





# **Tullow Oil**: Maximo and the Global Supply Chain



Pulse Comes to You

**Optimising the World's Infrastructure** 

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### **Tullow Oil Overview**



#### Mesbah Khan Development Projects Tullow Oil

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Tullow Oil story

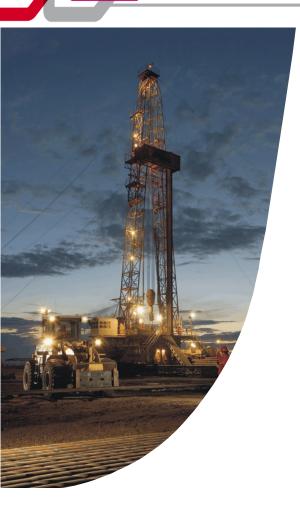
### Maximo Are You Ready?



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

#### **Tullow Oil Growth Story**

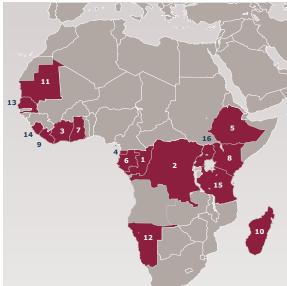


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- Founded in Ireland in 1985 by Aidan Heavey who is still CEO
- First project was in Africa Senegal (1986-2001)
- 1990's: Expansion across Africa and South Asia
- 2001: Acquisition of BP's North Sea gas fields
- 2004: Acquisition of Cape Town-based 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



#### Key: E Exploration D Development P Production

| 1 | Congo (Brazzaville) DP | 10Madagascar <b>E</b> |
|---|------------------------|-----------------------|
| 2 | Congo (DRC) E          | 11Mauritania EDP      |
| 3 | Côte d'Ivoire EDP      | 12Namibia D           |
| 4 | Equatorial Guinea DP   | 13Senegal E           |
| 5 | Ethiopia E             | 14Sierra Leone E      |
| 6 | Gabon EDP              | 15Tanzania E          |
| 7 | Ghana EDP              | 16Uganda ED           |
| 8 | Kenya* E               |                       |
| 9 | Liberia E              |                       |

#### subject to completion of farm-in deals.

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#### Rest of the World



Europe 1 Netherlands E 2 United Kingdom EDP

#### Group highlights

#### **Africa**

- 37,500 boepd
- 16 countries •
- 55 licences
- 18 producing fields 2 producing fields 16 producing fields

#### **South America**

- 3 countries
- 4 licences



South Asia

5,600 boepd

2 countries

8 licences

South Asia 1 Bangladesh EDP 2 Pakistan EDP

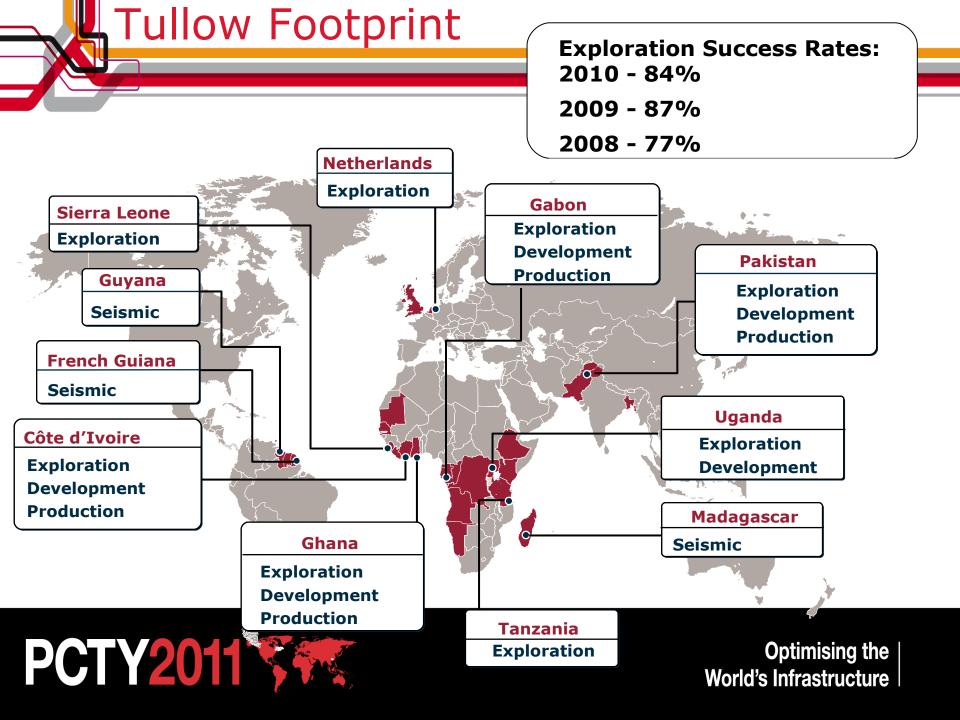


South America 1 French Guiana E 2 Guvana E

3 Suriname E

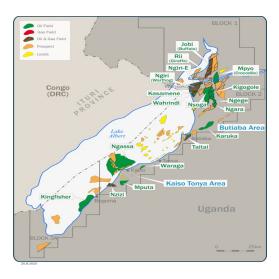
#### **Europe**

- 12,700 boepd
- 2 countries
- 28 licences



# Major Developments – Ghana & Uganda





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- 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"

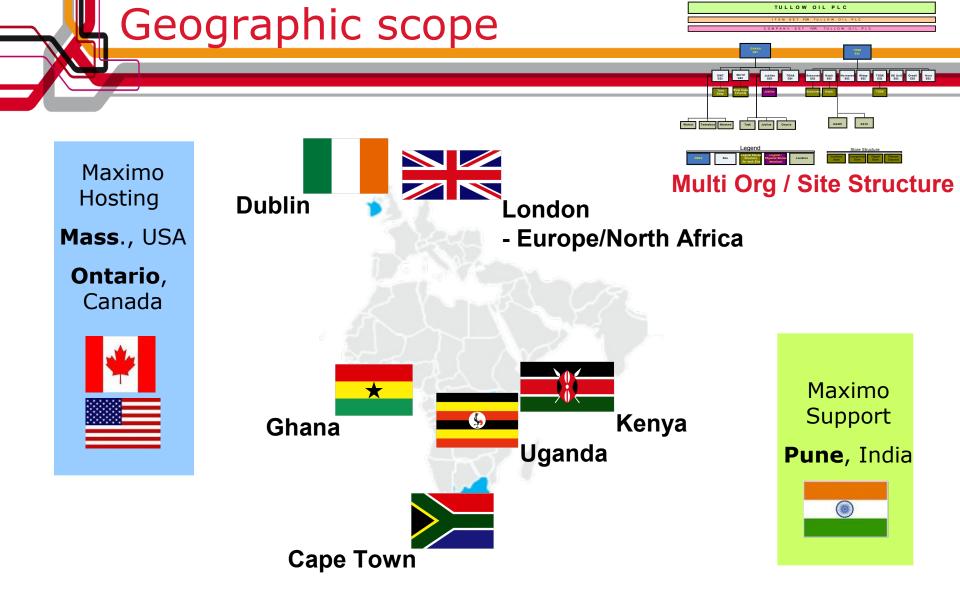
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- - SCM Transformation to upgrade SCM Processes, Systems, **Organisation & Capability**
  - New business processes for
    - Requisitioning "the line"
    - Contracts and Procurement
    - Materials and Logistics
    - Finance integration
      - Invoices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

# SCM Transformation & Maximo

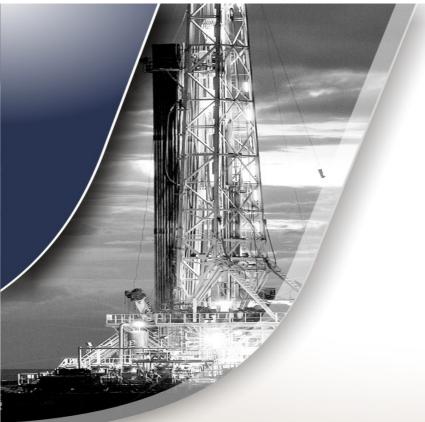






#### Same hosted instance for all, same process for all

# Maximo project



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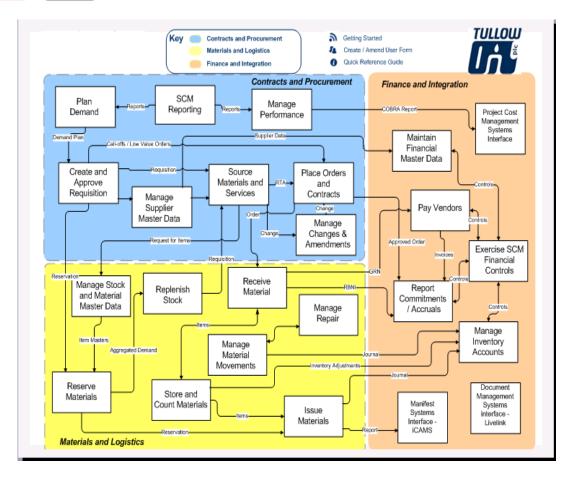
#### Component 1: Supply Chain Operating Model & Business Processes



#### Component 3: Hosting & Support

Workflow, Delegation of Authority, Linked Documents

Supply Chain Process Scope



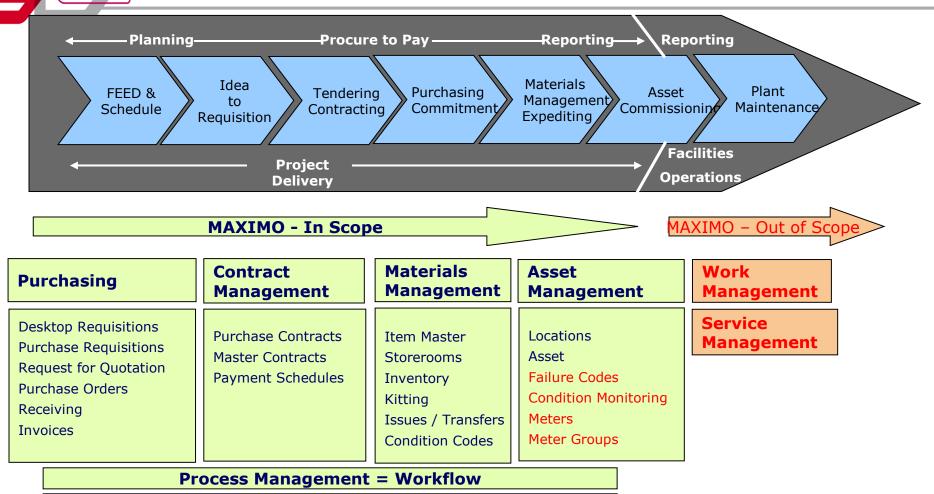
•Unique approach

•Supply Chain focus on Contracts and Procurement and Materials and Logistics

•A transactional backbone before emerging Asset Management needs

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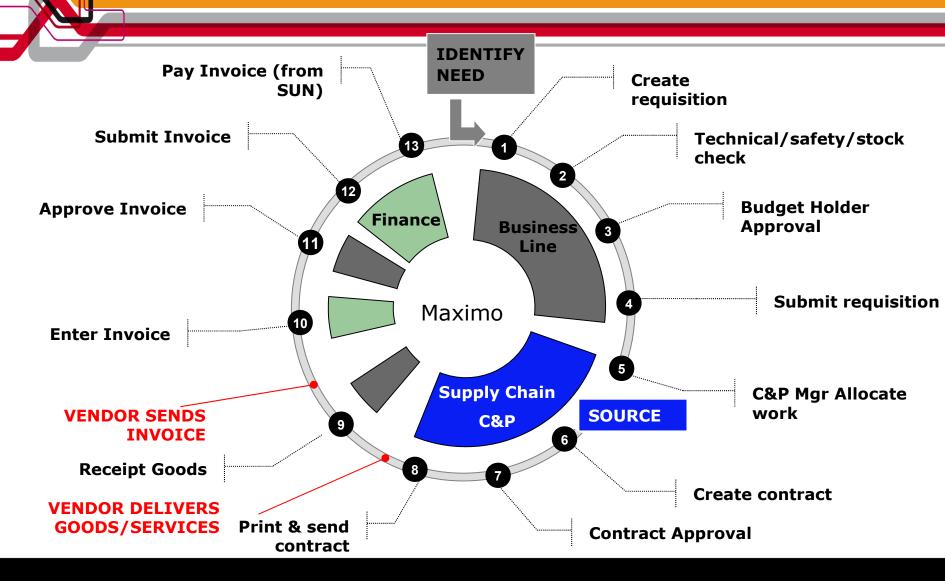
# Maximo supporting business lifecycle



**Performance Management = Alerts, Reports, KPI's** 

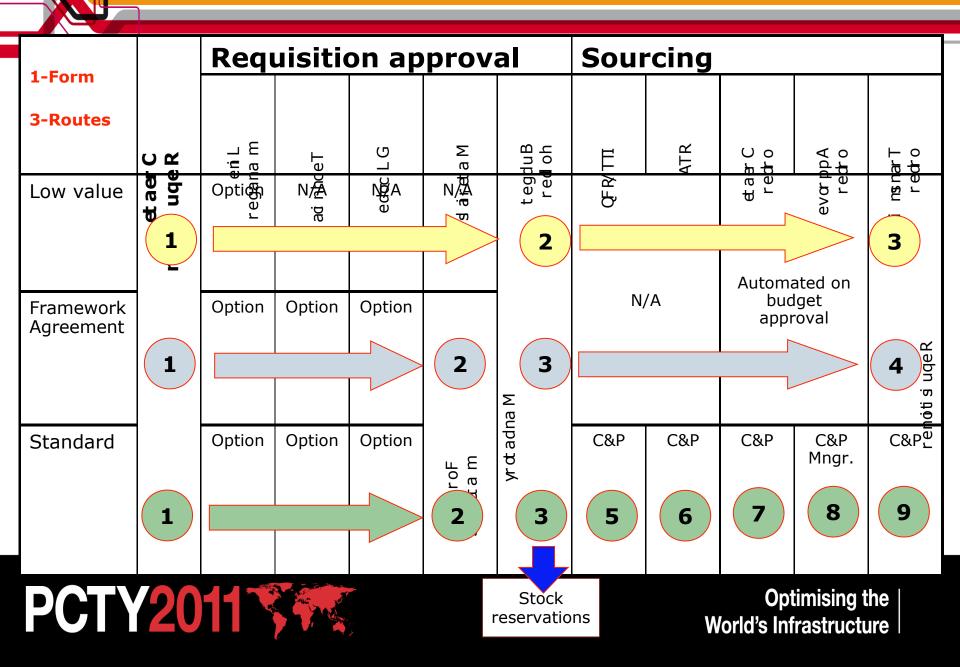


### Procure-to-Pay: integrated backbone visibility

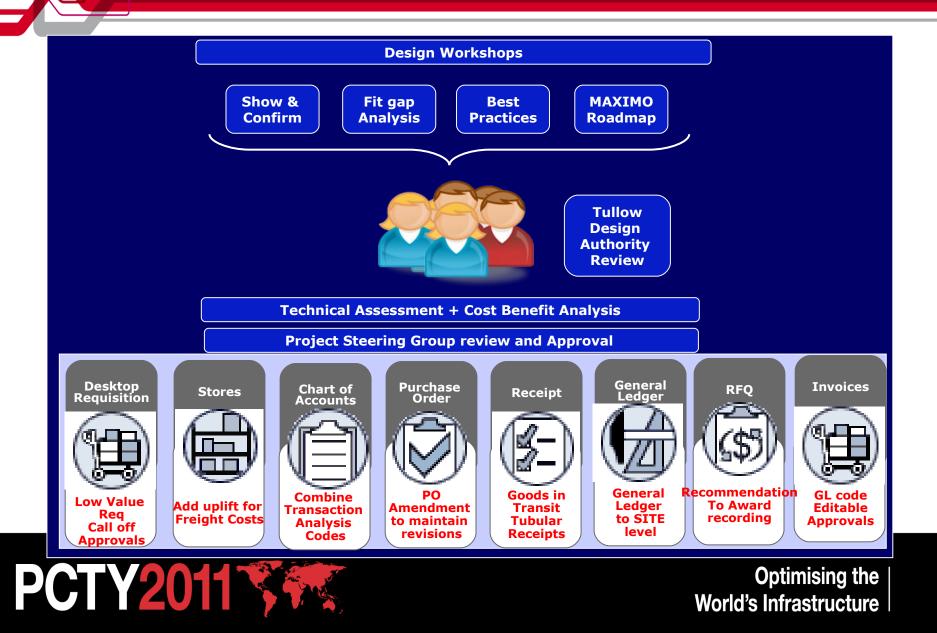


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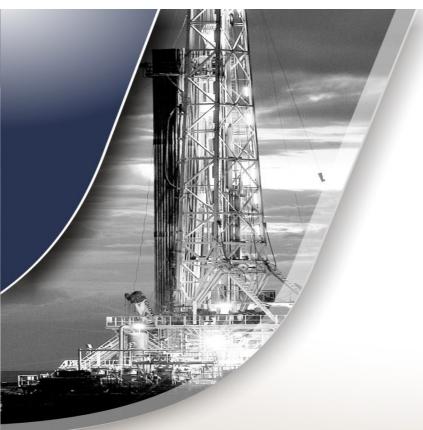
## End user simplification



# Out of the box? ... some enhancements



# Deployment



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# Global Deployment

- Template and environment stability
- **Central Team**

Deployment

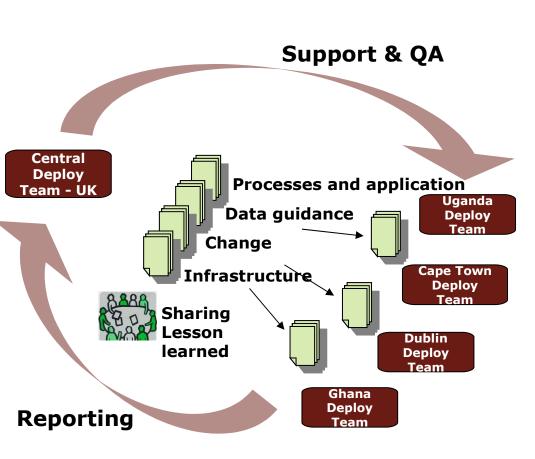
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Local

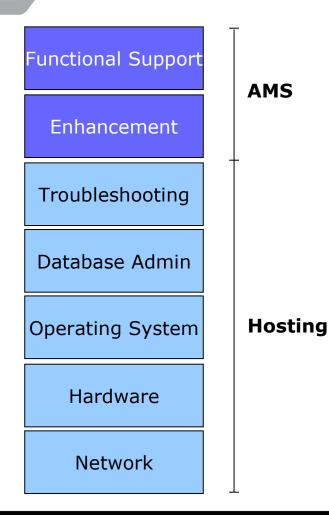
- Managing interface with hosting and support and related applications
- Method, lessons learned, manage issues and risks, expert contacts
- Support country implementations; on-site when necessary for specific deployment activities
- Data preparation
- Training

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- Responsible for deployments, work closely, support local stakeholders
- Combination of local Tullow and consultant / contractor staff



# IBM Hosting & Application Management



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#### 2<sup>nd</sup> 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

### Maximo touches all: **business line**

|               | Department                       | Training<br>Target | Actual<br>15-Sep | CURRENT%<br>Trained |
|---------------|----------------------------------|--------------------|------------------|---------------------|
| C&P           | Contracts and Procurements*      | 21                 | 20               | 95%                 |
|               | JV Accounting                    | 4                  | 4                | 100%                |
| Finance       | Accounts Payable                 | 7                  | 7                | 100%                |
|               | 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%                 |
| Ducinese Line | External Affairs/CSR             | 2                  | 2                | 100%                |
| Business Line | Finance                          | 4                  | 3                | 75%                 |
|               | HR                               | 3                  | З                | 100%                |
|               | Internal Audit                   | 3                  | 3                | 100%                |
|               | Investor Relations               | 2                  | 1                | 50%                 |
|               | P&D                              | 8                  | 8                | 100%                |
|               | Project Controls - London        | 4                  | з                | 75%                 |
|               | Well Engineering                 | 2                  | 2                | 100%                |
| Approvers     |                                  | 49                 | 38               | 78%                 |
|               |                                  |                    |                  |                     |
|               | Total                            | 138                | 115              | 83%                 |

SITE 1, London: Europe and North Africa Training Dashboard

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- 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
- Just in time training
- Develop Super Users

# Change management **made** a difference

#### Maximo Are You Ready?





Kylie Braid Karen Caldwell Kevin Gallacher Simon Vernon

#### Materials & Logistics TULLOW

For further Information, contact Suzanne Rae

Mesbah Khan



- 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

348 PO's by SITE

| All Ghana Desktop Requisitions   🔻 Filter > 🆓   🗊   🄗 |           |       | 1 =         |
|---|-----------|-------|-------------|
| Chart Type: BAR                                       |           |       | View By: S  |
|   | Status    | Value | Percent (%) |
| All Ghana DRs (By Status)                             | APPR      | 26    | 36.62       |
|   | CAN       | 2     | 2.82        |
| 30 -  | DRAFT     | 20    | 28.17       |
| 20 -  | TUBHREJ   | 2     | 2.82        |
|   | TUGLREJ   | 2     | 2.82        |
| APPR DRAFT TUGLREJ TULMWAPPR                          | TUGLVER   | 4     | 5.63        |
| CAN TUBHREJ TUGLVER WAPPR                             | TULMWAPPR | 2     | 2.82        |
| 71 Requisitions: by STATUS                            | WAPPR     | 13    | 18.31       |
| All Ghana Purchase Orders   🔻 Filter > 🚜   🕽   🏟      |           |       | 1 -         |
| Chart Type: BAR                                       |           |       | View By:    |
|   | Site      | Value | Percent (%) |
| All Ghana POs (By Site)<br>500 –1                     | DWT       | 6     | 1.72        |
|   | JUBILEE   | 241   | 69.25       |
| 300   | TGHA      | 101   | 29.02       |

300 200

100 -

n.

DWT

JUBILEE

Site

TGHA

| Ghana Invoices   🔻 Filter > 🚜   📰   褅  |   |          |       | 0 - 1        |
|--|---|----------|-------|--------------|
| hart Type: <u>BAR</u>  |   |          |       | View By: Sta |
|  |   | Status   | Value | Percent (%)  |
| All Ghana Invoices (By Status)   | - | APPR     | 11    | 2.9          |
|  |   | CANCEL   | 2     | 0.53         |
|  |   | ENTERED  | 111   | 29.29        |
| 150 -  |   | TUBHREJ  | 10    | 2.64         |
| 100<br>50<br>0<br>APPR TUBHRE TUGLRE TUOVRE<br>CANCEL TUCCAPPR TUGLVER TURFP<br>ENTERED TUGLREA TUOVAPPR WAPPR<br>Status |   | TUCCAPPR | 5     | 1.32         |
|  |   | TUGLREA  | 11    | 2.9          |
|  |   | TUGLREJ  | 1     | 0.26         |
|  |   | TUGLVER  | 33    | 8.71         |
|  |   | TUOVAPPR | 13    | 3.43         |
|  |   | TUOVREJ  | 1     | 0.26         |
| 379 Invoices: by STATUS  |   | TURFP    | 95    | 25.07        |
|  |   | WAPPR    | 86    | 22.69        |

#### **Go Live**

Daily Wash up meetings30 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



### Lessons learned



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### **Impact across Tullow**



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- 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

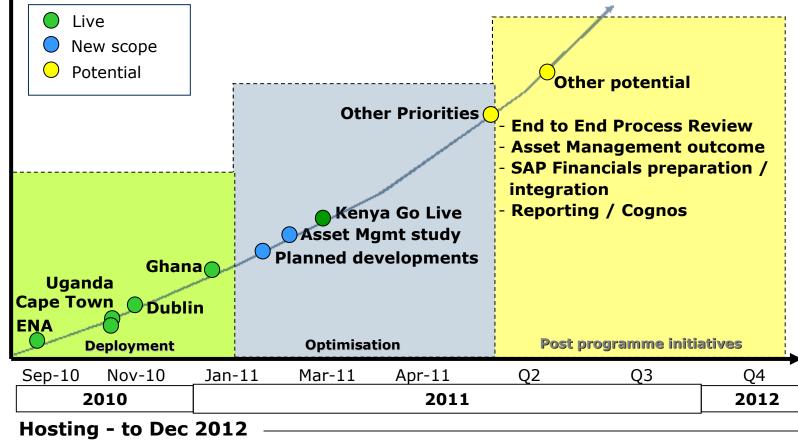
#### Lessons Learned

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| Technica Solution  | Data Readiness   | Infrastructure &<br>Security   | Business<br>Readiness  | Post Go Live<br>Support   |
|--|--|--|--|---|
| Design Build Test  |  |  | Communication<br>Engagement  |   |
| <ul> <li>Early set up of<br/>Integrated<br/>Design Authority</li> <li>Institute a clear<br/>system freeze<br/>protocol</li> <li>Solution must</li> </ul> | <ul> <li>Master Data<br/>Management<br/>process</li> <li>Integrated<br/>approach to<br/>data gathering<br/>e.g. C&amp;P, M&amp;L,<br/>Finance</li> </ul> | <ul> <li>Allow sufficient<br/>time to validate<br/>user access<br/>and security<br/>groups</li> <li>Clear user role<br/>definition and<br/>business</li> </ul> | <ul> <li>Timely Change<br/>Management</li> <li>Objective<br/>Readiness<br/>Reviews</li> <li>Training close<br/>to go live,<br/>scenario based</li> </ul> | <ul> <li>Single point of<br/>accountability<br/>for post go live<br/>preparation &amp;<br/>management</li> <li>Early design of<br/>service desk<br/>process to<br/>users</li> </ul> |
| be `fit for<br>purpose'  | <ul> <li>Data collection<br/>template<br/>process,<br/>responsibilities<br/>and ownership</li> </ul>   | ownership<br>required<br>Performance &<br>connectivity<br>testing must be  | <ul> <li>Super user<br/>community<br/>build-up and<br/>engagement is</li> </ul>  | <ul> <li>Early set up of<br/>System<br/>Administrator<br/>role</li> </ul>   |

# Tullow Maximo Roadmap





Application Management Support - to Dec 2012



# Thank you. Questions?



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