clarity from complexity

effectively managing inter-dependent systems
leader in developing solutions for Inter-dependent Systems Management (ISM)

enterprise-class software platform application provider

operating from UK (London & Bristol) and USA (Seattle & Washington DC)

strategically building international presence, channels and expansive-markets

grown from over a decade supporting native-market aerospace and defence sectors

platform evolving from 12-years of in-the-field research & development

highly skilled and experienced management team

backed by IPGroup and Parkwalk Capital
ability to model, manage and functionally analyse ‘massive’ inter-dependent networks

already handling massive data-network scales of 1M+ inter-dependent data rich objects/nodes

unique embedded functional programming capability [user configurable]

unique suite of built-in analysis toolsets: simulation | scheduling | optimisation | monte carlo | DSM | etc.

unique ability to store and visualise complex process/project/chain knowledge ‘multi-dimensionally’

BOXARR’s core fundamental logic is vastly stronger than alternative tools

ability to handle ‘real-world’ cyclic and non-hierarchical dependencies

proven performance: already empowering some of the world’s largest organisations
core values are pervasive throughout our platform

- easy for personnel to adopt and utilise
- manage massive-scale complexity, and collaborative inter-dependencies
- enhance value of existing investments
- organic functional models – not just static drawings

simple and intuitive

open architecture

collaborative scalability

fully analytical
As the world becomes increasingly complex, your reliance on inter-dependency increases exponentially. This complexity is acknowledged by factors such as:

- Emerging markets & opportunities
- Unprecedented financial complexity
- Trillions of lines of embedded code
- Global environmental pressures
- Internet of Everything (IoE)
- Massively distributed supply-chains
- Increasing technical capability
- Global legislative pressures
- Internationalisation / Global village
complexity generates spiralling problems of inter-dependency

- small changes can result in significant consequences
- ‘diversity of possibility’ becomes standard
- unexpected events become less ‘unlikely’
- simply summing the product of sub-systems is no longer viable
the major pitfall to the ‘silo’ approach is

‘inter-dependency’
try representing the following process on a piece of paper

(Imagine each letter is either a part or a process)

“A” and “B” form “C”

“D” and “E” form “F”

“C” and “F” together form “G”
thought experiment | an example process

maybe you thought relationally...

... and you’d be right
or, maybe you thought functionally...

\[ C = (A + B) \quad F = (D + E) \]
\[ G = (C + F) \]

... and you'd be right
...so why should you combine relational + formulaic ways of seeing the same problem?

\[ C = (A + B) \]
\[ F = (D + E) \]
\[ G = (C + F) \]
draw a box

name the box
(each has a unique ID)

associate the box with data – e.g.
- process
- work-centre
- part code
- cost
- lead time
- resource
- location (longitude/latitude)
- owner
- etc.

this data can be:
- manual-entry
- I/O from existing data systems
connect boxes with arrows to define process/critical path

associate the arrow with data – e.g.  
- process  
- work-centre  
- cost  
- logistics  
- lead time  
- resource  
- owner  
- etc.

this data can be:  
- manual-entry  
- I/O from existing data systems
boxes and arrows can then be built up to effectively visualise individual operational processes across the naval organisation
assign collections of boxes into logical groups

associate the group with data – e.g.
- holistic process
- work-centre silo
- combined cost
- associated logistics
- total lead time
- collective resources
- owner(s)
- etc.

this data can be:
- summed values of box data
- manual-entry
- I/O from existing data systems

name the group (each has a unique ID)
now you can begin to effectively ‘visualise’ the hidden inter-dependencies between individual operations, processes, work-centres, programmes, logistics, support tasks, maintenance, etc.
BOXARR gives you the power to create a pan-organisational model of the Royal Navy
granular-truth | visualised-interdependencies | data dynamic & organic
the Airbus A380

- made from circa 4 million individual parts
- with 2.5 million individual part numbers
- and 310 miles (530km) of electrical wiring loom
- with immensely complicated software
- all produced by over 1,500 different suppliers
- across 30 different countries
- all designed and assembled by thousands of engineers
- and individually customised for 13+ airline operators
- and assembled concurrently over multiple sites in UK, France, Germany and Spain

... and all needing to come together

in exactly the right order, in exactly the right place, at exactly the right time
BOXARR is the only solution specifically aiming to solve the complexity of ISM (on a ‘massive’ scale)
how much knowledge-value in your organisation is currently stagnating in network drives, written on Post It notes, scribbled on the back of napkins, or locked away in people’s heads?

intelligence has no value if it’s inaccessible…, un-shared…, forgotten

remember to save this somewhere
BOXARR enables your knowledge to be aggregated, visualised, analysed and combined with computational functions to deliver true insight and operational value.
BOXARR delivers empowerment
capable toolsets to convert complexity into fully managed inter-dependencies
BOXARR delivers insight
to derive maximum intelligence through visualisations and reporting
BOXARR combines intuitive expression using “BOXes and ARRows” with collaborative modelling, complex formulaic calculation, visualisation & analysis, real-world scalability, delivering value, insight, power, clarity.
who’s already using BOXARR to transform their organisation

[sample customer list]
BOXARR is modelling root cause analysis of engine failures

BOXARR is saving hundreds of man-hours

BOXARR is protecting the company from supply-chain disaster disruption

BOXARR is ensuring safer, and more efficient engines
BOXARR is solving the enormous ‘rate of production’ challenge

BOXARR is helping $1.3T of aircraft orders to be delivered OTOB

BOXARR has become Boeing’s preferred tool for queuing networks

BOXARR is solving systems engineering challenges and supply-chain

BOXARR identified & saved ≈900 man-hours/month in one process alone

“BOXARR will be as significant to Boeing as composites”
BOXARR is modelling the entire ship development process

BOXARR is solving the problems of ‘grey-beard’ brain drain

BOXARR is reducing re-works and overspending

BOXARR is helping avoid massive unplanned cost from project overruns

BOXARR is in future-planning for supply-chain and logistics

"we see Boxarr becoming more valuable to us than spreadsheets"
BOXARR is the official supply-chain mapping tool for Airbus

BOXARR is a milestone-13 production level application (trusted resources)

BOXARR is critical for: resilience, rate ramp-up, advocacy & cost reduction

BOXARR is saving thousands in expensive supplier manager man-hours

BOXARR is helping to avoid huge losses by avoiding supply-chain disruption

“This innovative tool brings strong benefits to secure our supply chain”
BOXARR Insight | example locational inter-dependencies
BOXARR empowers facts-based decision making – which accounts for complexity/inter-dependency
real-time status | analytics | “what-if” change simulation | war-gaming | programme management
BOXARR helps your enterprise organisation clearly demonstrate to existing and potential customers its ability to:

- identify and analyse hidden complexities and inter-dependencies
- effectively manage its processes and procedures
- effectively manage its supply-chain and scheduling
- optimise the planning and delivery of a project/work-program
- identify, mitigate and minimise potential risks
- work in model-structured partnership with 3rd-parties
- effectively and efficiently manage change scenarios
- maximise efficiency, and minimise the potential for over-runs and over-spends
- share knowledge and collaborate with your customers and partners intuitively, visually and analytically