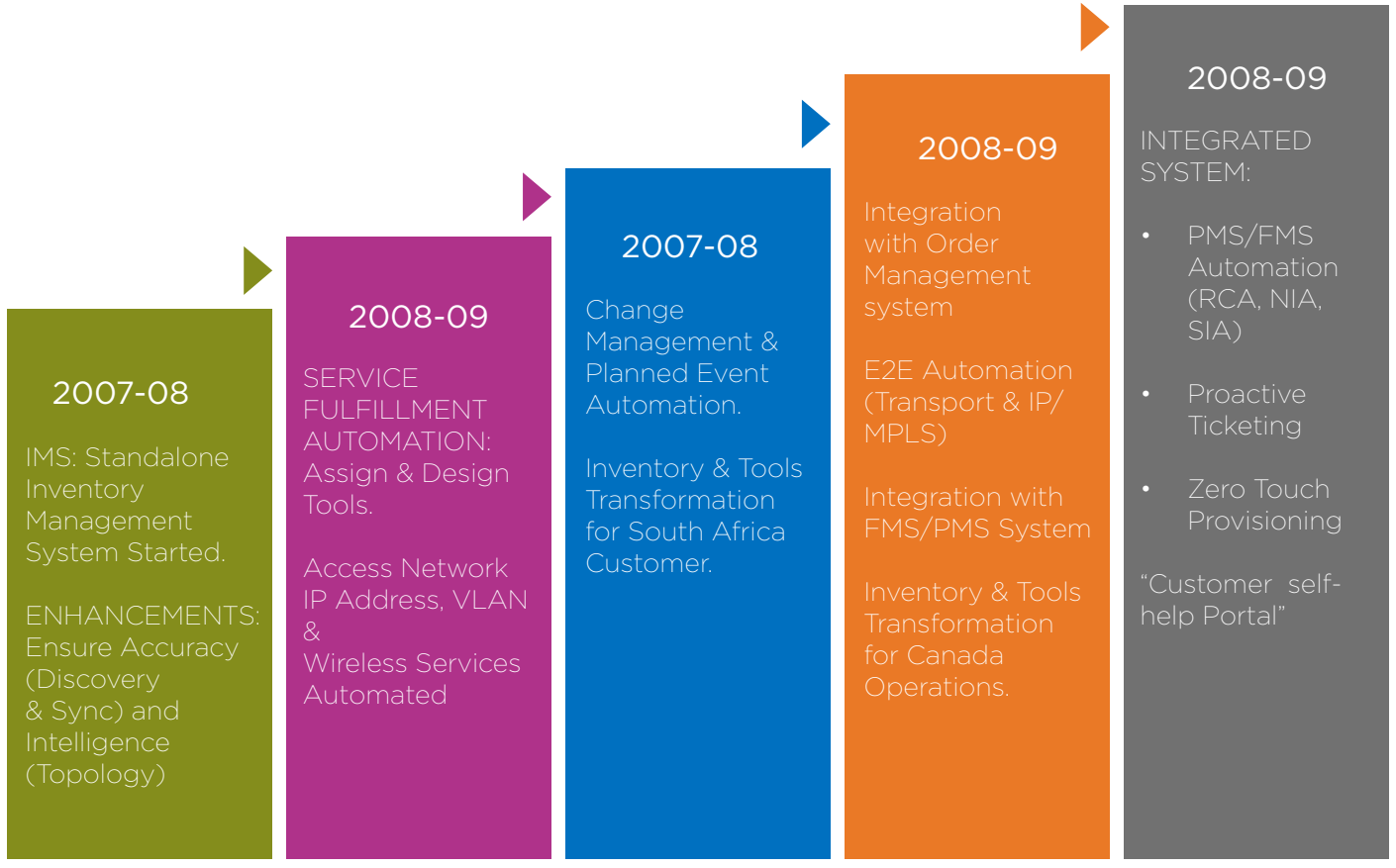# DSP TO DSP : A JOURNEY OF TRANSFORMATION OF A LEADING GLOBAL TELCO
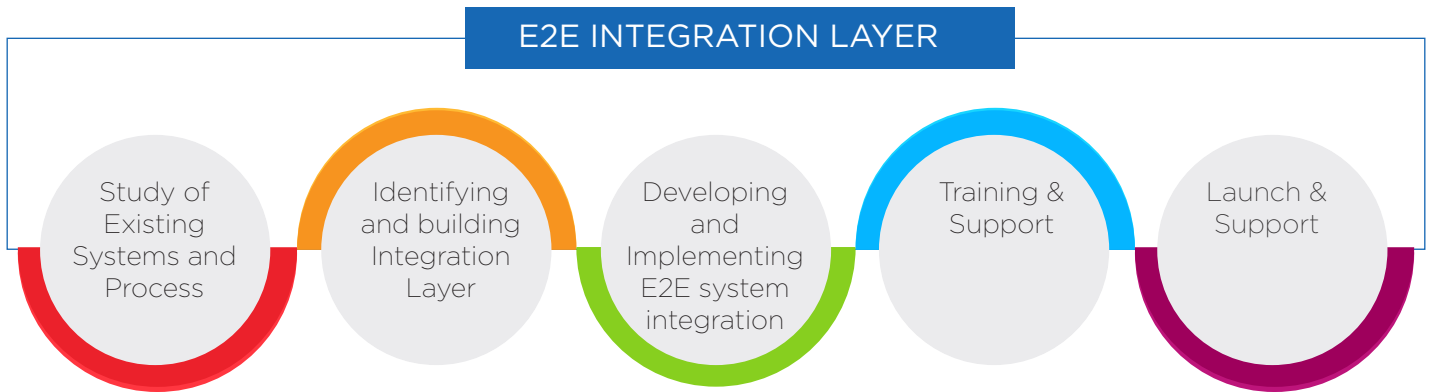
TCTS helped one of the largest global operator operating 1.2 MN International circuits, 85 MN voice transactions per day, 40 terabits of international bandwidth lit capacity and lacs of global network, transition from CSP to DSP. Operator was having manual and de-centralized service operations which required consolidation of all de-centralized Inventory systems. TCTS implemented no human intervention Service Delivery with its offering zero touch provisioning (ZTP) which eventually helped in setting a strong foundation for Service Assurance Tools and Systems.

Standards based Fully Automated Provisioning & Service Assurance

2007-08

IMS: Standalone Inventory Management System Started.

ENHANCEMENTS: Ensure Accuracy (Discovery & Sync) and Intelligence (Topology)

2008-09

SERVICE FULFILLMENT AUTOMATION: Assign & Design Tools.

Access Network IP Address, VLAN & Wireless Services Automated

2007-08

Change Management & Planned Event Automation.

Inventory & Tools Transformation for South Africa Customer.

2008-09

Integration with Order Management system

E2E Automation (Transport & IP/ MPLS)

Integration with FMS/PMS System

Inventory & Tools Transformation for Canada Operations.

2008-09

INTEGRATED SYSTEM:

- PMS/FMS Automation (RCA, NIA, SIA)

- Proactive Ticketing

- Zero Touch Provisioning

"Customer self-help Portal"

TCTS IMPLEMENTED E2E INTEGRATION LAYER ON OSS /BSS SYSTEMS AS AN INITIAL STEP IN DIGITAL TRANSFORMATION JOURNEY

With OSS & BSS systems existed in Silos and with bare minimum integrations TCTS implemented E2E integration layer across systems stacked for lead to cash like CRM, OMS, IMS, Config Engines ,Service Assurance and Billing systems achieving minimum human intervention

E2E INTEGRATION LAYER

Study of Existing Systems and Process	Identifying and building Integration Layer	Developing and Implementing E2E system integration	Training & Support	Launch & Support

BENEFITS DELIVERED

- Process standardisation
- Comprehensive process cycle view
- Higher volumes of orders delivered with improved TAT
- Reduced errors
- Higher data accuracy enabled E2E automation even for change orders like Upgrade, downgrade, shifting, Termination, etc.
- Strong foundation for service assurance because of high data integrity and system integration across inventory, FMS/PMS and TT systems

ZTP BENEFITS REALIZED

Time Saved	Load	Improvement	
Average **28** Min per CLR (Circuit Layout Record) Saved. (Earlier 90 to 120 min for Manual CLR Creation)	**~1200** Orders/Month	**~300%** Increase in Productivity.	New-Order Automation (VPN & Internet Access)
8 Min per CLR (Earlier 30 to 40 min for Manual CLR Deletion)	**~500** Orders/Month	**~400%** Increase in Productivity for Termination and Change Management Orders.	Termination Order Automation (VPN & Internet Access)
40 minutes/CLR (Earlier 90 to 120 min for Manual CLR Creation)	**~3000** Orders/Month	**~120%** Improvement in Productivity.	Transport Layers Automation (VPN, Internet & Transport Services)

TATA COMMUNICATIONS
TRANSFORMATION SERVICES

END TO END DIGITAL TRANSFORMATION

	LEVER	CONCEPT	REALIZED BENEFITS
1	Value Stream Mapping	• Process study to identify value add vs non-value add activity • Identify necessary non-value add activities for automation	• **15-20%** reduction in cost of operations
2	First Time Right (FTR)	• FTR in a value chain process (FTR = 0.95*0.90*0.99*0.85 = 0.72) • Measures orders processed w/o rework • Fall in FTR in individual processes reduces overall FTR	• **7 to 10%** productivity improvement
3	Zero Touch Provisioning (ZTP)	• Auto assign & design & configuration, business rules creation, auto configuration engine for FTR • Integration with Order management system for zero touch inventory design and activation • RPA	• Workforce reduction by **51%** • Order handling increased by **400%**
4	Service Acceptance & Testing (SAT) Automation	• Automated check list validation in service fulfilment tool for end customer service delivery • RPA	• Improvement of one day TAT in customer circuit handover • Workforce reduction by **5%**
5	Program Management (PM) Automation	• Important milestone notifications on customer order to end customer • RPA	• **33%** time saving • Auto customer notifications • **5-10%** Improvement in NPS
6	Demand Pull	• Handoffs optimization in a value chain • Attribute level balancing for process streamlining • Multiskilling – for better flexibility & enabling line balancing • Immediate resolution with RCA to avoid error repetition	• **35%** improvement in Order to Cash cycle time