

# **AI Platform for Decision-Making**



Democratise AI And Empower Every Person and Organisation

As Industrial IoT, sensors and Cloud transforms business, data-driven decisions become more and more challenging due to the volume of data.

Circa 90% of all data generated will never be used and is simply NOISE – IBM.



90% of all data generated will never be used and is simply just noise - IBM

### Challenges Faced By Industries

Today's AI Algorithms work on a fixed set of parameters to define a fixed set of answers. They are defined as 'Artificial Narrow Intelligence' (ANI) or Narrow/Weak AI, capable of performing one task well.

#### Industries Need A Solution

As Industries embrace the future of digital transformation, masses of data is generated, creating the need for an AI Multi decision-making platform – 'Artificial Complex Intelligence' or ACI.

### **ConOPTIUM<sup>™</sup>** Is The Solution

Conigital's AI Decision Platform, ConOPTIUM<sup>™</sup>, provides companies and industries with unlimited data optimisation capability in near real-time. ConOPTIUM<sup>™</sup> is an ACI, making multiple complex decisions at scale.

# **ConOPTIUM™**

## Our AI Multi Decision-Making Platform

Takes in all types of data to give you optimized decisions at scale in real-time.

Provide transparent solutions to give you full control and clarity for real-time business insight.



### **Total Transparency**

ConOPTIUM<sup>™</sup> will give you real-time business insight that is transparent. Meaning you always have control.

### **Real-Time Solutions**

ConOPTIUM<sup>™</sup> works in real-time, calculating billions of combinations, giving you optimised decisions at scale.

### Microsoft Integration Benefits

ConOPTIUM<sup>™</sup> is cloud based and fully compatible with Microsoft packages.

# Conigital

## ConOPTIUM<sup>™</sup> + Microsoft Azure

ConOPTIUM<sup>™</sup> combined with Microsoft Azure, the Cloud computing platform, makes for a perfect partnership, bringing you a powerful cloud based AI decisionmaking platform. Azure supports varied operating systems, tools, databases, programming languages, and, devices – the perfect solution for any business or industry.



#### Total Control + Management

Combining ConOPTIUM<sup>™</sup> and Microsoft Azure will benefit your organization to deploy and manage our AI decision-making platform easily, allowing you full control.

#### Agility + Scalability

ConOPTIUM<sup>™</sup> and Azure are fast in terms of deployment, operation, and scalability. This will give you a competitive advantage, with the most up to date cloud technology.

### Storage + Speed

ConOPTIUM<sup>™</sup> excels with Azure, having several data centers and delivery points, facilitating faster content delivery and optimal user experience in real-time.

# **ConOPTIUM™** Case Study One

## Offshore Windfarm - Link %

One of the worlds UK's largest producer of low-carbon electricity and supplier of electricity in the UK wanted to invest in wind farms.



#### Problem Statement

They wanted to know what site they should invest in, the cost of building and operating the Wind farm and optimal layout of turbines.

### Solution

An 8 objective optimisation algorithm taking into consideration many operational constraints, at 17 sites, optimal layouts and a economic sensitivity analysis.

#### Wind Farm Cost per MegaWatt



### Output

A detailed report comprising of a breakdown of all the given sites and the associated costs of developing an optimally laid WF. The Costs of the deployments ranged from £1.6 BN to £1.8 BN across the 17 sites analysed.

# **ConOPTIUM™** Case Study Two

## Airport - Link %

One of the world's largest airports wanted to optimise fuel and travel time costs between the itself and a West Europe Airport.

#### **Problem Statement**

Heathrow airport wanted to optimise fuel and travel time costs between Heathrow airport and Schiphol airport.

#### Solution

Using a multi objective optimisation algorithm to take into consideration many operational constraints to reduce fuel and travel times costs.



#### Aircraft Optimisation Efficiencies



### Output

The algorithm found the optimal routes between Heathrow to Schiphol, creating cost savings off.

a. Case 1:

i. Minimise fuel consumption when climbing: 12% from base line { (1250 -1100) / 1250 = 12%}

ii. Minimise travel time when climbing:16% from base line { (860 - 720) / 860 =16%}

b. Case 2:

iii. Minimise endurance: 2% {(47.05 - 45.92) /47.05}
iv. Minimise endurance: 2% {(47.05 - 45.92) /47.05}
v. Minimise NOx: 4.3% {(49.38 - 47.22) / 49.38}

# Live ConOPTIUM<sup>™</sup> Projects

## **Autonomous Vehicles**

We currently have a number of live (£multimillion) Driverless Vehicle projects in cities all over the world, powered by our L4/L5 "lift and shift" autonomous vehicle platform ConICAV<sup>™</sup>.

ConOPTIUM<sup>™</sup> empowers real-time decision-making, path planning and object classification.



#### **Driverless Problem**

A number of Smart Cities, Airports and other high traffic destinations are integrating driverless vehicles as part of their transport strategy.

#### **Driverless Solution**

The ConOPTIUM<sup>™</sup> platform was the perfect solution to overcome complex, real-time decision-making scenarios for our driverless vehicle platform and in-house AI concierge.

## Project 'Ute'

We are tasked with supplying an Australian client transport agency with driverless utility vehicles and Kangaroo detection and avoidance system. <u>Website Link</u>.

# How ConOPTIUM™ Can Help You

Decision-Making Across Multiple Industries

Call for more information: +44 (0) 843 289 0874 Email us for information: <u>info@conigital.com</u> Visit us online: <u>www.Conigital.com</u>



