Innovations and Methods of administration of a Business Transformation Project in UKPN - Challenges and Outcomes

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Global Environment

- Energy is under explosive change
  - Electrification of transportation and heating
  - Renewable energy penetration
  - Pro-sumers
  - 3Ds (Digitalization, Decentralization,Decarbonization)
  - Market changes (new businesses, blockchain etc)
- The above require well designed, reliable, well maintained Distribution Electricity Networks
- As a result, new ways of working need to be adopted by DNO/DSOs worldwide in order to achieve efficiency and customer satisfaction.

Objectives

- This presentation will focus on the innovations, the roadmap undertaken, challenges and methods for the administration of a Business Transformation IT Project undertaken by UKPN

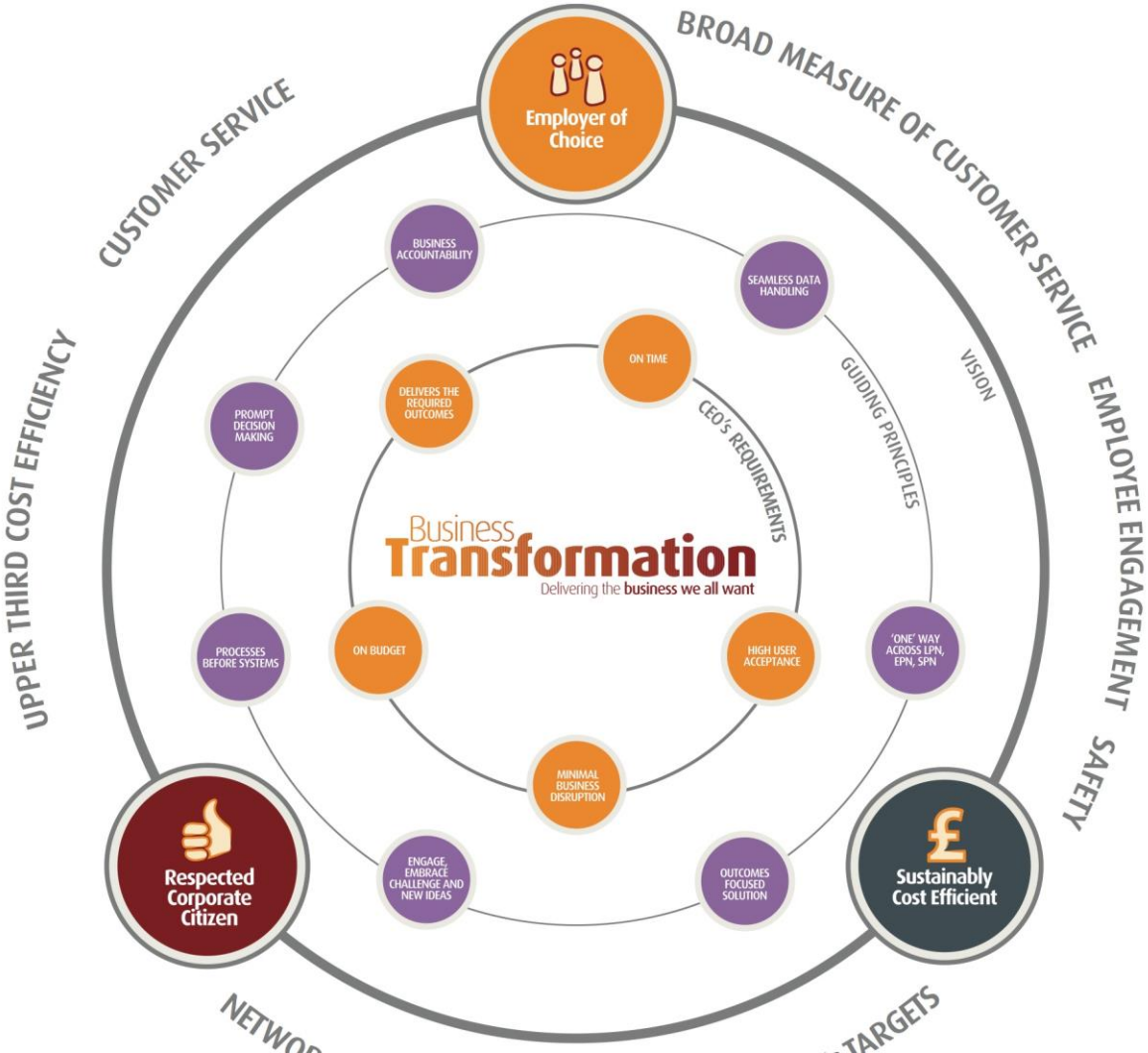
- To describe the approach that was adopted by the programme in order to successfully complete
  - How to produce all design deliverables required to initiate the Build / Realisation phase
  - Build / Realisation phase challenges

- Outcomes – Benefits of the project

BTP Design methodology

Developed by leveraging **best practices** from large transformation programmes executed by major consulting firms (KPMG, Accenture, Enzen)

The BTP enabled the DNO to achieve its TOM (target operating model) by **making changes to processes, people, culture, organisation, data and systems**.


BROAD MEASURE OF CUSTOMER SERVICE
EMPLOYEE ENGAGEMENT
SAFETY
OUT PERFORM CIs AND CMIs TARGETS
NETWORK RELIABILITY
UPPER THIRD COST EFFICIENCY
CUSTOMER SERVICE
Employer of Choice
Sustainably Cost Efficient
Respected Corporate Citizen
VISION
GUIDING PRINCIPLES
CEO's REQUIREMENTS
BUSINESS ACCOUNTABILITY
SEAMLESS DATA HANDLING
'ONE' WAY ACROSS LPN, EPN, SPN
HIGH USER ACCEPTANCE
OUTCOMES FOCUSED SOLUTION
ENGAGE, EMBRACE CHALLENGE AND NEW IDEAS
MINIMAL BUSINESS DISRUPTION
ON BUDGET
PROCESSES BEFORE SYSTEMS
PROMPT DECISION MAKING
DELIVERS THE REQUIRED OUTCOMES
ON TIME
Business Transformation
Delivering the business we all want

Source UKPN

Guiding principles of all phases

1. Consider changes to ways of working (processes) before changes to systems
2. Ensure that the business is accountable for project delivery, not only the implementor
3. Make decisions promptly and then stick to them
4. Engage, share and test the solution (designs, tests, etc) with all employees and stakeholders - embrace challenge and new ideas

Guiding principles of all phases

5. Design a solution that is focused on business outcomes:
   - Pragmatic approach to design considering deliverability, cost, and importance
   - Only set requirements that are needed to deliver the business outcomes
   - Use best practices where it contributes to achieving the business outcomes
   - Keep it simple, keep it standard, avoid bespoke and ensure adherence to standards (not always feasible)
   - Focus on end to end processes even if they have cross organizational boundaries
   - In process areas that are not linked to the business outcomes, performance must be maintained across the business

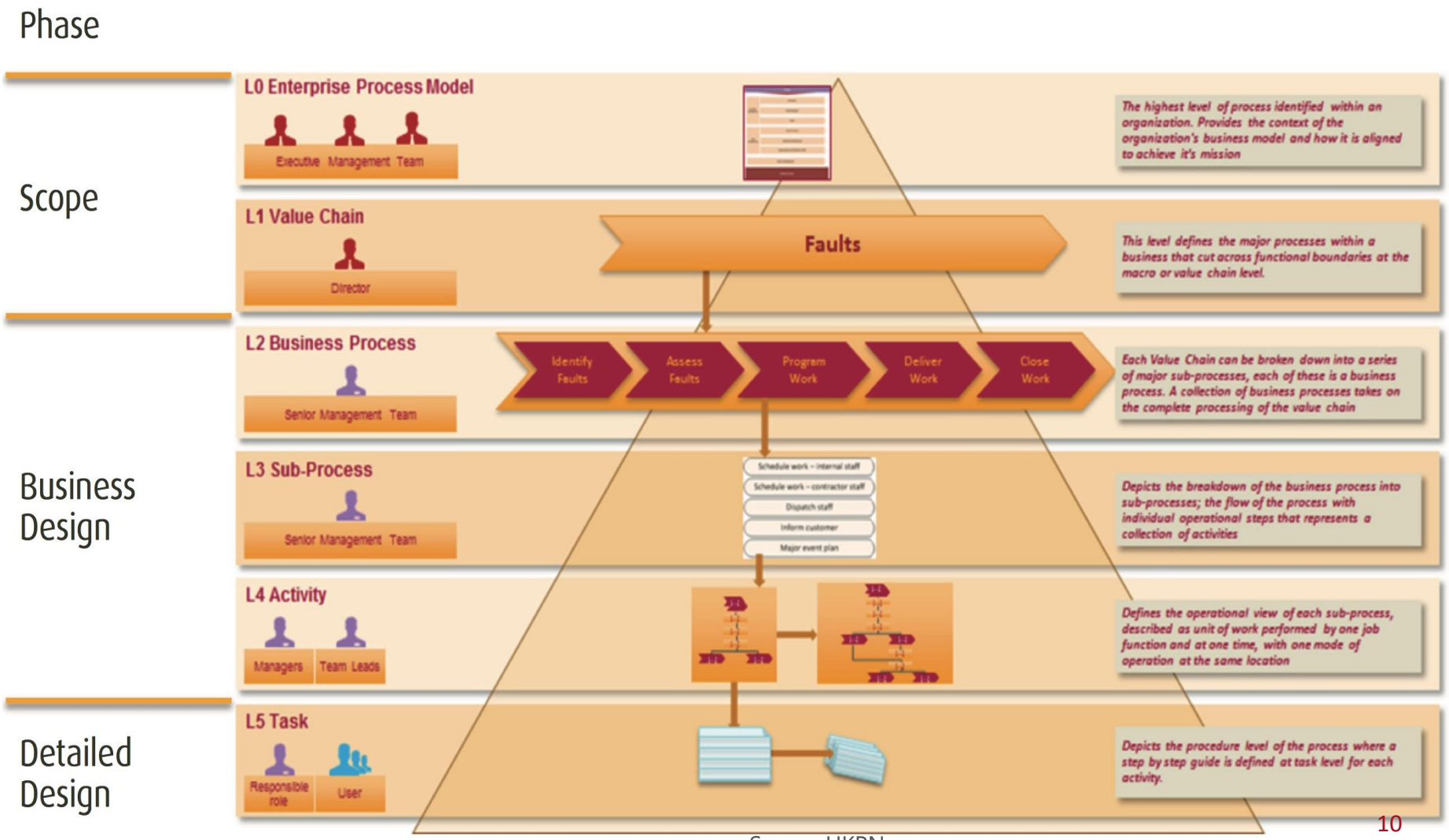
Guiding principles of all phases

6. Adopt the ‘One’ principle across all areas
   - ‘One’ common process and ‘One’ information model
7. Data handling is to be seamless:
   - Data is to be entered into IT systems once only (at source), in the field only when necessary
   - Manage data and information as an asset
   - Operational, financial and regulatory reporting is to be integrated into processes and systems

Leading to

- Delivering the five key requirements :
  - On time
  - On budget
  - Delivers the required outcomes: top third customer performance, 10-20% reduction in unit costs and accurate data
  - Minimal business disruption
  - High user acceptance

The following diagram outlines the process hierarchy that was used in the BTP (Faults).



Source UKPN

Phases -Releases

- Release 1: Back Office
- Release 2: Connections, Customer Service & Contractor Management
- Release 3: Asset Management, Inspection & Maintenance
- Release 4: Capital Delivery & Strategic Sourcing
- Release 5: Faults Management

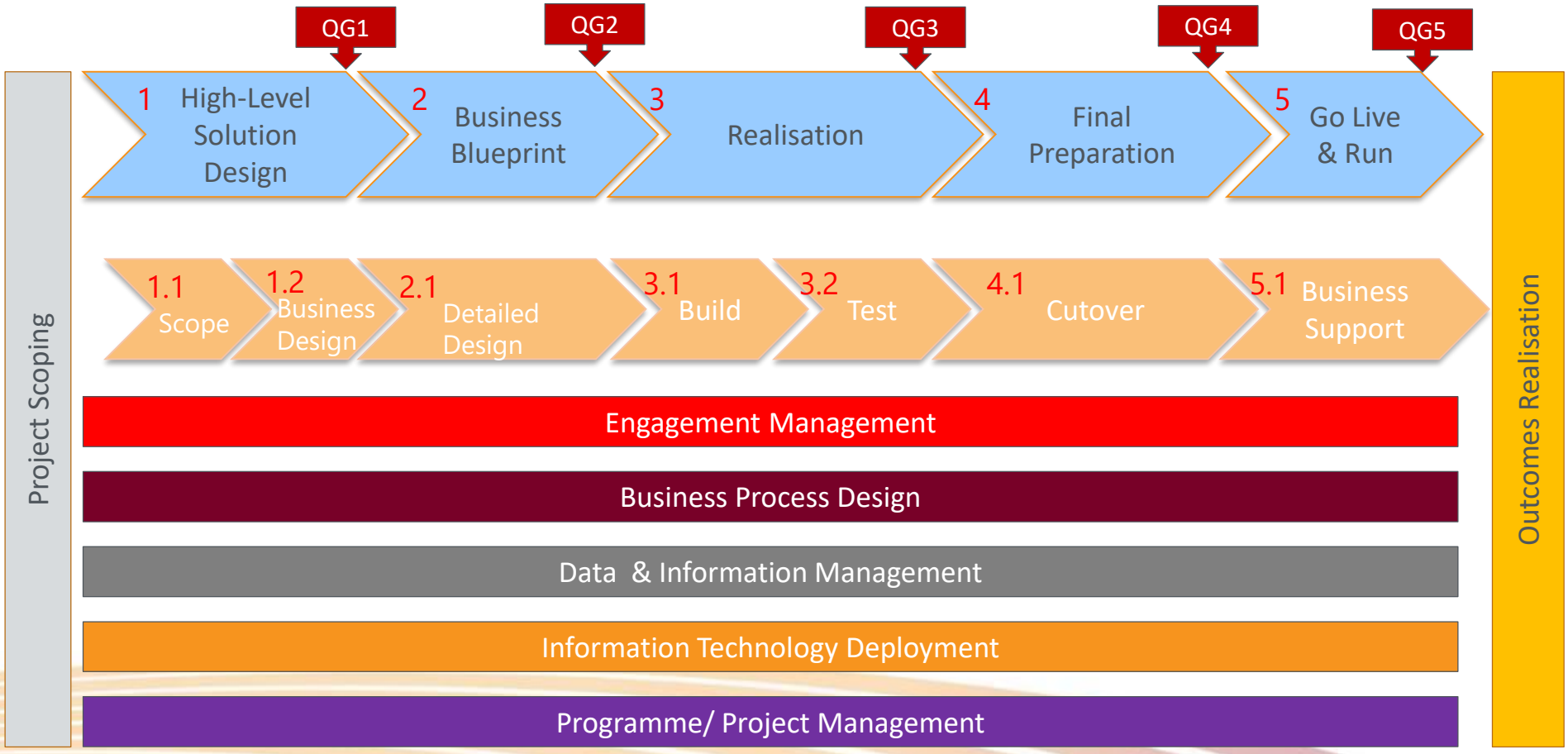
- The project started in 2013 and ended December 2016 with 2017 for small changes

Project Quality Gates

- Objective:
  - To conduct quality checks at critical stages of the project.
- Project Quality Gates are an integral part of Quality Built In approach for any big IT led projects.
- The aim of each Project Quality Gate is:
  - To assure that all key deliverables and actions of the gate have been completed in compliance with recommended practices and to the customer's satisfaction
  - To enable project management to continuously communicate the process and build quality directly into the project
  - To provide a tool to effectively manage project expectations and monitor customer satisfaction

Project Phases, Quality Gates, Workstreams

The following displays the implementation Methodology aligned to the Business Transformation Programme. The Quality Gates are identified at each project phase and the 5 workstreams are listed below the project phases.



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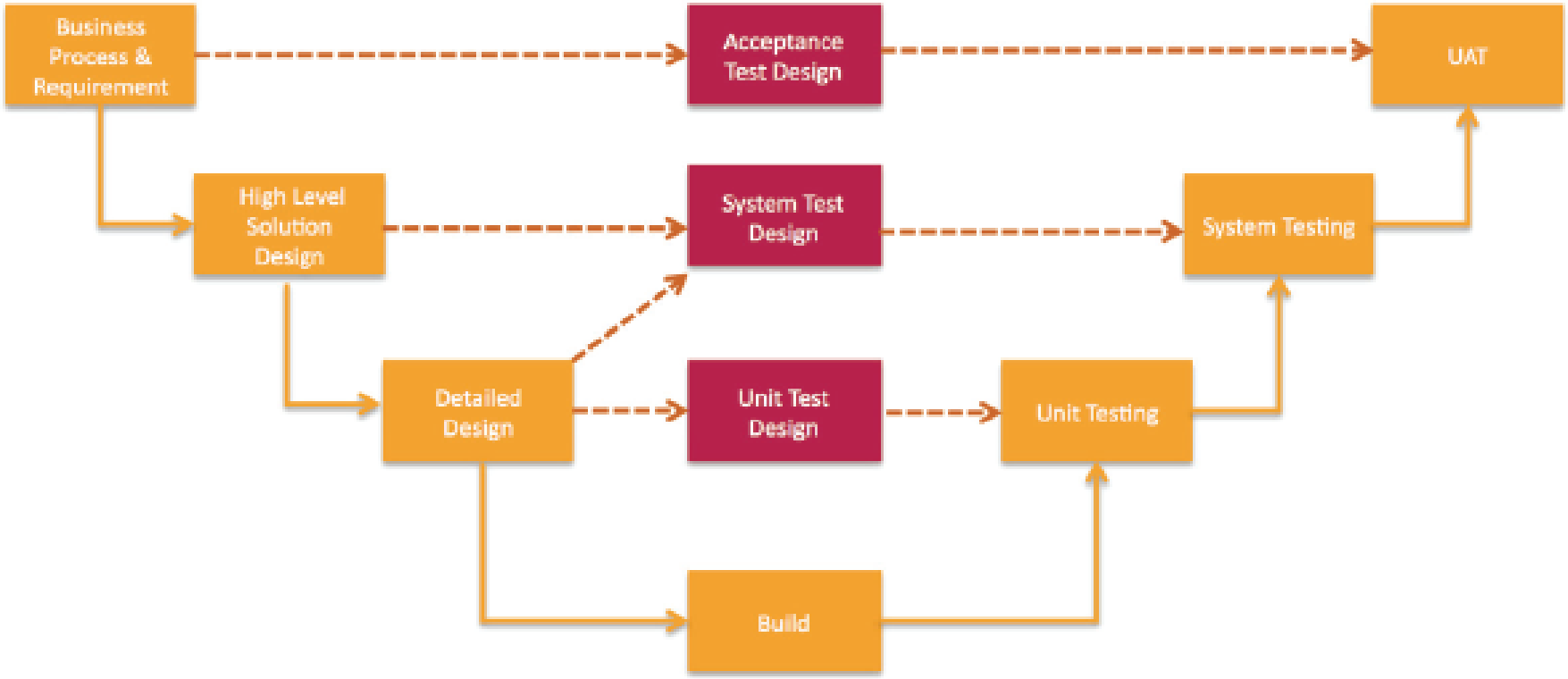
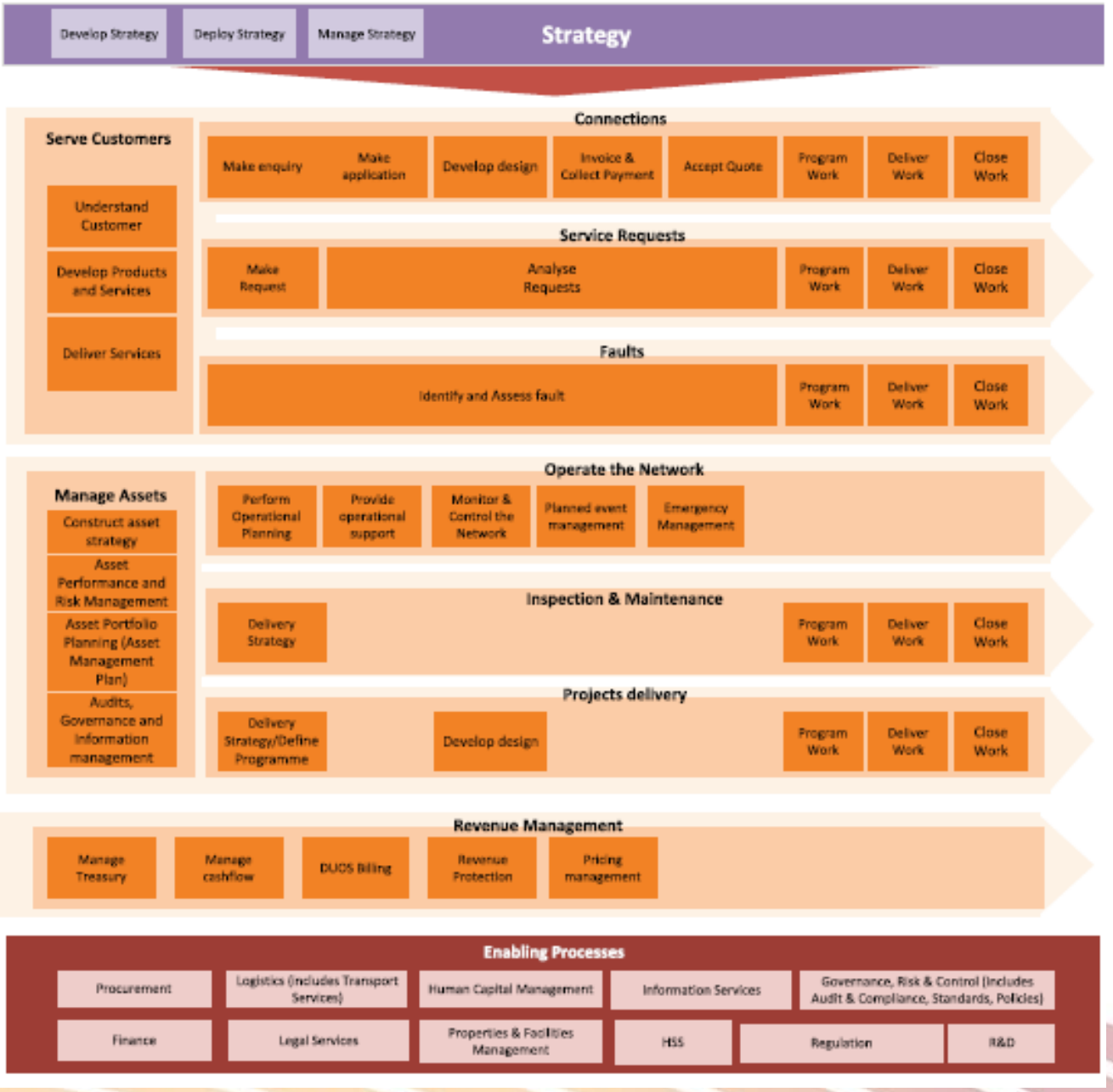

Business Process & Requirement
Acceptance Test Design
UAT
High Level Solution Design
System Test Design
System Testing
Detailed Design
Unit Test Design
Unit Testing
Build

Source UKPN

Enterprise process model



Source UKPN

Project management

- BTP transformation lead
- Release manager
- Deployment manager
- Test manager
- Enterprise system manager
- BAU manager
- Functional leads
- Functional consultants
- etc

Key Challenges of the Program/Solution

- Normal Resistance to change in any new environment
- High number of fixed assets - approx. 6m
- Asset data not always registered in the system or data registered in the system not physically available
- There was a system limitation of only 100000 assets in a single mobile device, had to change/customize the mobile solution a lot for speed and usability improvements
- Initial slow response of the backend system
- Required many changes in the flow of the screens in order to make entry fast resulting in lot of bugs and many rounds of testing
- This led to missed standard functionality that was later wanted but not available (due to limited initial design/ limited initial business requirements)
- Resource issues as new and enhanced functionality needs more data entry in the field and backoffice than previously anticipated

Key Challenges of the Program/Solution

- Various departments – users are dispersed in different places, initiated full mini project for training and knowledge sharing
- Remote work was highly anticipated
- Meetings held with all participants in multiple places, via teleconference 90% of time, no central place for meetings
- Users resistance to move from paperwork to fully digital
- Sometimes, old and new system was proposed to work simultaneously, not accepted by management team in most of the cases
- As it is a big organization, too much bureaucratic procedures are in place that prevent speedy decision making and user responses, Even after BTP, this problem is prevalent
- No boundaries between BAU and new functionality changes

Innovations-line benefits

- High time and economic efficiencies (confidential)
- Streamline the resource allocation process
- Gain full transparency into resources, equipment and available skills
- All field staff to use handheld devices instead of paper and excel based work
- Time capture capability (on route, onsite, assessing etc)
- Electronic Dispatch of the jobs to multiple resources at the same time
- Full visibility of open jobs in the field
- Streamline of logistics, finance and HR operations
- Increase customer satisfaction
- One truth

Thank you