SAP PPM at the heart of driving Transnet’s Value Chain

Ronnie Kanniah
Rebatho Madiba
DISCLAIMER

This presentation and the information shown in the slides herein is for the purpose for illustration only, and does not represent any actual facts of the company.
Agenda

1. Transnet at a Glance
2. The journey of SAP PPM in Transnet
3. The fundamentals of understanding SAP PPM to position it in Transnet
4. Key Learnings
Transnet at a Glance

[Image of a hand pointing to a map or diagram related to Transnet]

[Translated text from the image]
Transnet at a Glance

Transnet is the largest and most crucial part of the freight logistics chain that delivers goods to each and every South African. Every day Transnet delivers thousands of tons of goods around South Africa, through its pipelines and both to and from its ports. It moves that cargo on to ships for export while it unloads goods for overseas.

Our vision and mission is to be a focused freight transport company, delivering integrated, efficient, safe, reliable and cost-effective services to promote economic growth in South Africa.
Transnet at a Glance
Transnet National Ports Authority

Breakwater:
- Creates a channel for vessels to navigate through.

Port Control Tower:
- Ensures the safe navigation of vessels and dispatches pilots, tugs and berthing staff.

Port Limits:
- Vessels wait on the perimeter for clearance from the harbour master and for a port pilot to steer the vessel safely into the port.

Harbour Master:
- The harbour master controls traffic in and out of the port.

Dredging Services:
- Creates depth for vessels to navigate through.

Pilot Steers Vessel:
- Trained port pilot taken by boat or helicopter to steer vessels safely to port.

Berthing Services:
- Docking and undocking of vessels.

Lighthouses

Tenants

Terminal Operators

Lighthouses
Transnet at a Glance
**Overall framework for Market Demand Strategy MDS delivery**

<table>
<thead>
<tr>
<th>MDS objectives</th>
<th>Significant economic growth and socio-economic impact for South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDS strategies</td>
<td>Capturing unfulfilled logistics demand and creating capacity for that demand</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MDS initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital planning and execution (incl. procurement)</td>
</tr>
<tr>
<td>Volumes and customer satisfaction</td>
</tr>
<tr>
<td>Operational efficiencies and productivity</td>
</tr>
<tr>
<td>Finance and funding</td>
</tr>
<tr>
<td>Regulatory and key stakeholder engagement</td>
</tr>
<tr>
<td>Safety, health, environment and quality</td>
</tr>
<tr>
<td>Human capital strategy</td>
</tr>
<tr>
<td>High performing organisation (including MDS governance and SPO's)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key areas to be tracked to ensure success of initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>KPIs</td>
</tr>
</tbody>
</table>

**SOURCE:** Transnet Group RMO
The journey of SAP PPM in Transnet
• Why are we embarking on this journey:
  - Consolidation of the Transnet Portfolio and Project Management
  - Standardisation and consolidation of the tools used to manage projects in Transnet
  - Reduce the level of efforts in implementing SAP PPM
  - By Leveraging on existing SAP PPM in Transnet
Principles behind the approach

**Change Management Principles**

1. Corporate Plan
2. Employees
3. ERM
4. Innovations
5. Strategic Initiatives
6. Legislation

**Project Management Principles**

1. Manage Innovations
2. Review Opportunity
3. Select Resources
4. Execute Projects
5. Handover & evaluate
6. Reward & Recognise
Transnet Portfolio Management Process

**MANAGE THE INNOVATION**
- Log the innovation
- Review and classification
- Innovation qualification using questionnaires
- Workflow and notification
- Complete MI Phase
- Approve Gate1

**REVIEW THE OPPORTUNITY**
- Innovation becomes an opportunity for continuous improvement
- Prefeasibility study
- Metric assessment: AS-IS and TO-BE
- Further qualification and scoring
- Opportunity ranking to form a pipeline portfolio of projects
- Workflow and notification
- Complete RO Phase
- Approve Gate2

**ASSIGN THE RESOURCE**
- Assign Project Manager
- Assess required financial resources if known
- Workflow and notification
- Complete AR Phase
- Approve Gate3

**EXECUTE THE PROJECT**
- Execute the project according to methodology:
  - Just Do It
  - Lean
  - Six Sigma
  - CAPEX/OPEX
  - ICT
  - Product Development
- Workflow and notification
- Complete EP Phase
- Approve Gate4

**HANOVER & EVALUATE**
- Benefits tracking
- Workflow and notification
- Complete HE Phase
- Approve Gate5

**REWARD & RECOGNISE**
- Top Projects of the Month reporting
- Top Project of the Year Reporting
- Employee or Project team rewards
- Workflow and notification
- Complete RR Phase
- Approve Gate6

**Innovation/idea** ➔ **Opportunity** ➔ **Project** ➔ **Benefits** ➔ **Employee/Team Reward**
Integration of the Transnet Project Management Methodologies

**JDI**
- Just Do It
  - Justify
  - Do
  - Inform
  - Evaluate

**Lean**
- DMAIC
  - Define
  - Measure
  - Analyse
  - Improve
  - Control

**Six Sigma**
- DMAIC
  - Define
  - Measure
  - Analyse
  - Improve
  - Control

**CAPEX**
- Concept (FEL-1)
  - Pre-feasibility (FEL-2)
  - Feasibility (FEL-3)
  - Execution (FEL-4)
  - Finalise (Close-out)

**ICT**
- Analyse
  - Design
  - Develop
  - Test
  - Finalise
Implication of SAP PPM

Portfolio Management Level:
- Portfolio Management Committees
- Voice of the Customer
  - Corporate Plan/RMO Input
  - ERM
  - Customer Engagement
  - Project Requests/Wishlist
  - Employees

Project Execution Level:
- Lean six Sigma
- ICT
- CAPEX
  - Continuous Improvements Committee
  - OPCO
  - CAPIX/Investment Committee
  - RMO

Methodology:
- DMAIC
- SDLC/ASAP
- PLP
  - Wireless Network upgrade
  - Installation of equipment
  - 1064 Loco acquisitions
  - Improvement of turnaround time
  - CRM System implementation
SAP PPM Landscape in Transnet

* The portfolio items can be linked to different ERP and Operational Systems to extract all required data. This allows to consolidate a heterogenous system landscape.
The fundamentals of understanding SAP PPM to create value in Transnet
What is SAP PPM

- A central solution based on a SAP platform, designed to manage portfolios of ideas/innovations, allowing visibility and governance of the execution of projects.
  - Manages all project types; CAPEX, ICT, Engineering/Product Development and Continuous improvement
  - Enforces discipline aligned to best practise; PLP, PMBOK, Lean Six Sigma, Prince 2
  - Strong toll gate approach; phase-gate-phase on initiatives and projects
  - Workflow; informing the right person to action the respective task, milestone, phase or gate approval
  - Reporting and Dashboard
Functions of SAP PPM

**Portfolio Management**
- Bucket structure
- Initiative lifecycle management
- Pipeline visibility
- Idea Ranking and scoring
- Tollgate management
- Document management
- Knowledge management

**Project Management**
- Project Execution using various methodologies
- Execution and monitoring
- Programme management
- Resource management
- Tollgate management
- Workflow Management
- Capability of WBS costs monitoring
- Integrated 3rd Party project management tools
- Document Management

**Dashboard & Reporting**
- Portfolio Performance
- Programme Performance
- Project Performance
- Strategic, tactical and operational views
- Financial performance view: benefits tracking
- Progress view: task & activities, GANTT

**Integration to other Systems**
- Integration to SAP
- Integration to document management systems
- Integration to third party systems through middleware
- Integration to data warehouse
- Integration to MS Projects server or other 3rd Party tools
Transnet Value Chain: hierarchy model defined

- **Transnet core business objectives; top level mapping of the business, with customer centricity.**
- **Transnet value chain details of the companies business drivers.**
- **Key business processes defining the details of the business value chain from Business Process high-level activities**
- **Business Process detailed activities with defined attributes of systems, documentation, policies, roles.**
- **Business Process supporting SOP**
Transnet L0 Value Chain Model

Partners / Stakeholders

- e.g. Supply Chain Partners, Regulatory Bodies, Shareholders, etc.

Support Services

- e.g. Legal Compliance, Finance, ICT, HC, Procurement, Property, Projects, etc.

CORE

- Capacity and Design
- Marketing and Sales
- Operational Planning & Execution
- Customer Services

SUPPORT

- Asset Management

Customers Needs

Customers Satisfaction
Principles of the bucket structure

Portfolio Management at the different levels of the Value Chain: Prioritisation Monitoring
Innovation Qualifying Questionnaire aligned to MDS

<table>
<thead>
<tr>
<th>Questionnaire ID: Z_INIT_QUEST</th>
<th>Number of Questions: 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score: 0.00</td>
<td>Assigned to Field: Innovation Qualifying</td>
</tr>
<tr>
<td>Changed On: 00.00.0000</td>
<td>Changed By:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MDS Idea Criteria</th>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Does this idea align with the expansion and maintenance of economic infrastructure?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2 Does this idea align with growing volumes and improving market share?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3 Does this idea align with enabling regional integration?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4 Does this idea align with improving performance, productivity and operational efficiencies?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>5 Does this idea align with promoting sustainable growth?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>6 Does this idea align with prioritising safety, skills development and procurement?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

- Does this idea align with the expansion and maintenance of economic infrastructure?
- Does this idea align with growing volumes and improving market share?
- Does this idea align with enabling regional integration?
- Does this idea align with improving performance, productivity and operational efficiencies?
- Does this idea align with promoting sustainable growth?
- Does this idea align with prioritising safety, skills development and procurement?
- Does this idea align with creating regulatory certainty and compliance with policy including optimising the social and economic impact of all interventions?
- Does this idea align with driving research and the deployment of new and cutting-edge technologies?
- Is the source of the idea driven by executive from a strategic perspective?
- Is the solution to the problem known?
## Filtered Portfolio

The image shows a software interface for managing a portfolio of initiatives. The interface includes a table with columns for **Bucket Name**, **Name**, **ID**, **Innovation Qualifying**, **Review Opportunity**, and **Number of Items**. The table lists various projects and initiatives categorized under different buckets. For example:

- **Lean Rotating Machines**: Coleshop optimisation Project (ID: 0000000347), Innovation Qualifying: 25, Review Opportunity: 5, Number of Items: 0
- **Innovation Wagon**: MRK-3 REFURBISHMENT (ID: 00000002698), Innovation Qualifying: 25
- **Lean RSE**: Optimization of Valve Section (ID: 00000001242), Innovation Qualifying: 25
- **Capex Information Technology**: PFM 5.0 for ICT (ID: 00000001949), Innovation Qualifying: 25
- **Innovation RSE**: Reduce cost of manufactur... (ID: 00000001723), Innovation Qualifying: 25
- **Lean Auxiliary**: Streamlining the whole pro... (ID: 00000003666), Innovation Qualifying: 25
- **Innovation Rotating Machines**: CET Motor Alternator Group (ID: 00000001651), Innovation Qualifying: 25, Number of Items: 1
- **Lean Coaches**: Reduce material shortage ... (ID: 00000002973), Innovation Qualifying: 25
- **Innovation Coaches**: The making on money (ID: 00000001544), Innovation Qualifying: 25, Number of Items: 0
- **Lean Rotating Machines**: 1IE Prison refurbishing (ID: 00000002460), Innovation Qualifying: 25

The interface also includes options for filtering and searching the portfolio. The bottom of the image shows a logo for "Lean Six Sigma Business Process Optimization."
Opportunity Qualifying Questionnaire

Question

1. Estimated hard benefits from the Financial Analysis and/or primary metric?
2. Estimated soft benefits from the Financial Analysis and/or primary metric?
3. Expected reduction in defects
4. Does this project require capital investment?
5. Is the cost of the effort worth the benefit?
6. Expected number of team members required to drive the project to completion?
7. Expected duration of project
8. Will this project improve customer satisfaction?
9. Will this project have significant strategic impact?
10. Is there baseline data available for the process?
11. Project complexity due to issues with respect to schedule, budget, customer requirements, difficulty collecting data, union, contractual & regulatory barriers, change management, size of working group affected, geographic dispersion, etc?
12. Can this project be replicated at another centre/depot?
13. Is this an existing process?
### Transnet’s Top Initiatives

#### Table: Transnet Top Initiative

<table>
<thead>
<tr>
<th>Bucket Name</th>
<th>Name</th>
<th>ID</th>
<th>Innovation Qualifying</th>
<th>Review Opportunity</th>
<th>Number of Items</th>
<th>Category</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lean Rotating Machines</td>
<td>Cotsnp optimisation Project</td>
<td>0000000347</td>
<td>25</td>
<td>5</td>
<td>0</td>
<td>National Rotating Machines</td>
<td>Durban</td>
</tr>
<tr>
<td>Innovation Wagon</td>
<td>MRK-2 REFURBISHMENT</td>
<td>0000802896</td>
<td>25</td>
<td></td>
<td>1</td>
<td>National Weapons</td>
<td>Uitenhage</td>
</tr>
<tr>
<td>Lean RSE</td>
<td>Optimization of Value Sections</td>
<td>0000001242</td>
<td>25</td>
<td></td>
<td>1</td>
<td>National Rolling Stock Equipm</td>
<td>Durban</td>
</tr>
<tr>
<td>Capex Information Techno</td>
<td>PPM 5.0 for ICT</td>
<td>0000001949</td>
<td>25</td>
<td></td>
<td>1</td>
<td>National Information Technolog</td>
<td>Kiner Park</td>
</tr>
<tr>
<td>Innovation RSE</td>
<td>Reduce cost of manufactur...</td>
<td>0000001723</td>
<td>25</td>
<td></td>
<td>1</td>
<td>National Rolling Stock Equipm</td>
<td>Salt River</td>
</tr>
<tr>
<td>Lean Auxiliary</td>
<td>Streamlining the whole pro...</td>
<td>00000003688</td>
<td>25</td>
<td></td>
<td>1</td>
<td>National Auxiliary</td>
<td>Kpedevexport</td>
</tr>
</tbody>
</table>
Key Learnings

- Learn and understand the SAP Solution you are implementing and the **VALUE** it is bringing to your organisation!
- SAP PPM is the enabler of corporate performance management in Transnet
- Understand the under-lining business principles that support the SAP solution from a best practise and organisational perspective!
- It is possible to innovate with SAP!
- SAP PPM ROCKS!