

# NEUROVERSE

Turning complex industry data into real business outcomes - FAST.



As operating environments grow more complex and fast-paced, organisations in rail and transport, critical infrastructure, and defence and intelligence are managing more data than ever before. But making that data work - across siloed systems, legacy platforms, and real-time operations - can be complex.

That's where XDNA Neuroverse makes the difference.

Developed by XDNA – the digital innovation arm of Downer – Neuroverse is a powerful, end-to-end solution accelerator that transforms complex, disconnected data into clear, actionable insights. With Neuroverse, just 5% of your effort goes into technology and 95% into delivering real outcomes. It's built to connect your systems, streamline your data, and help teams move from insight to impact – fast.

Whether it's optimising maintenance, forecasting asset lifespan, or managing operational and environmental risks, Neuroverse delivers measurable value in weeks, not years. Backed by Downer's deep experience in the field, Neuroverse empowers both decision-makers and frontline teams to work smarter and achieve better outcomes.

### > XDNA Neuroverse

### > Built for Industry

XDNA Neuroverse helps you make sense of complex infrastructure data so you can act with confidence and precision. Designed for organisations managing critical infrastructure - including rail and transport, government services, defence and intelligence - Neuroverse turns complexity into clarity.

While the first tranche of business value is delivered through capturing, consolidating and visualising data; a step change comes from analysing, predicting, and providing insights to those that can use it to drive optimised actions. Neuroverse brings together siloed systems, real-time information, and advanced analytics to support faster decisions, improve performance, and reduce risk across your operations, unlocking value iteratively as use cases expand and more complex opportunities are tackled.

With XDNA Neuroverse, you're backed by Downer's engineering expertise and a team that understands the pressures and demands of operating critical infrastructure - because we've been there.

Proven



Tested and trusted in live industry environments

**Integrated** 



Built to embed within your organisational DNA

Fast



Designed to deliver measurable value fast





#### > A Solution Accelerator

XDNA Neuroverse integrates seamlessly with your existing investments in operational technology, enterprise and bespoke systems to deliver fit-for-purpose data solutions. No lengthy build times. Built to enhance, not replace your current infrastructure. Value from day one.

Whether you're forecasting asset lifespan, correlating environmental impact with infrastructure strain, or giving your operations team a unified view of the network, Neuroverse provides the building blocks to make it happen efficiently and at scale.

Neuroverse is built on proven use cases in real operational environments. A preconfigured logic system feeds live data into the platform, allowing teams to process information quickly and solve issues faster. It streamlines analysis, accelerates decision-making, and ensures critical insights are delivered where and when they're needed most.

As your needs change, Neuroverse keeps pace. With a scalable architecture and modular components, it is underpinned by industry leading partnerships, designed to grow with you, adapting to new data sources, business priorities, and operational goals without skipping a beat.

#### **Key Capabilities**

- Connects to your data, wherever it lives, from IoT sensors to enterprise systems.
- > Easily managed in the cloud and deployable at the edge so you get insights where you need them most.
- In-built machine learning and AI lifecycle support.
- Advanced visualisation and business-ready dashboards via Neuroverse Cortex.

- Scalable, cloud-based architecture that supports everything from small pilots to national rollouts.
- Seamless integration with the systems you already use.
- Secure cloud platform designed to serve multiple users or teams
   without compromising privacy or control.

#### A smarter way to power your data journey

XDNA Neuroverse is built and supported by people who Neuroverse gives you a fast, flexible foundation to unlock value from your data – without the long build times or high costs of starting from scratch.

At its core is the **Data Value Platform** – a secure, pre-configured environment that connects to your existing systems, manages your data flow, and sets the groundwork for smarter decision-making.







#### From there, you can tailor the solution to your needs:

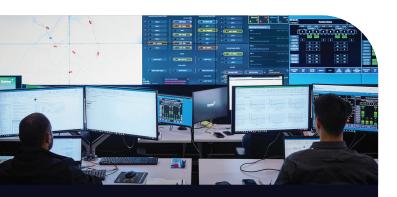
- Industrial AI as-a-Service gives you access to advanced analytics, automated insights, and contextual intelligence, supported by XDNA's expert data team.
- Data-Driven Solutions are tailored to your organisation's goals – from improving performance and reducing risk to forecasting asset lifespan or environmental impacts.

With Neuroverse, you can start quickly, scale easily, and stay focused on outcomes. It's a flexible solution that adapts to your priorities and grows as your needs evolve. XDNA can help you at every step from platform provision to delivered and managed data-driven solutions.

### > Secure by Design

XDNA Neuroverse is designed to keep your data safe, whether you're working in the cloud, on site, or in secure environments.

- Hosted in Australia, with data kept onshore to meet local requirements
- Your data is kept separate from other customers for added privacy
- Access is role-based, with secure logins, multi-factor authentication (MFA), and support for single sign-on
- (SSO) using corporate accounts – for both internal users and external customers or stakeholders
- All activity is tracked so you can meet audit and compliance needs
- > Trusted in remote and high-security settings across industry



### > How We Work

No transformational timeframes - just practical steps that get results fast.

- 1. Identify the business challenge
- 2. Plug into your existing systems
- 3. Rapid deployment of XDNA Neuroverse
- 4. Visualise, test, and iterate
- **5.** Scale solutions and optimise performance

## > Neuroverse Cortex: Your Command Centre

Core to driving speed to value from your data is Neuroverse Cortex - a powerful, configurable interface designed to support everyone from strategic decisionmakers to operational teams in the field.

Cortex brings together your data, workflows and real-time system feeds in one place, making it easier to see what's happening, act faster, and stay aligned across the entire organisation.

Neuroverse Cortex is the entry point for value creation - transforming complex data into clear operational visibility. But visualisation is just the beginning. By layering in Al-powered analysis and real-time IoT data, Neuroverse enables smarter forecasting, predictive action, and automation across key workflows.

Neuroverse Cortex brings the data to life with intuitive, powerful features designed for industry teams



### Drag-and-drop dashboard customisation

Easily tailor insights and views to suit different roles and responsibilities - no coding required.



Real-time insights with drill-down capabilities – from boardroom to workforce

Access live data and explore detailed layers with just a few clicks for faster, more informed decisions.



### User management across multiple environments

Control access and permissions for different teams, sites, or business units - all from a central interface.



### Integration of spatial data (GIS), weather, 3D models, and external sources

Visualise location data, overlay environmental inputs, and bring external datasets together for a unified operational view.



#### NeuroAl

NeuroAl is a powerful platform for building, evaluating, and deploying machine learning models that tackle real-world challenges such as anomaly detection, procurement optimisation, and extending asset life.

For business users, NeuroAI Analyst is your full-time data expert - able to uncover insights using natural language, just like you'd ask a team member - presented clearly through text, tables and visuals.

#### > Real Solutions in Action

Neuroverse is built for the real world – shaped by Downer's deep industry experience and proven in the field. From transport to utilities, mining to healthcare, these examples show how we turn complex data into measurable outcomes, fast.



### Operator consistency in remote mineral processing

At a remote mineral sands processing plant in Africa, inconsistent operator performance was affecting output quality and efficiency. To address this, XDNA Neuroverse was deployed to improve operator consistency by using machine learning to predict optimal settings for sensitive plant components, based on changing environmental conditions.

Given the site's limited satellite connectivity, the Neuroverse Edge solution was installed on-site to ensure low-latency, high-reliability performance for operators. At the same time, data and insights were synchronised with the cloud, giving supervisors and global executives real-time visibility into plant operations.



### Predictive maintenance in transport

A rail customer needed to improve fleet reliability and address critical issues, including early signs of thermal runaway in train batteries and unexpected HVAC failures. With XDNA Neuroverse, they gained the ability to predict subsystem failures in components like HVAC and auxiliary power.

By analysing real-time telemetry alongside historical data, the platform identified HVAC issues up to seven days in advance and detected overheating batteries early, allowing timely maintenance before incidents occurred. This proactive approach helped mitigate risk, improve safety, and optimise fleet performance.



### Data-driven efficiency in hospital logistics

A national commercial laundry uses Neuroverse to visualise movement and usage of garments and linens fitted with RFID tags across a number of hospitals, generating valuable insights into usage patterns, movement flow, and performance efficiency.

The data insights uncovered gaps in the supply chain, improving inventory accuracy and saving thousands in lost linen annually.

### > Why Choose XDNA Neuroverse?

At its core XDNA Neuroverse delivers real results – fast. Built by industry experts, it combines deep domain knowledge with scalable, secure technology to solve complex challenges without disrupting your operations.

#### We live in your industry

- Designed by people who've worked on real-world systems
- > Built by professionals with direct experience in rail, defence, and critical infrastructure

#### **Outcomes in weeks, not years**

- Solutions start from day one no long wait times
- Leverages trusted, industry-grade acceleration tools to fast-track delivery
- > Delivers measurable results in months

#### Flexible, scalable, secure

- Hosted in Australia with strict data and access controls
- > Scales to fit any operation, big or small
- Integrates smoothly with your existing IT systems

#### **Subscription-based simplicity**

- > Monthly subscription with annual commitment
- > Predictable costs and full control over features
- > Scales easily as your needs grow



#### **Talk to XDNA today**

Ready to move from platforms to real solutions? Let's start with the business challenge that matters most and solve it together.

