



# Network & technology solutions

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# Our business



## Size and scale

**1.2m**  
Shareholders



**A\$47b**  
market cap



Public  
**ASX20**  
Company



**A\$23b**  
total income  
FY21



**A-/A2**  
investment grade rating  
from S&P and Moody's

**S&P Global**  
**MOODY'S**

**Forbes**

**#453**  
on Forbes' Global 2000

## Customers and people

**19.0m**  
retail  
mobile services



**1.7m**  
wholesale  
mobile services

**3.7m**  
Consumer &  
Small Business  
bundle and  
data services



**195k**  
enterprise  
data &  
connectivity  
services



**~340** retail  
stores in  
Australia



Employee  
engagement  
**80** score

We operate in  
**20+ countries** and  
territories outside of Australia



## Leading in sustainability

Certified as  
**carbon neutral**  
in our operations July 2020



Helped **~2.6m** customers  
to stay connected through  
COVID-19 support  
packages (FY20)



Provided  
**~\$150m of value**  
through our social  
and community  
investment (FY20)



# Ten key trends shape our future technology strategy



## Virtualisation of the RAN



- Effective resource utilisation & cost efficiency
- Technology acceleration for new use cases & capabilities

## Emergence of satellites and networks from the sky



- Improved performance
- Mobile backhaul & resilience
- Economic regional connectivity

## Move to Cloud Cloud to Edge



- Multi-cloud edge continuum
- Workload orchestration
- Smaller blast zones

## Dedicated networks for industry verticals



- 5G Standalone, private / dedicated networks
- Orchestration & end to end slicing
- Committed enterprise SLAs

## Energy efficiency



- Optimise cost efficiency
- Deliver on our environmental commitments

## Native digital customer expectations and experiences



- Transform & amplify our data
- AI/ML smarts for our customers & business processes

## Hybrid work @ home shifting demand and app requirements



- Coverage quality & experience
- Access agnostic applications
- Optimise capacity to meet shifting demand profile

## Ecosystem integration and capability exposure



- Ecosystem partnerships (customer, hyperscaler, 3<sup>rd</sup> party)
- APIs & modularity for internal and external reuse

## Cybersecurity, digital identity and data sovereignty



- Trusted AI/ML cybersecurity
- Federated, localised data & ID management for digital economy

## Automation, data, artificial intelligence & machine learning



- 3Cs of data
- Workflow / process automation
- AI everywhere

# Leading network & technology solutions that deliver future



## The best 5G network for Australia

Largest coverage and best performance across metro, regional, and rural areas

## Technology enabling customer and industry solutions

Dynamic management and automation of capacity, speed, latency, security, and resilience across all network types

## Enhanced resilience for customers

Through smaller impact zones, orchestrated failover for apps and connectivity

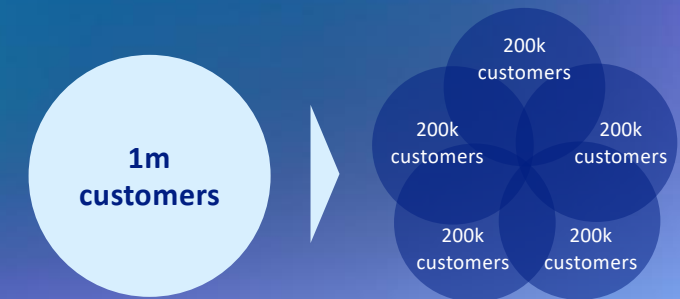


~95% 5G population coverage by FY25

>80% traffic on 5G by FY25

Double metro cell sites

Expand regional coverage by 100,000km<sup>2</sup>



# Leading with the best mobile network in Australia with material differentiation for our customers



## Best 5G Network for Australia

### Largest Network

95% 5G population coverage

### Expand Regional Coverage

We will add 100k km<sup>2</sup> in regional coverage and a further 1m km<sup>2</sup> in NB and M1 IoT coverage added

### Best Capacity, Performance and Customer Experience

Doubling metro sites & deploying new 5G bands. Better in-building coverage  
Fastest real world speeds across combined 4G/5G.  
Consistent coverage and speed

### Accelerate the move to 5G

For new opportunities with 80% of traffic on 5G  
3G closure in FY24 to enhance capacity

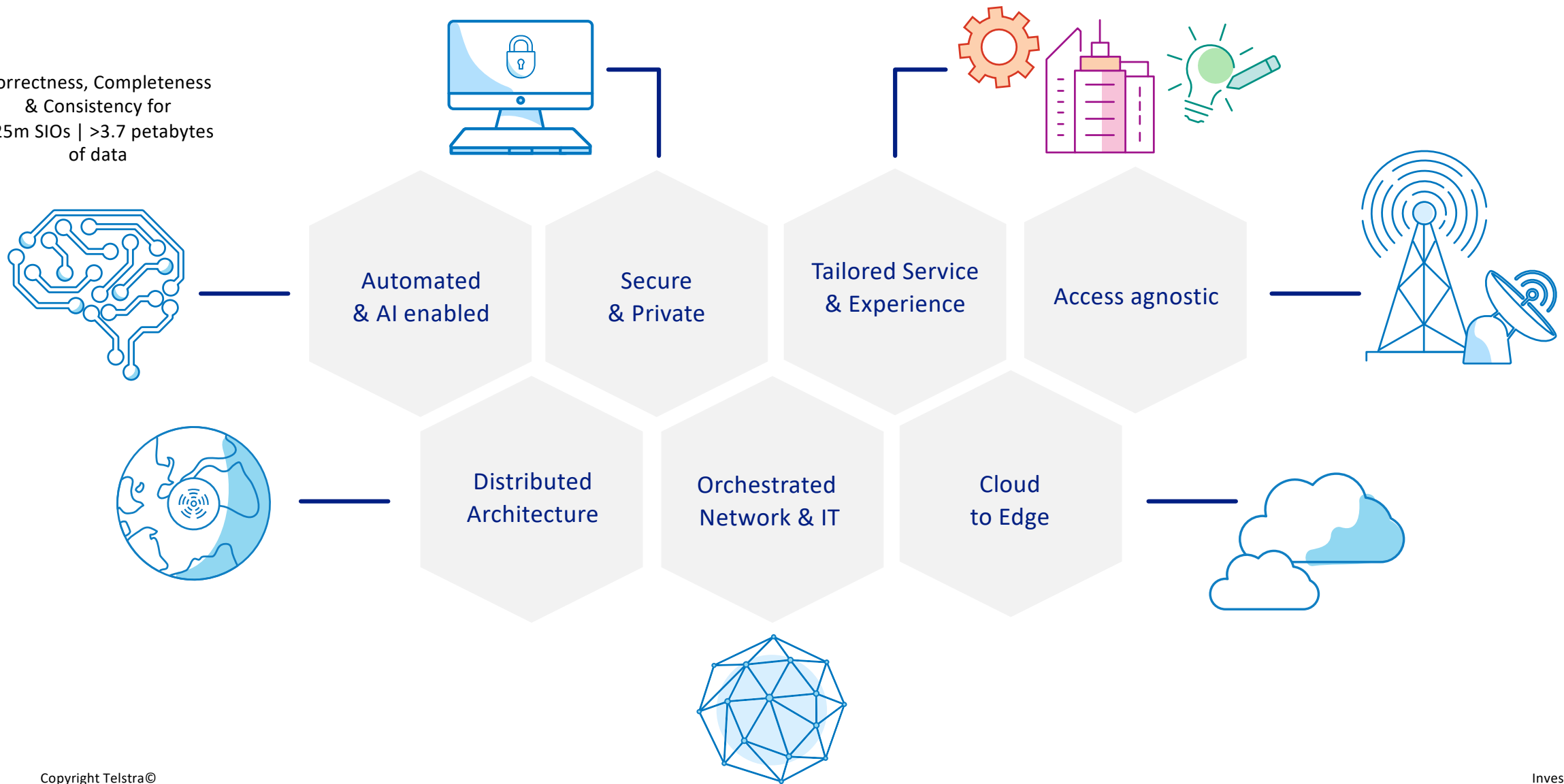
### Enhancing fixed experiences

~2.3m modems supporting 4G backup  
We will introduce 5G backup and fixed wireless access

# Technology Enablers for continued differentiation



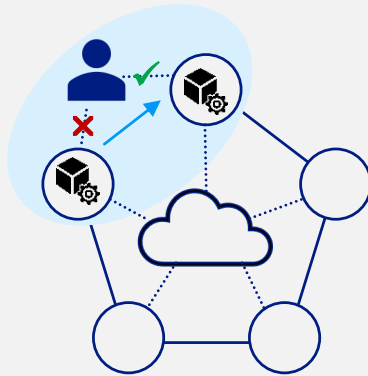
Correctness, Completeness  
& Consistency for  
>25m SIOs | >3.7 petabytes  
of data



# Orchestrated end-to-end resilience



## Enhance resilience & maintain performance



- Orchestrated & automated failover
- Network triggers & reconfiguration
- Maintain data sovereignty
- Edge compute enabled



## Trusted end-to-end resilience & security

Making the complex simple by orchestrating business critical solutions for enterprise and government



Multi-access & multi provider network resilience



Cloud to edge flexibility

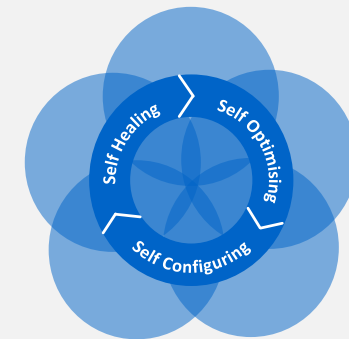


Multi-cloud economics



People powered tech solutions

## Smaller impact zones keeping business connected



- Distributed network resilience
- AI enabled predict & prevent
- Closed loop automation
- Local survivability



# Pain Points w/ Existing Human Centric Operations

## Service/Resource Anomaly Detection and Service Impact Assessment

1

- **Constant event noise for operations teams -**
  - Planned and unplanned events result in alarm storms
  - Untagged alerts results in a lot of wasted effort for causal analysis
- **Cannot identify impacts based on ingested or inferred information without human SME involvement -**
  - Lack of change impact view, i.e., state of service/network before and after change
  - Lacking a cohesive AI/ML centric approach towards availability and quality anomalies detection
  - Cannot predict anomalies across domains based on past trends

## Service/Resource Root Cause Analysis

2

- **Lack of a real time cross-domain topology view of customer services with multiple siloed inventories**
- **Lack of cross domain relationships** which result in —
  - Wasted effort in identifying root cause
  - MTTK (Mean Time To Know) takes too long
  - Downstream/upstream impacts cannot be identified
  - Inability to understand major outages resulting from cross domain dependencies
  - Inability or delays in identifying customer impact from an outage
- **Lack of automated and contextual root cause analysis**
- **Lack of AI/ML approach for probable root cause identification of service or resource failures**

## Service/Resource Remediation & Validation

3

- Lack of AI/ML approach for remediation recommendations
- Mostly manual domain-centric decisioning for remediation. No transition pathway for automated or semi-automated (human approves recommended best action) remediation decisioning.
- Lack of coordinated adoption of automation/runbooks at various levels of maturity across different domains
- No automated checking of remediation actions and feedback loop for improvements
- No proactive measure identification (e.g. anomaly detection) for preventative assurance

## Visualisation & Interconnected Self-Serve Eco-system

4

- Lacking an E2E role based visualisation of entire process (detection, root cause analysis, remediation & validation) such that operations teams have a single pane of glass for most of their functions. Eg network and automation status
- Lacking a user-friendly data science centric, policy driven eco-system where domain and operations SMEs can derive value from metric analysis and observations for various AI-Ops functions
- Lacking an end user self service function to build automations

## Path of adoption by Ops Teams

5

- Lacking a proven adoption methodology of incorporating AI/ML techniques across all Ops functions & teams



# AIOps 2025

Create a cohesive Service Operations eco-system, enabling and supporting Telstra Front Of House, Enterprise & Network Operations Centres and Engineering DevOps Teams to design and monitor all customer service and network assurance activities



Front Of House



Engineering

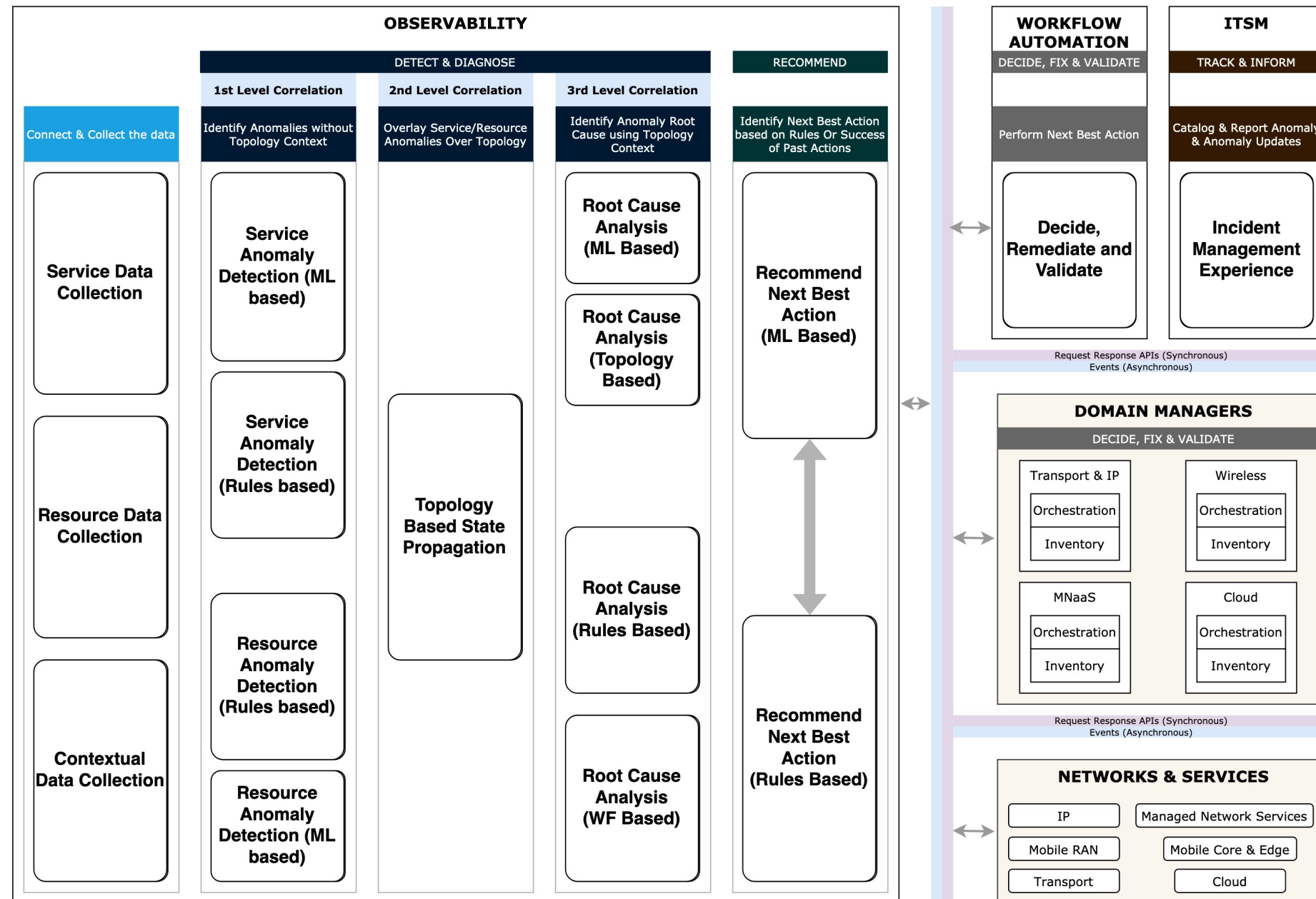


Network Operations Center



Enterprise Operations Center

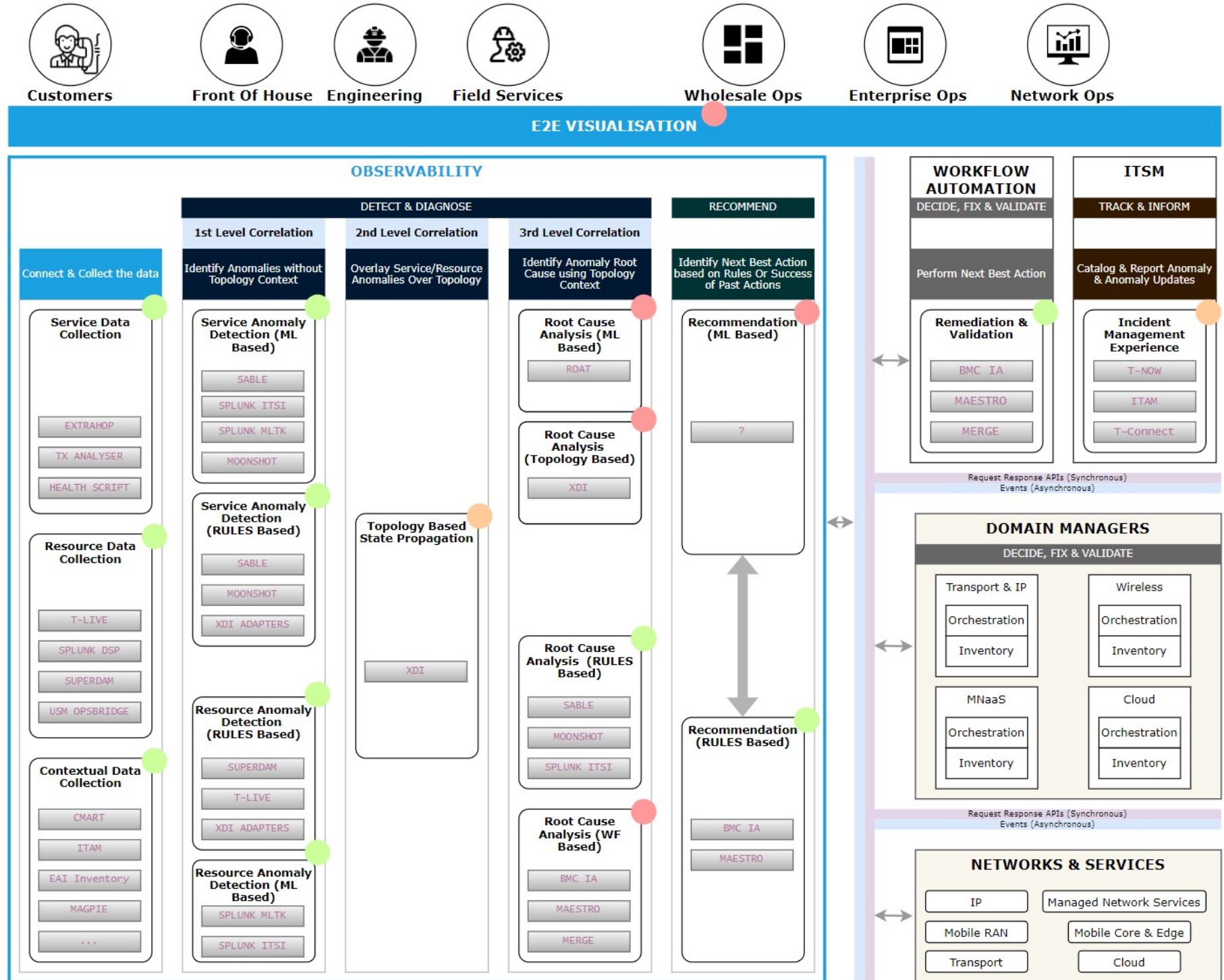
## E2E VISUALISATION



# AIOps Assurance Deep Dive

Maximise existing investments in Observability, and stitch existing Telstra Capabilities and emerging capabilities together to produce an end to end assurance view

- High Functional Maturity
- Medium Functional Maturity
- Low Functional Maturity

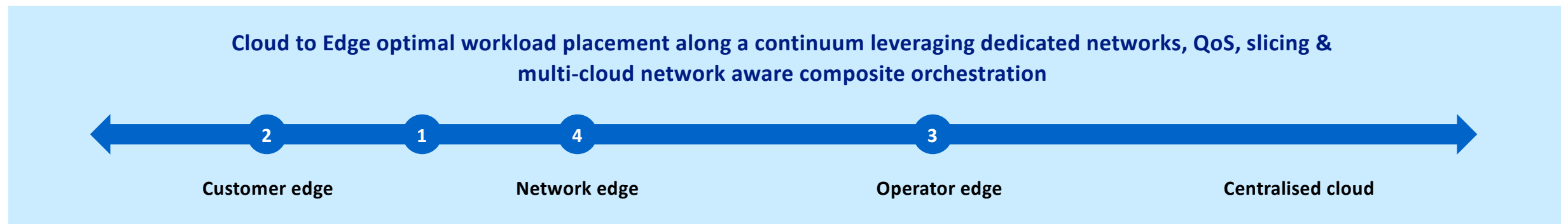
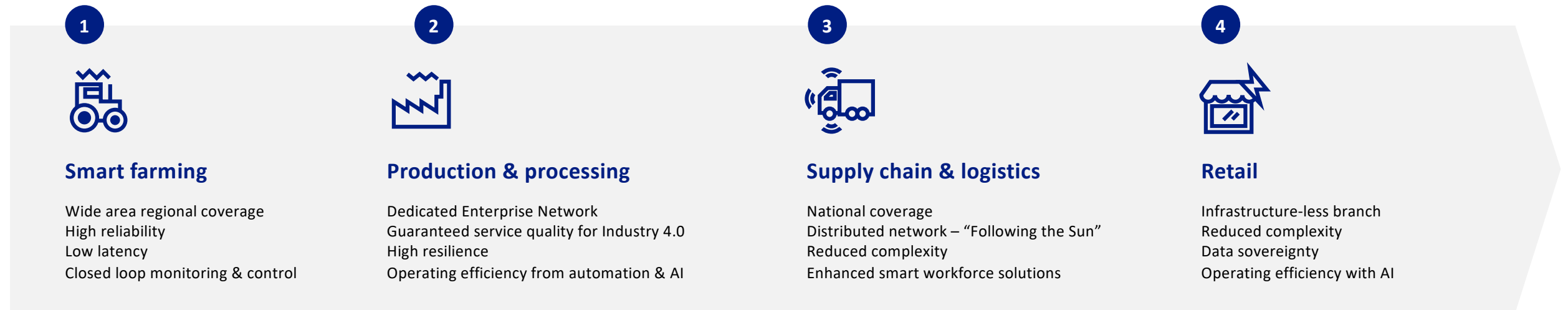


# “Better on Telstra”



Leveraging our leading networks & capabilities to provide tailored services to our customers

With Innovation Hubs in Toowoomba, Gold Coast & Melbourne, we developed a partner ecosystem to support Enterprises with leading technology solutions that address their specific industry requirements



This model accelerates innovation & informs our future service roadmap



Q&A