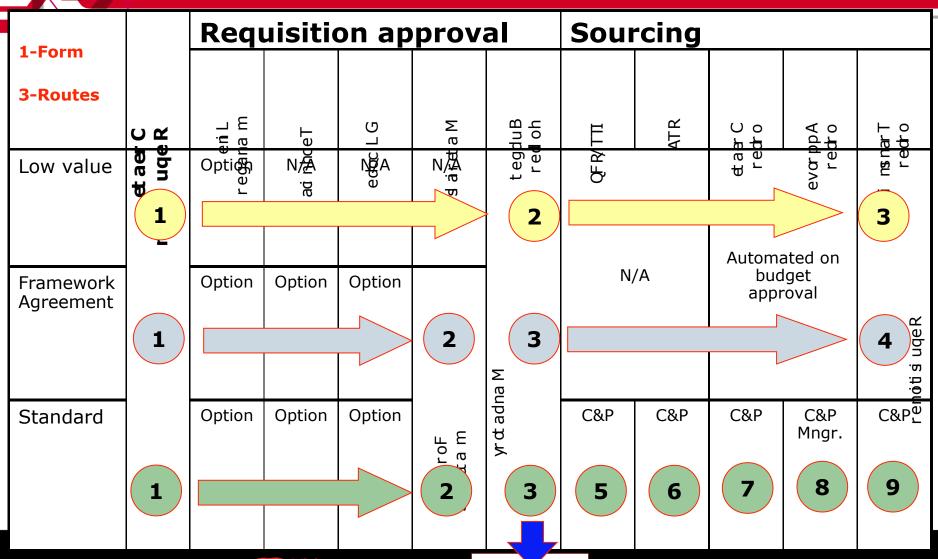


Procure-to-Pay: integrated backbone visibility





End user simplification

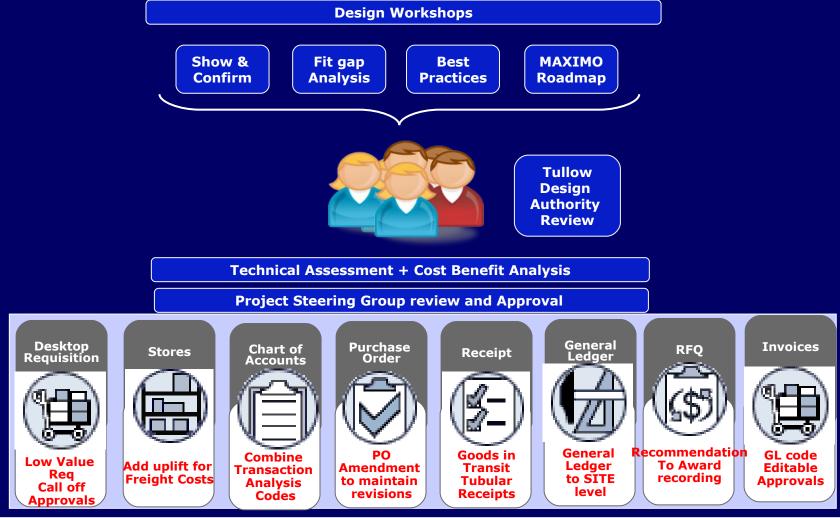


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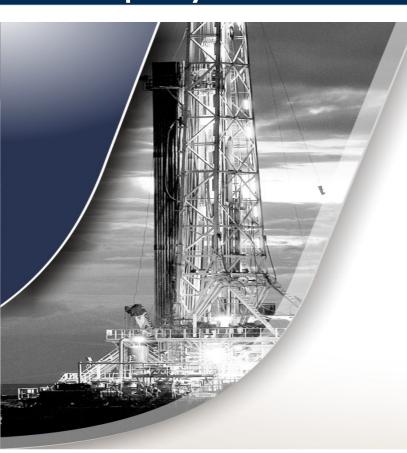
Stock reservations

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Out of the box? ... some enhancements



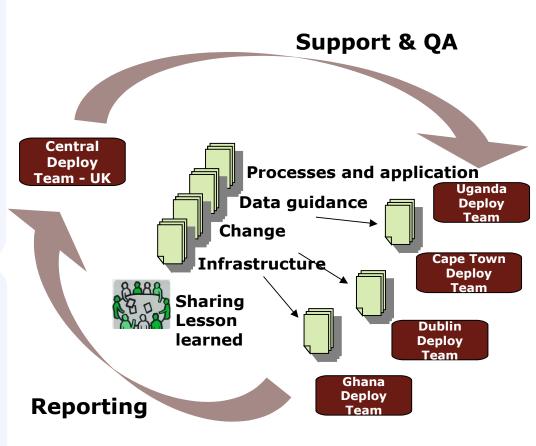
Deployment



James Neophytou Associate Partner IBM Global Business Services



- Template and environment stability
- Managing interface with hosting and support and related applications
- Method, lessons learned, manage issues and risks, expert contacts
- Support country implementations; on-site when necessary for specific deployment activities
- Data preparation
- Training
- Responsible for deployments, work closely, support local stakeholders
- Combination of local Tullow and consultant / contractor staff



IBM Hosting & Application Management

Functional Support

Enhancement

Troubleshooting

Database Admin

Operating System

Hardware

Network

AMS

2nd Line Support (India)

- Tullow Service Desk takes first call / mail on tickets
- First line diagnostic to Tullow helpdesk
- Transition project team members for knowledge retention

Hosting service (USA/Canada)

- No hardware or resources needed within Tullow other than a 'Systems Owner'
- Full DBA and back-ups
- 99.7% availability
- Dedicated centre, know Maximo architecture
- 20 clients, 13 countries

Hosting



Maximo touches all: business line

ENA Maximo Training - People Trained - 29 Oct 2010

	Department	Training Target	Actual 15-Sep	CURRENT% Trained
C&P	Contracts and Procurements*	21	20	95%
	JV Accounting	4	4	100%
Finance	Accounts Payable	7	7	100%
Business Line	Information Systems	9	8	89%
	Corporate Planning and Economics	1	1	100%
	Drilling	1	1	100%
	EHS	4	4	100%
	Engineering	2	2	100%
	Exploration	12	5	42%
	External Affairs/CSR	2	2	100%
	Finance	4	3	75%
	HR	3	3	100%
	Internal Audit	3	3	100%
	Investor Relations	2	1	50%
	P&D	8	8	100%
	Project Controls - London	4	3	75%
	Well Engineering	2	2	100%
Approvers		49	38	78%
	Total	138	115	83%

- Training across all departments and functions,
 - from Geologist to CFO
 - from Safety Officer to head of Well Engineering
- Everyone uses
 - same process
 - same system
 - same instance
 - any country
 - any department

- SITE 1, London: Europe and North Africa **Training Dashboard**
- Just in time training
- Develop Super Users



Change management **made** a difference





Your Tullow London Super Users are:

Requisitioning & Receipting

Candice Wentworth Jacquelyn Nwike Paul Tait Trudie Seeney

Contracts & Procurement

Donna Mills Hermione Wade Kevin Findlay Mesbah Khan

For further Information, contact Suzanne Rae

Finance Kylie Braid Karen Caldwell Kevin Gallacher Simon Vernon

Materials & Logistics

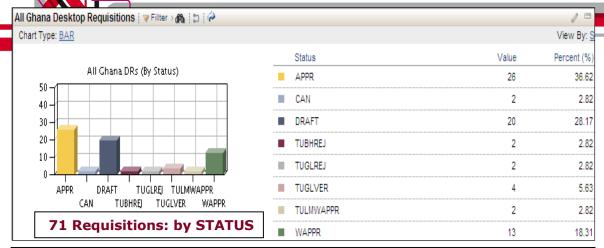
Martin Ellis



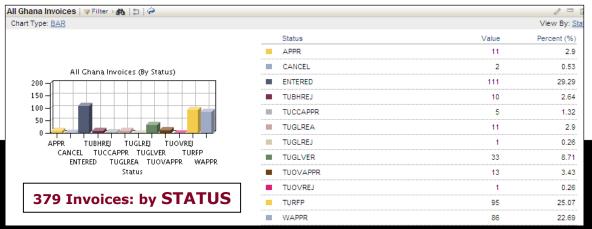


- Local sponsorship
- Business Readiness
 - "Go" / "No Go"
- Super User Briefings
- Hypercare "Red T-shirts"
- Cheat Sheets
- Intranet Support Pages
- Posters/ Town Hall / Leaflets

Vital Signs and Hyper-care







Go Live

- Daily Wash up meetings
- 30 minutes
- Daily "Vital Signs" dashboard to track what is happening
- 2-3 weeks of Hyper-care
 covering floor-walking
 and refresher training
- Tullow team follow ups to take the temperature

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Quotes





"Maximo is making Finance's job easier through better capturing of data, tracking progress and follow up. People find Maximo easy to navigate and robust. Users like the system."

- Uganda Post-implementation Review



"We have been live for 5 days and it's like we have always had - Rob Newcomb, Finance Manager, Ghana it. The Go-Live was a pleasant non-event"

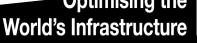


"The system is as fast in Cape Town as it is in London. I can approve requisitions and invoices wherever I happen to be." - Andrew Marks, Chief Information Officer

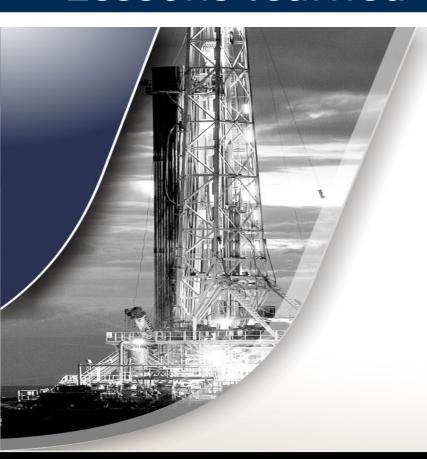




"The good thing is that Maximo enforces the correct "The good thing is that maximo discountial nonDelegation of Authority and highlights potential nonDelegation of Authority and highlights potential nonNicky Breslin, Group Accounting Manager compliance." - Nicky Breslin, Group Accounting Manager optimising the



Lessons learned



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Impact across Tullow



- Track and trace demand & visibility of requests
- Spend control
- Cost recovery audit trail and approval trail
- Speedier month end visibility of accruals
- No more paper requisitions
- Electronic approvals
- Low value requisition by pass Procurement team
- Call off orders by pass Procurement team



Lessons Learned

Technical Solution

Design Build Test

- Early set up of Integrated Design Authority
- Institute a clear system freeze protocol
- Solution must be 'fit for purpose'

Data Readiness



- Master Data Management process
- Integrated approach to data gathering e.g. C&P, M&L, Finance
- Data collection template process, responsibilities and ownership

Infrastructure & Security



- Allow sufficient time to validate user access and security groups
- Clear user role definition and business ownership required
- Performance & connectivity testing must be

Business Readiness



- Timely Change Management
- Objective Readiness Reviews
- Training close to go live, scenario based
- Super user community build-up and engagement is

Post Go Live Support



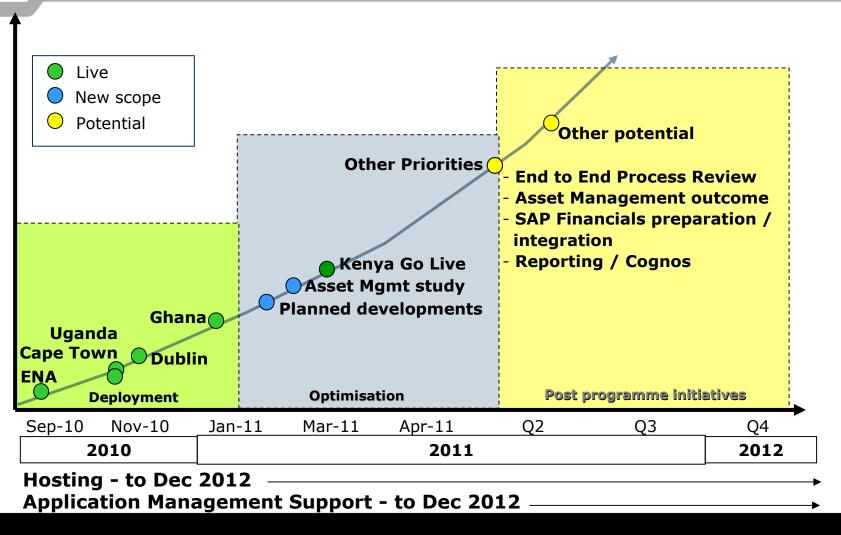
- Single point of accountability for post go live preparation & management
- Early design of service desk process to users
- Early set up of System Administrator role

detailed

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Tullow Maximo Roadmap





Capability / Operational Developments / Maturity

Thank you. Questions?

