Computing Technology Product Awards – Best IoT Product

**Name of Company Entering: Mindtree**

**Should you win, who will be collecting the award?** Deepak Parmeshwaran, CBO, Mindtree NxT

**If you were to win the award, how would you like to receive your trophy?\* select one:**

* At a virtual awards ceremony – Virtual- Deepak Parmeshwaran, CBO, Mindtree NXT

**Product name: Asset Insights Platform**

**Provide a summary of your innovation and why it should be considered the Best IoT Product (max 250 words): 247 words**

The Mindtree NxT Asset Insights Platform (AIP) is an IoT management platform designed with industry application in mind and drawing on NxT’s extensive pedigree in manufacturing, mining, engineering & construction, energy & utilities and the logistics industries. Its industry focus allows each platform deployment to be tailored to the customer’s specific vertical – as opposed to a generic horizontal platform – with supplementary, proprietary IoT solutions layered on top.

A completely cloud based platform (unlike industry rivals) AIP is cloud agnostic, able to be installed simply on any cloud environment as well as the Mindtree NxT proprietary hosted environment. Its full suite of capabilities take advantage of a host of technologies spanning IoT connectivity, cloud & edge computing, big data and computer vision analytics (when combined with AR/VR nodes), RPA, NLPs and applied AI/ML. This mix enables the AIP to provide proprietary correlation logic features, providing customers with powerful insights that drive better decision making, efficiencies, improved customer experiences and reduced operational costs. The AIP also enables new flexible usage models thanks to its technology mix. Customers are able to pay on a per-use basis (as a service), converting regular CAPEX to OPEX, helping save up to millions of dollars. The AIP can even calculate real productivity levels per unit/machine in real time.

These differentiators have made the Mindtree NxT AIP one of the world’s most widely used IoT management platforms, handling over 45TB per day, connecting over 10,000 industrial plants and 15 million material tags / end nodes.

**What the product does and why it is innovative (in depth):**

Exploring the platform in further depth, it has the following capabilities that set it apart from its industry peers:

* High interference / low network area connectivity capabilities
* Drone connectivity and geospatial technology management for 3D scanning/quantity estimations/spatial analysis/geofencing
* XR/VR/AR device management for training/assistance/safety
* Built in AI, ML, NLP capabilities for computer vision analytics/big data analytics/asset utilisation and productivity analysis along with respective data visualisation capabilities
* Material tracking (for applications like mining)/remote stockyards or warehouse management
* Connected worker systems for availability/safety/compliance/training (especially in hazardous zones)
* Standard RFID/QR tagging and management
* Automation / RPA

The platform’s breadth of capabilities combined with the Mindtree NxT history working in IIoT means that customers are supplied with highly tailored solutions that map directly to their business need. It is this technical acumen and vertically applied approach to IoT that sets the Mindtree NxT AIP head and shoulders above the competition.

**Provide measurable success:**

Mindtree NxT benchmarks its customer’s success across four pillars: Operating efficiencies, employee engagement, business models, and customer experience. The following KPIs are based on our existing/past customer’s success rates:

**Operating efficiencies:**

* 15-20% reduction in equipment leasing costs
* 30-35% improvement in capacity utilization across batching plants
* 10-15% improvement in construction equipment productivity **–** (use case: concrete value chain)

**Employee engagement:**

* 25-35% improvement in worker availability in sites
* 30-40% reduction in near misses & critical incidents
* 40-60% improvement in training effectiveness

**Business Models:**

* Product “Servitization” is leading to new & innovative pricing models
* Outcome based: Moving away from traditional equipment leasing models (ignition on/off; mileage) to outcomes delivered
* Usage based: Moving away from “Full Development” fee to “Pay-per-Use” models

**Customer Experience:**

* 40-50% improvement in project reporting transparency and reduction of disputes
* 30-40% reduction in project delays
* 50-60% improvement in synchronization between field requirements & factory production

**Examples of how customers are using it:**

A well-known manufacturer of gas meters for the Oil & Gas industry used the Mindtree NxT AIP to achieve the following:

* Reduced 120 manual forms and checklists to 70 and digitized them
* Collection of live machine data to auto-populate fields in the digital forms
* Digital quality control dashboards built for actionable insights by management
* Achieved granular traceability of over 50 unique components
* Provided supplier quality analysis

This resulted in the following business outcomes:

* Improved “FTR” rate\* for gas meters, pinpointing the stage of quality issues
* Lowered re-work costs
* Improved work efficiency and productivity
* Simple ranking of suppliers based on quality allowing for operational and financial reshuffling as necessary

*\* FTR stands for First time right and it originates from six sigma. Most mature companies have a higher FTR which ensures that the amount of rework required reduces substantially. If we can pin-point the quality issue at an earlier stage, the time for rework and wastage reduces vis a vis when we do it at a later stage when the finished product is almost ready.*

Additionally, a manufacturer of steel frames for power transmission towers leveraged the AIP to achieve the following:

* Retrofitting sensors, gateways, HMIs, and smart meters to convert legacy factory machinery to smart and bringing them into the network
* Wireless data acquisition from 60+ machines
* More than 50 variables from each machine
* Real time data transfer
* Empowering operator with HMI for local decision support for machinery alarms, alerts, productivity

Which in turn resulting in the following business outcomes:

* 10-15% improvement (imp.) in OEE
* 8-10% reduction in energy consumption
* 10-12% reduction in WIP material wastage

**Degree to which product support is carried out in the UK:**

Advance level of support through Mindtree centres in UK. We have a full-fledged office in London and 1 office in Ireland from which we can support our customers regarding deployment, service delivery and any other support. Apart from this, we have more than 10 other centres/offices in European region which can help our customers in case the need arises.