

Setting your organisation up for AI success

Effectively scaling your AI initiatives with a multidisciplinary approach

Erwin Bisschops – Entelect Data Practice Lead



My Timeline

Husband and father of 2 daughters, passionate guitarist and composer, avid gardener, and humble athlete; born in The Netherlands but fell in love with the African continent.

1991–1997

My secondary and tertiary study years

Management Information Systems, Strategy and Organisation Science

1997–1998

Cap Gemini

IT Consultant

1998–2004

Synergetics

Senior BI Consultant; lots of international BI experience – speaking at conferences and publishing articles.

2004–2010

Harvey Jones

Emigrated to South Africa; Principal BI Consultant, Consultant Manager, Global BI Lead and Director.

2010–2022

Altron Karabina

Data & Analytics Consulting Services Lead – managing project delivery and a team of data consultants.

2022– Present

Entelect

Data Practice Lead – guide a large team of data professionals with their career journeys and facilitate excellent delivery on our projects.

Entelect Overview

Entelect offers **end-to-end technology services** and enterprise grade solutions through a set of best-practice, **flexible engagement models** that are tailored to suit our customer's needs.

Our teams are personally invested in the outcomes and engineer solutions that deliver real returns.

Custom
Software

Experience
Design

Strategy
& Advisory

Data
& AI

Cloud
Migration

Digital
Transformation

A Global Presence

Our footprint spans 6 countries and consists of **1500 people**, with the majority based in South Africa.

Our Experience

- Telecoms
- Retail
- Energy
- Banking
- Mining
- Insurance
- Wealth & Asset Management

Our Capabilities

Entelect is recognised as a magnet for outstanding technology talent. Our developers have experience in enterprise grade technologies, including **full stack engineering, web, mobile, backend and data.**



Software Developer

Business Analyst

Experience Designer

Quality Assurance Engineer

Salesforce Engineer

Solutions Architect

Data Solutions Engineer

Project & Agile Manager

AVIS®

AngloAmerican

bol.com

Bupa

Canva

Coca-Cola

Deloitte.

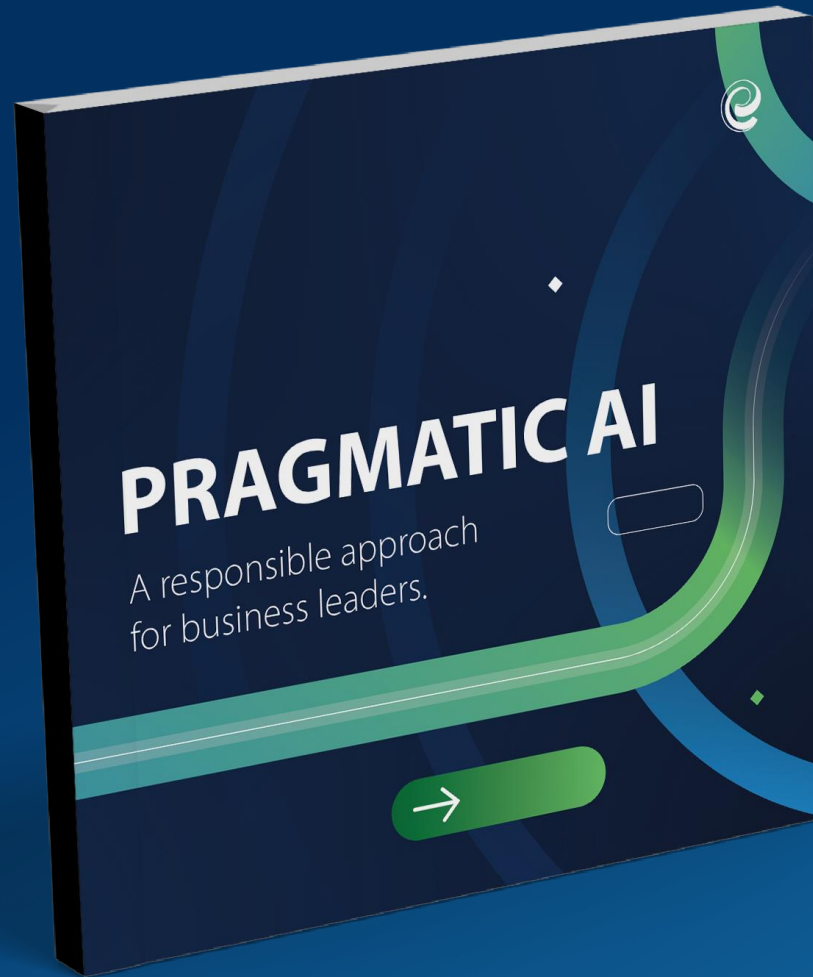
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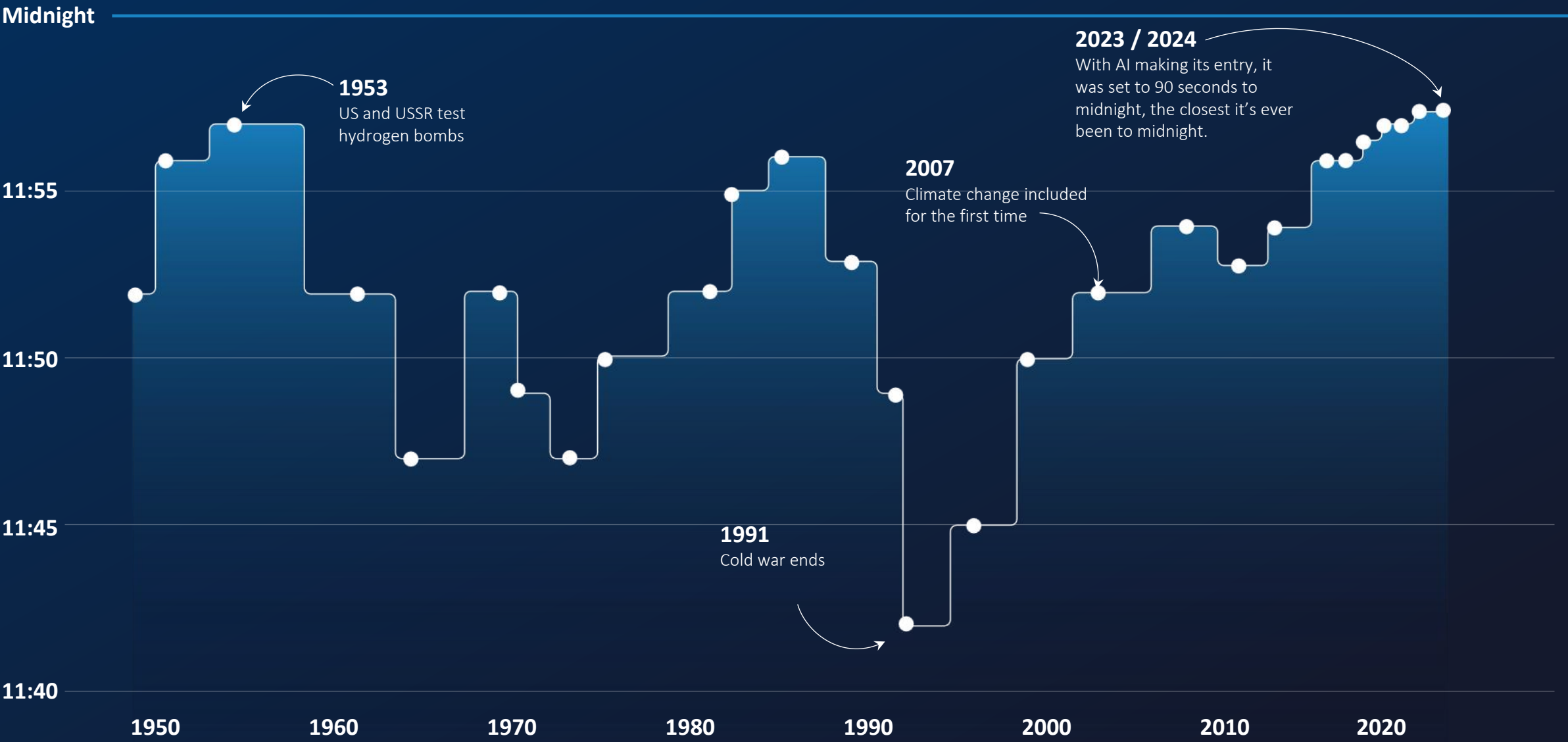
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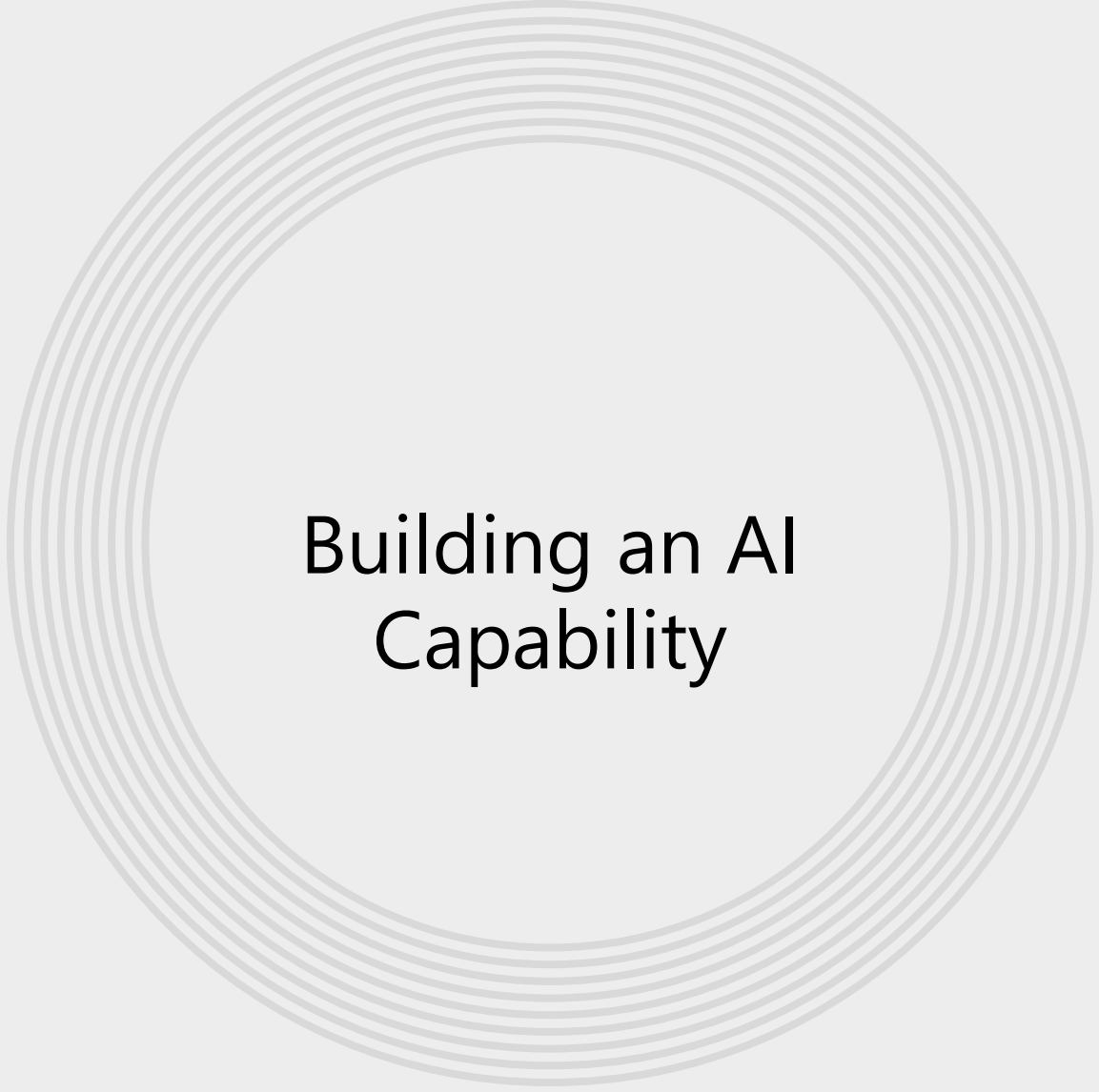


A **responsible AI** project does not just consider its social impact, but its business impact as well.



Doomsday Clock 1947- 2024

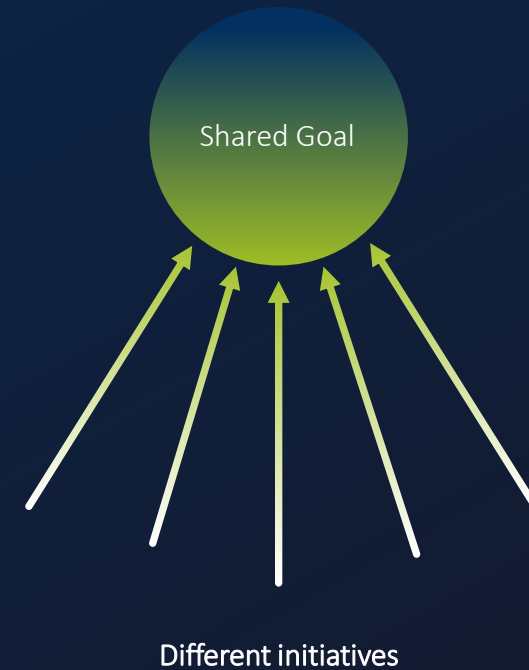
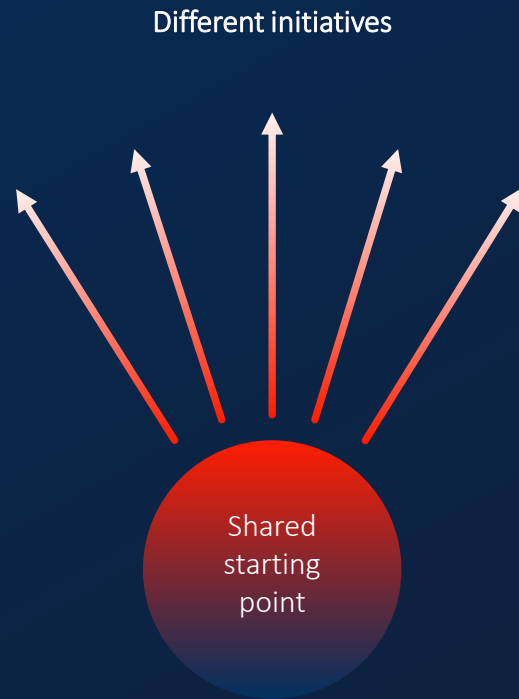




Building an AI Capability

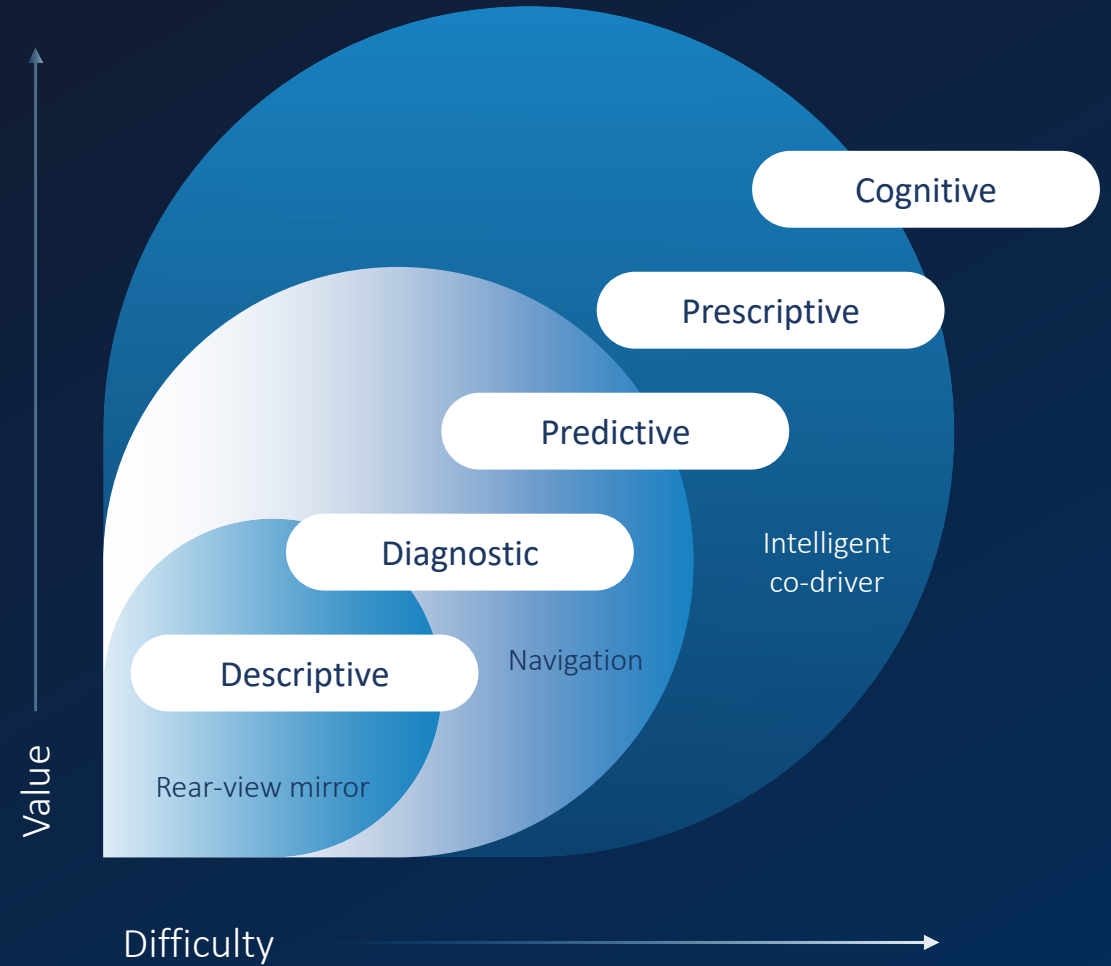


The importance of a shared goal



Walk before you can run

Analytics maturity model



AI Organisational Lessons Learnt

Make AI a strategy centrepiece

Requires CEO-level support.

A centrally led organisation is the key to scaling

Robust (and reusable) cloud infrastructure is crucial.

Don't implement dozens of pilots

Narrow the scope and focus on implementing 1 or 2 solutions for impact.

Treat data as a corporate asset

Data can be an enabler or a blocker.

AI is a people play

Focus on change management & end-user adoption at all times.



Operating models

Centralised
Model

Decentralised
Model

Hybrid
(federated) Model

Hub-and-spoke
Model

Embedded
Model

Centre of
Excellence (CoE)
Model



Crafting your AI CoE





Uncovering a meaningful AI Use Case



Uncovering a meaningful AI use case

Characteristics of a good use case

- ✓ Low friction around training the solutions
- ✓ A clearly understood business impact
- ✓ A clear and immediate audience
- ✓ Good quality data
- ✓ Well-defined success criteria
- ✓ Easy to implement

Characteristics of a bad use case

- ✗ Low value problems
- ✗ An unclear understanding of the tool
- ✗ Poor source data
- ✗ Expensive solutions with low confidence in the results
- ✗ Difficult to integrate into existing systems
- ✗ Unmeasurable outcomes

- Cost of mistake is low
- Cost of human involvement far exceeds the value of the choice

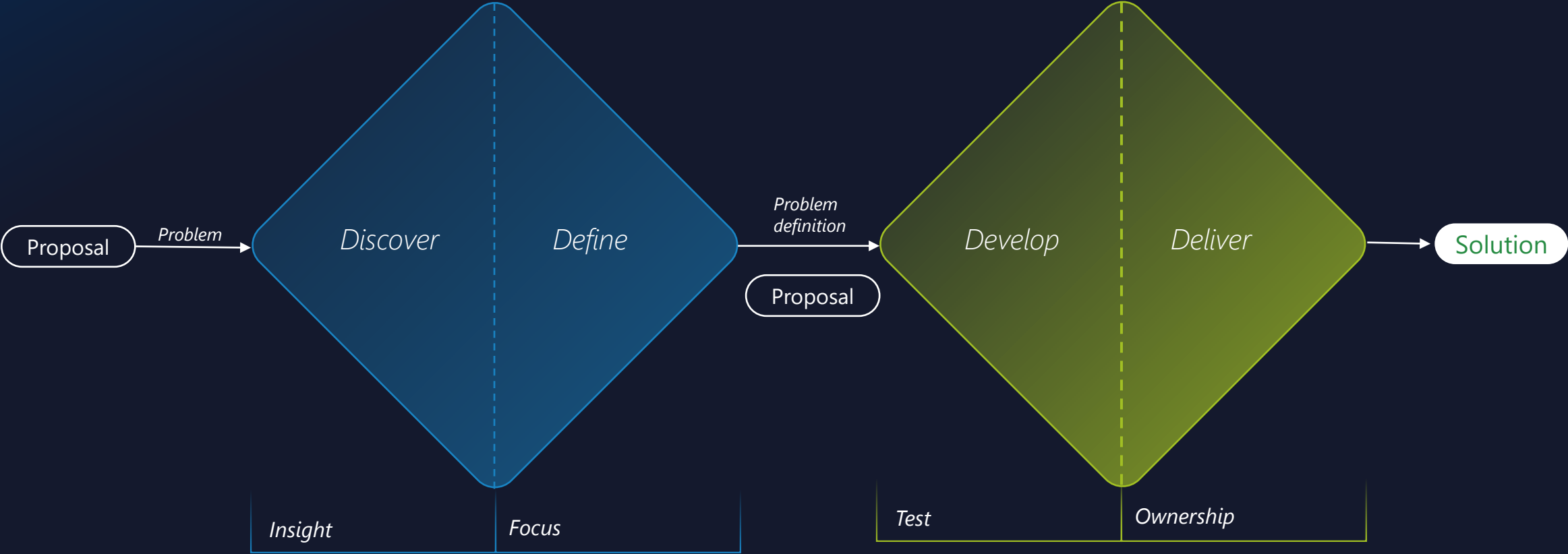
- Cost of a mistake is high
- The value of the choice far exceeds the cost of human involvement



How to deliver AI initiatives – the double diamond

Proof of Principle – “The Why”

Proof of Concept – “The How and What”



The benefits of this approach



- Trade-off Between recall and precision
- Importance of curated ground truth for experimentation
- User expectations for source transparency and navigation
- Challenges of dynamic knowledge bases
- Model selection and use case suitability
- Guarding technique for output validation



- Specifically instruct the model to watch out for near misses. Eg. "H8Speech@gmail.com"
- Reduce randomness/temperature to zero so that responses are deterministic
- We did a matrix analysis on what technology would be the best option to use the given criteria on the models.
 - Models: GPT-OpenAI, Llama – Meta, Gemma-Google, Gemini-Google.
 - Criteria: performance, customization and fine-tuning, scalability, cost and licensing, documentation and support, ethical considerations, integrations and APIs, and security and privacy.

Let's Connect!



Erwin Bisschops

Data & Analytics Leader | Team-Builder | Business Enabler



Adrian Maritz

Offering over 1500 contract Software Engineers (Java, Javascript, .NET) and teams for enterprise...





entelect.co.za