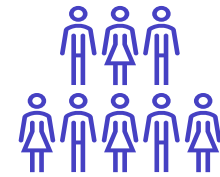
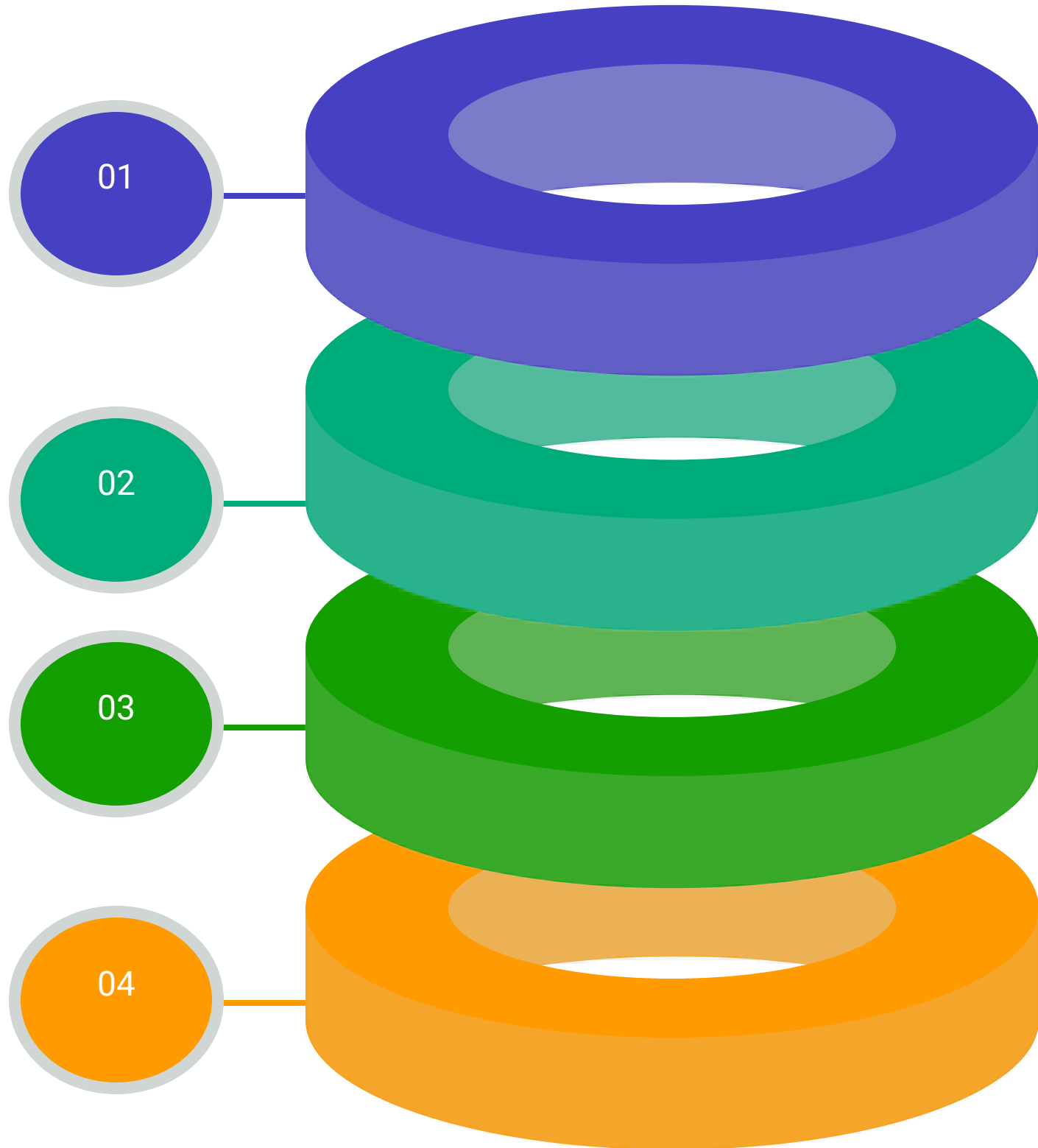




How targeted supply chain strategies can drive operational excellence and boost overall business performance

Colette Yende

Transnet SOC Ltd: Driving South Africa's Integrated Freight Logistics



Who We Are

- South Africa's largest freight logistics and rail operator, under the Department of Transport
- Manages over **30,000 km of rail network**, ports, pipelines & terminals
- Key enabler of regional economic integration across SADC



Strategic Pillars

- Modernisation & Digitalisation
- Sustainable infrastructure investment
- Public-private partnerships
- Regional growth & integration
- Supply chain efficiency & reliability



Our Divisions

- **Transnet Freight Rail (TFR)** – Rail freight services
- **Transnet Port Terminals (TPT)** – Cargo handling at ports
- **Transnet National Ports Authority (TNPA)** – Port regulation and infrastructure
- **Transnet Engineering (TE)** – Rolling stock manufacturing and maintenance
- **Transnet Pipelines (TPL)** – Transport of petroleum and gas products
- **Transnet Properties**



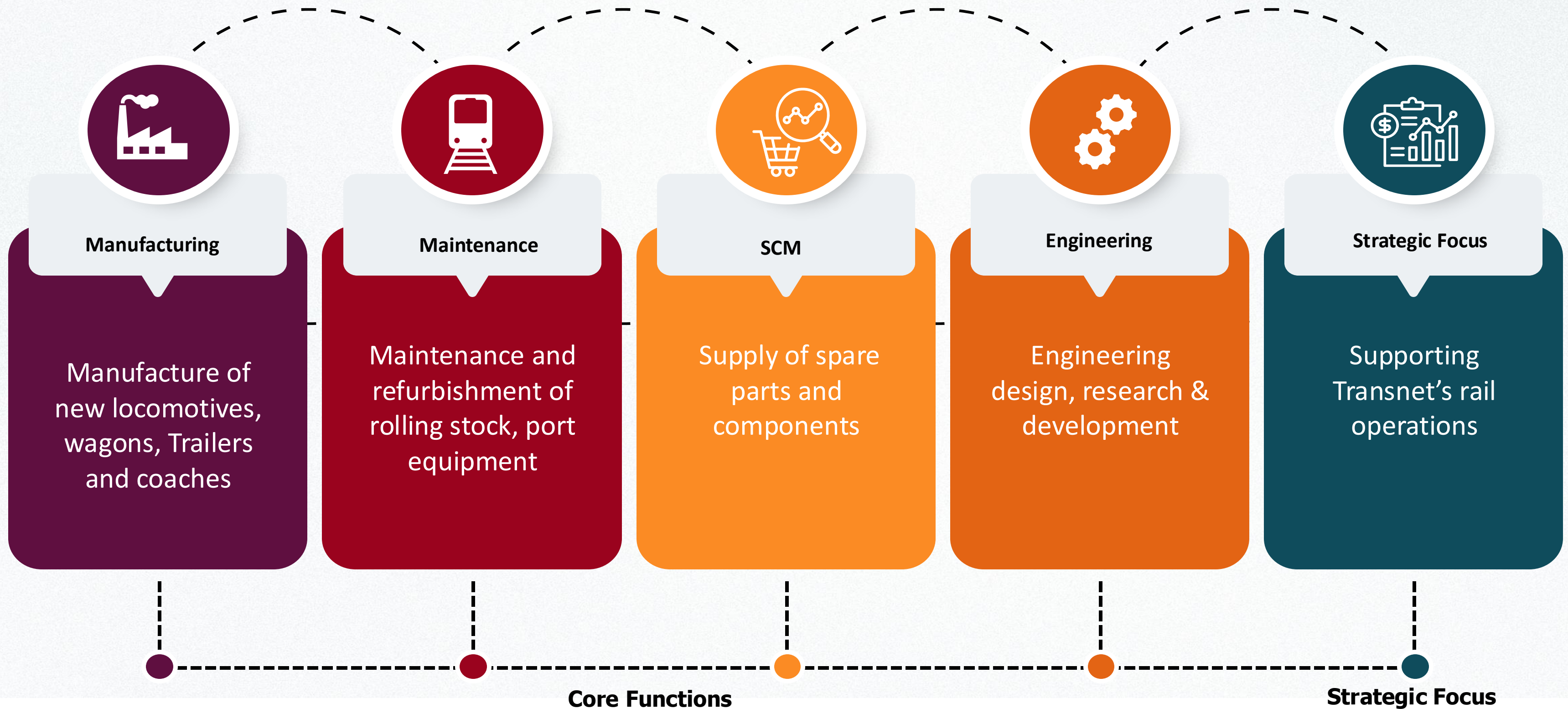
Transnet's Role in Supply Chain Digitalisation

- Investment in Control Towers, IoT sensors, and predictive maintenance for assets
- Port Community System (PCS) and digitized cargo tracking
- Integration with customs, shipping lines, and port users to reduce dwell time



TRANSNET ENGINEERING OVERVIEW

Transnet Engineering (TE) is a division of Transnet SOC Ltd., South Africa's state-owned freight transport and logistics company. TE is a leading provider of rolling stock manufacturing, maintenance, repair, and engineering solutions.



TE Strategic Undertaking

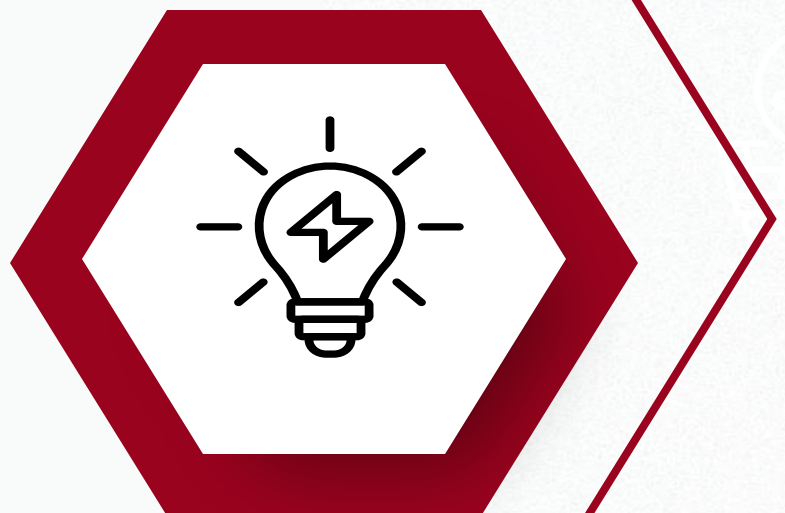
01



Value Proposition

- **Fleet Availability:** Ensuring locomotive and wagon readiness across the network.
- **OEM Capability** – Material & Technical support
- **Asset Life Extension:** Refurbishment, modernisation, and repurposing of fleets.
- **Localisation & Skills Development:** Supporting South Africa's industrialisation through localisation and development.

02



Strategic Narrative

To be Africa's leading provider of rail engineering solutions by enabling a reliable logistics network through innovative, sustainable, and industrially empowering asset management.

Strategic Pillars:

- Sustain Operational Excellence
- Strengthen OEM Capability
- Drive Commercial Growth
- Support Transnet's Rail Recovery & PSP Strategy
- Enable Industrial and Skills Development

03



Our Playbook

- Improve turnaround times for maintenance and overhauls.
- Drive down cost per locomotive through efficiency.
- Offer services to third-party operators across Africa.
- Leverage OEM and localisation strengths.

04

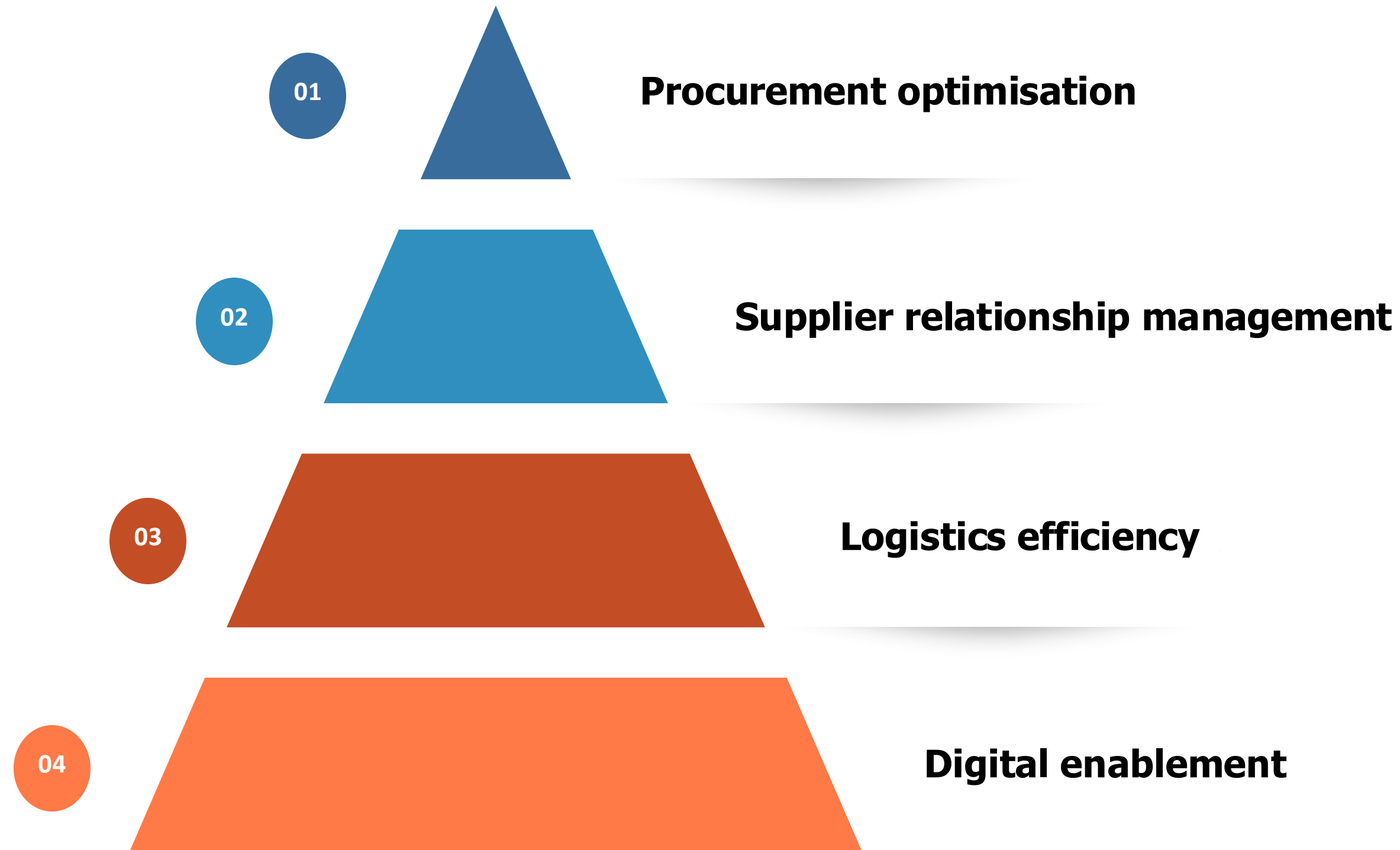


Key Deliverables

- Restore locomotives back into service.
- Increase Mean Time Between Failures (MTBF)
- Secure long-term OEM partnerships for spares and Technical support
- Expand business with African operators

OVERVIEW: CRITICAL LEVERS WITHIN SCM

Optimising Supply Chains for Performance & Resilience



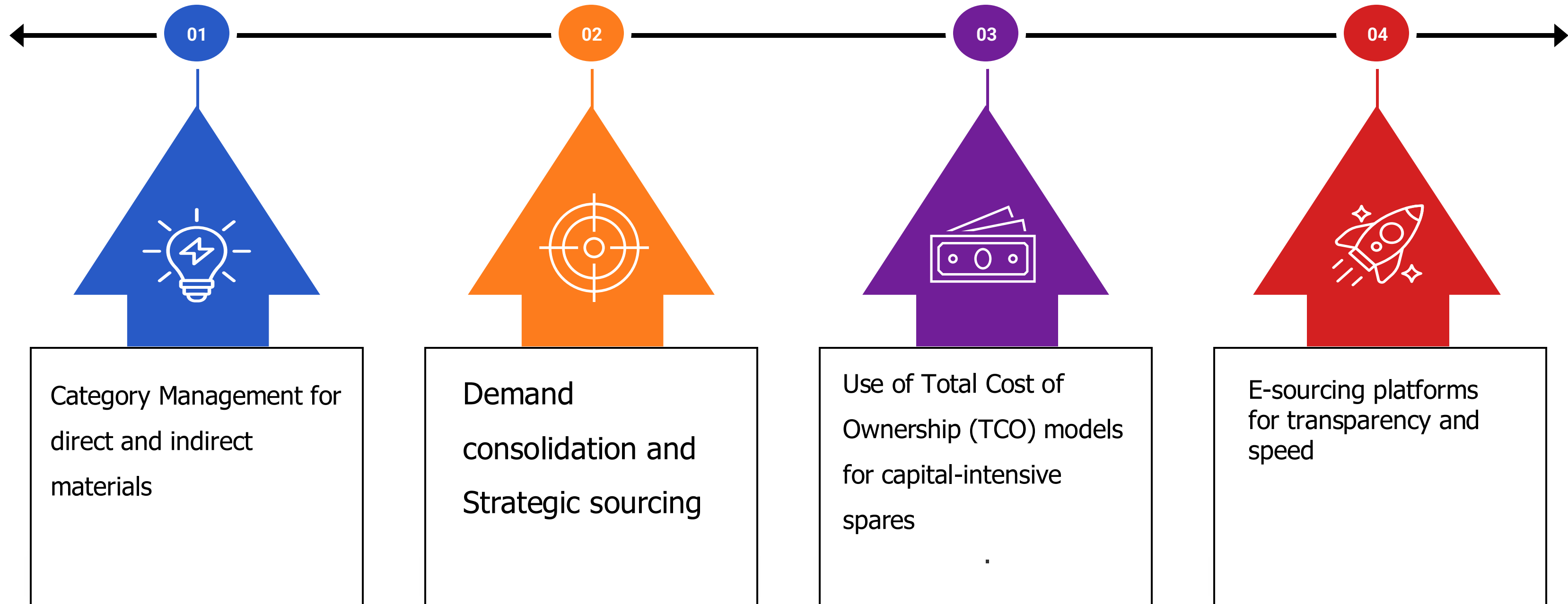
Outcomes: Efficiency, cost savings, resilience, measurable impact

PROCUREMENT OPTIMISATION

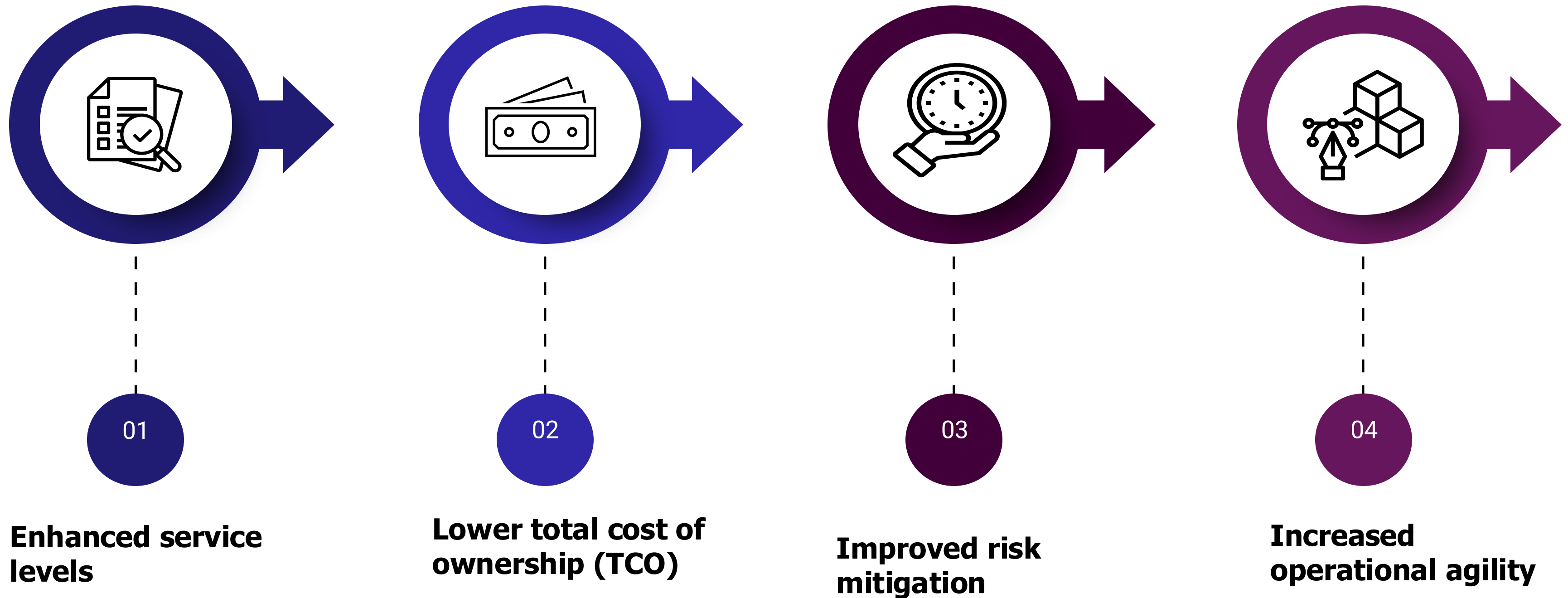
Transformation from transactional to strategic procurement

•**Traditional View:** Cost and compliance

•**Strategic View:** Value, innovation, total lifecycle cost



THE STRATEGIC IMPORTANCE OF SUPPLY CHAIN



From an Academic Perspective: Chopra & Meindl (2020) – Strategic fit between competitive strategy and supply chain capabilities is essential for performance.

SUPPLIER RELATIONSHIP MANAGEMENT (SRM)

01



Supplier segmentation and collaborative partnerships

- Strategic, preferred, transactional suppliers
- KPI-linked performance contracts
- Long-term collaboration with OEMs and OPMs

02



TE Practices:

- Joint improvement plans with top OEMs
- Incentives for on-time, in-full (OTIF) delivery
- Risk and continuity planning with single-source vendors

03



Benefits:

- Improved supplier performance
- Reduced lead time variability
- Increased negotiation leverage

Monczka et al. (2015) assert that SRM builds shared objectives, reduces friction, and increases value co-creation.



Logistics & Inventory Efficiency

Strategic Investment in Local Warehousing

- Warehouse Management Systems (WMS) for managing location-specific inventory, improving visibility and stock rotation.
- Vendor-Managed Inventory (VMI): Let key suppliers maintain agreed stock levels within Transnet's local warehouses.

Inventory Analytics

- Forecasting Models: Use historical usage and failure rate data to predict future needs and automate reorder points.
- Stock Audits & Cycle Counting: Regular physical verification to ensure system data matches actual inventory

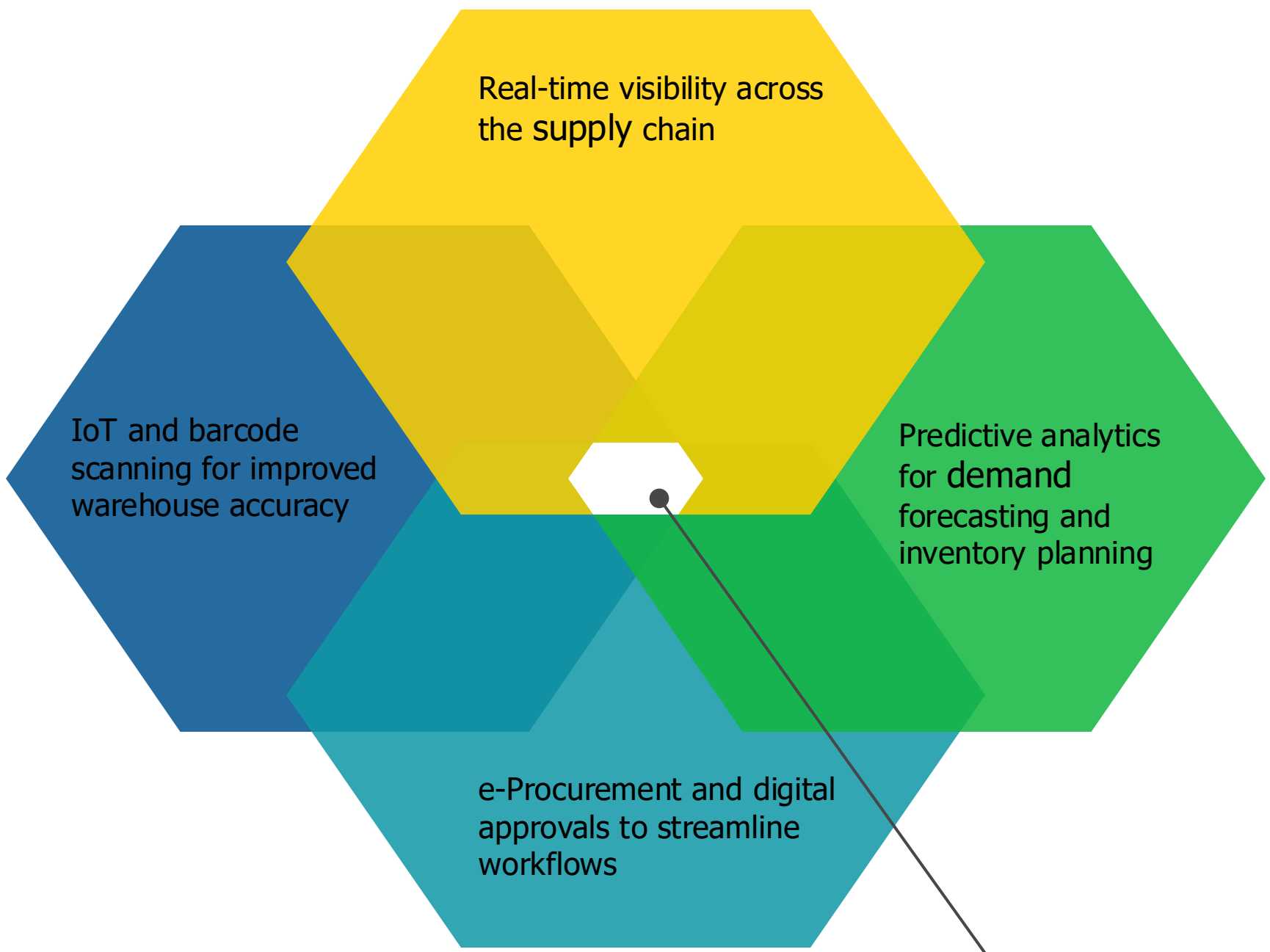
Lowering Emergency Logistics Cost

- Integrated Planning: Coordinate better between maintenance, operations, and procurement to anticipate future needs.
- Buffer Stocks: Strategically place buffer stock at high-demand locations to serve as an emergency fallback.

Reduced Replenishment Cycles

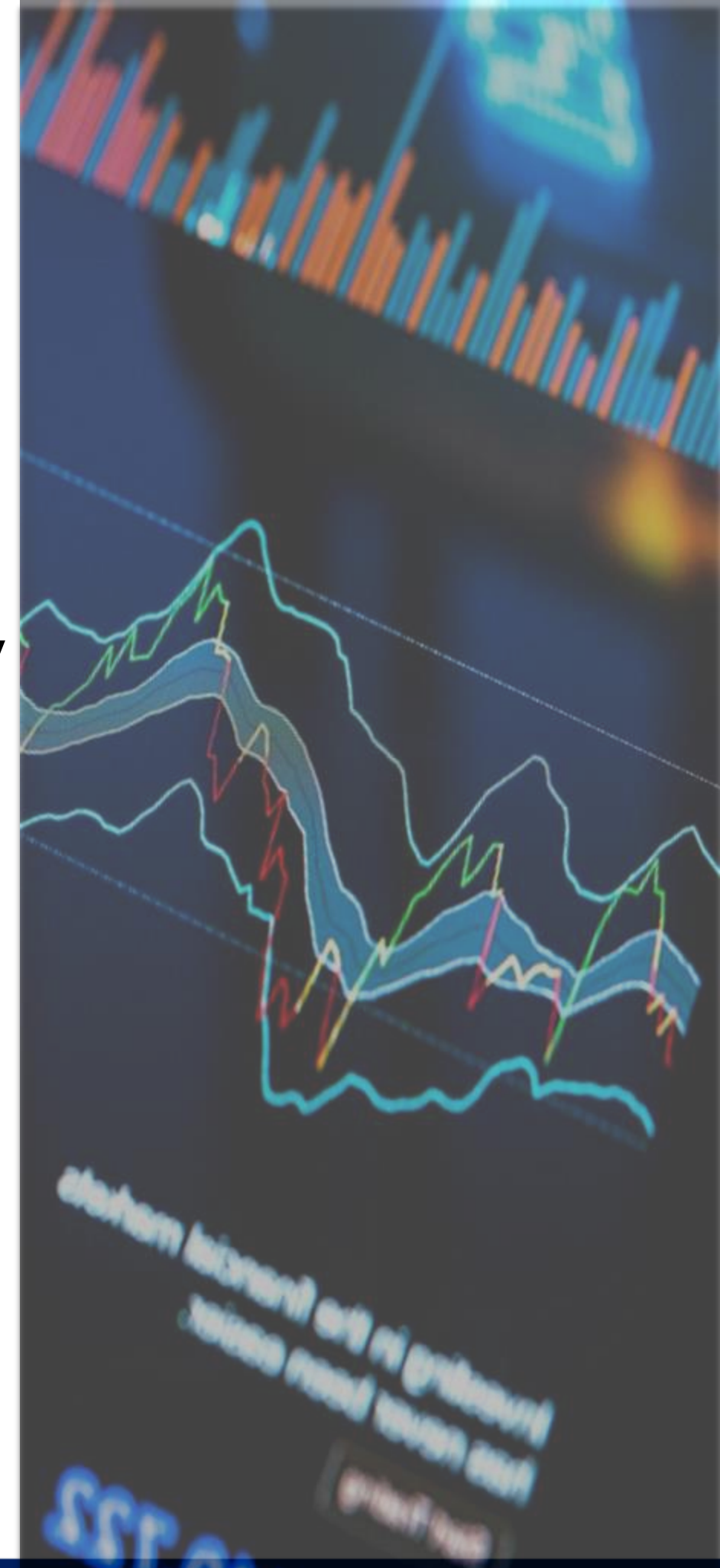
- Auto-Replenishment Rules: Use min-max levels in ERP systems to auto-trigger purchase requisitions
- Shorter Procurement Lead Times: Digitize and streamline approval workflows to avoid delays in raising purchase orders

DIGITAL ENABLEMENT & DATA-DRIVEN DECISIONS



MIT's Supply Chain Resilience Framework – agility, collaboration, visibility, and adaptability

- Impact:**
- Improved compliance
 - Faster decision-making
 - Reduced manual errors



STRATEGIC ENABLERS FOR SUCCESS

Digital Tools



eProcurement, analytics dashboards, AI in demand forecasting

People Capability



Training, supply chain academies, OEM knowledge transfer

Governance & Risk Management



Embedded risk frameworks and compliance controls

Policy Alignment



NIP, B-BBEE, localisation strategies

CONCLUSION

