



Service Description- ISG Engineering & Digital Solutions

G-CLOUD 15. LOT 3: CLOUD SUPPORT

ISG's Engineering & Digital Solutions help enterprises navigate the journey to digital transformation, guiding them through the haze of emerging technology and designing execution strategies to achieve business goals. Our Digital Advisory Services offer market insights, evaluate IT and digital strategies, design future target operating models, and structure and negotiate the partnerships with new vendors to deliver digital and technology services.

Digital Solutions

Digital Strategy

Digital Strategy helps organisations define their digital journey for data driven insights and analytics, use of automation, leverage of hybrid cloud, and other emerging technologies required for digital transformation.

Assessments address the need to understand current state and opportunities for enabling technologies while the strategy itself helps understand options and select best options for the environment in line with the business and operational goals.

Digital Experience and Enterprise Agility

Moving an enterprise to the agile, digital and DevOps way of working involves every aspect of the ISG Services Lifecycle – from analytics, to strategy, to operating model design and organisational change – through the transformation of ways of working and ways of sourcing. This practice uses many of ISG’s existing practice approaches however also draws on our immediate learnings in delivery in the global marketplace

Engineering Solutions supports clients who are doing both hardware and software engineering onshore, nearshore and offshore. Services include strategy, operations review, maturity assessment, and transactions and transitions, as well as supporting clients and providers to build deeper and more trusting relationships to drive joint innovation programs.

ISG’s expertise in creating global engineering centers is a key to our engineering services capability, supported by digital expertise in DevOps, Agile, Internet of Things, and the strong research we have to support these areas.

Digital Operating Model Design and Implementation – design and create a future target operating model and negotiate partnerships with new vendors. All components of a client’s operating model should be addressed for optimal delivery capability, and changes to a new operating model will follow a transformational journey, and we will support the client through their journey.



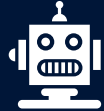
Digital Strategy

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ISG's Strategy Framework: the foundation to develop your Digital Strategy


Analytics


Trends


Digitalisation


Industry


Competition


Regulation

Business Demand
Business & Customers'
Objectives & Needs

**Customer
Value**

Technology Supply
Innovation, Differentiation
and Commodity

Strategy Components:

1

Business / Technology Alignment

2

Capabilities & Delivery Landscape

3

Operating Model

Technology,
Portfolios &
Architecture

Delivery Models
& Value Streams

Organisation,
Roles & People

Partner
Ecosystem

Culture &
Enablement

Governance &
Performance

Strategy Approach:

Vision & Objectives

Strategy Development & Evaluate
Scenarios

Strategy & Roadmap

Digital Strategy Development

Strategy

Phase 1



Align & Analyse

ISG will interview your leadership to understand the current landscape, business needs and objectives, constraints and current transformation plans. We will use current data sources (financial, volumes, labour, performance) to build a fact-based assessment of the operation, environments and associated costs to build a set of market comparisons for digital spend and overall ratios to guide your future strategy and complete a financial base case.

We will use this information and our unique business alignment methodology to engage key stakeholders in the validation of the collective vision and objectives for the future state of the technology operations through a Collaboration and Alignment Session (CAS) focused specifically on these Positive Outcomes.

Phase 2



Develop & Evaluate Strategy

A future digital strategy will be created collaboratively with the leadership team using a workshop approach, which will explore the latest trends and best practices.

Our advanced analysis will assess a set of key strategic options & initiatives based on:

- Their alignment the Clients business strategy.
- Alignment to the Clients Positive Outcomes
- Return on Investment for the Client
- Risk profile for each option
- Impact on existing/planned investments by the Clients.

The evaluation phase will then assess key strategic options & initiatives that best align with your business needs.

Phase 3



Finalise Strategy & Roadmap

The Digital Strategy will then be designed to best meets your business objectives.

Build/Buy and provider ecosystem recommendations, contract framework approaches that address technology and digitisation, automation and even potential monetisation opportunities will be identified, and a governance framework to manage the resulting landscape. An organisational change strategy will also be created based on the final strategy.

A transformation roadmap and financial business case will be developed to articulate a plan of execution toward optimised Client operations. And a strategy realisation roadmap will be developed to ensure the value identified through the strategy phase is realised through implementation.

Execution Phase 4



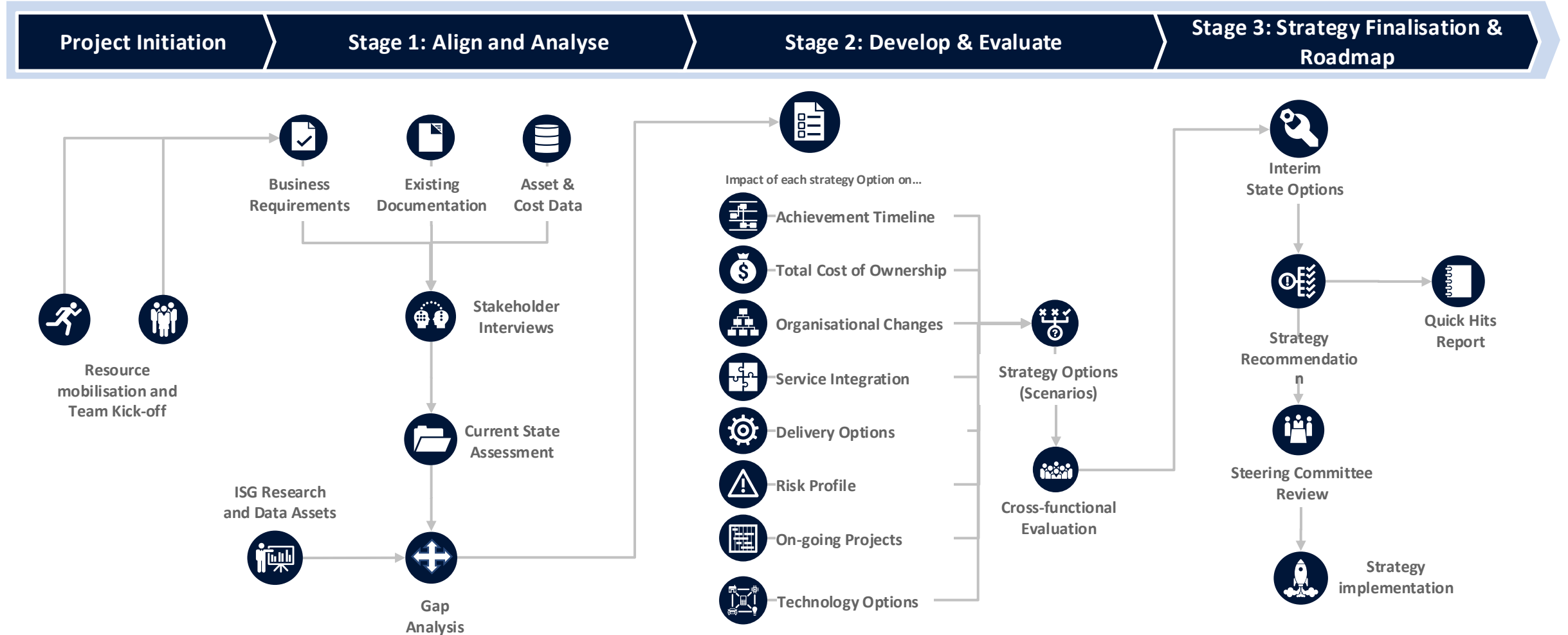
Execute Strategy

Potential short- and longer-term projects based on Strategy (many of which ISG can support using contingent pricing arrangements) e.g.:

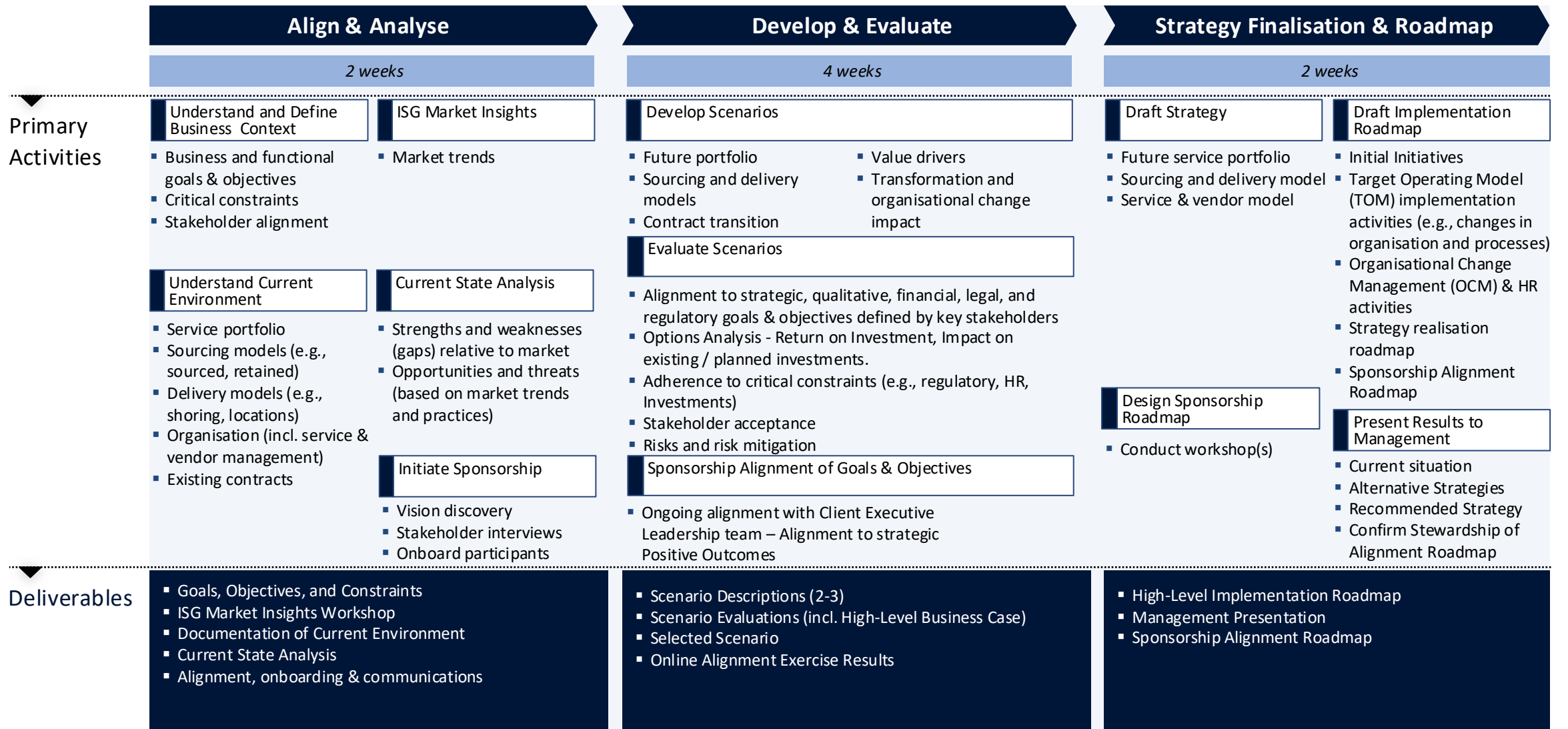
- Strategic Sourcing Activities using our market leading FutureSource™ framework to source Digital Transformation Partners.
- Retained organisation activities including the organisation design and workforce skills assessment necessary to establish essential skills
- Rapid Automation
- Cloud Migration and/or Optimisation
- Application Rationalisation

Digital Strategy Development: Customer Journey

Over the 3 phases identified, ISG support Clients to develop a comprehensive Digital Strategy & Roadmap to enable you to realise your transformation objectives.



Digital Strategy Development: High-Level Approach and Timeline



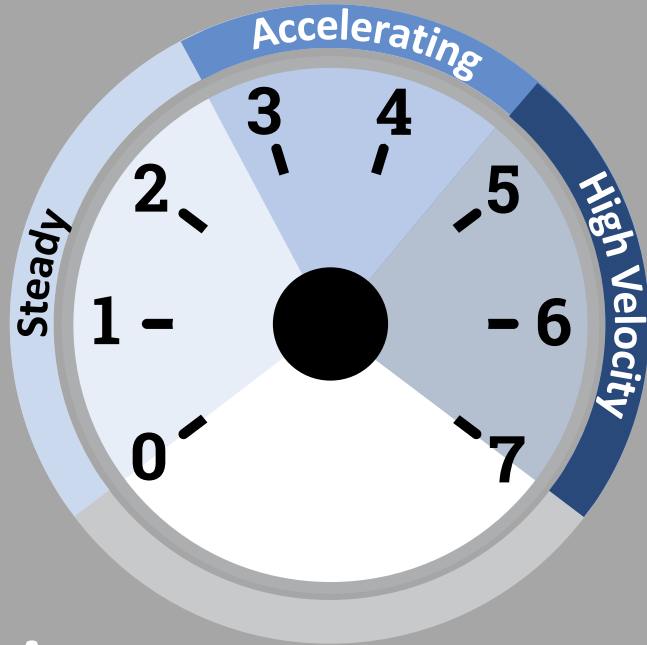


Digital Experience and Enterprise Agility

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What is Enterprise Agility?

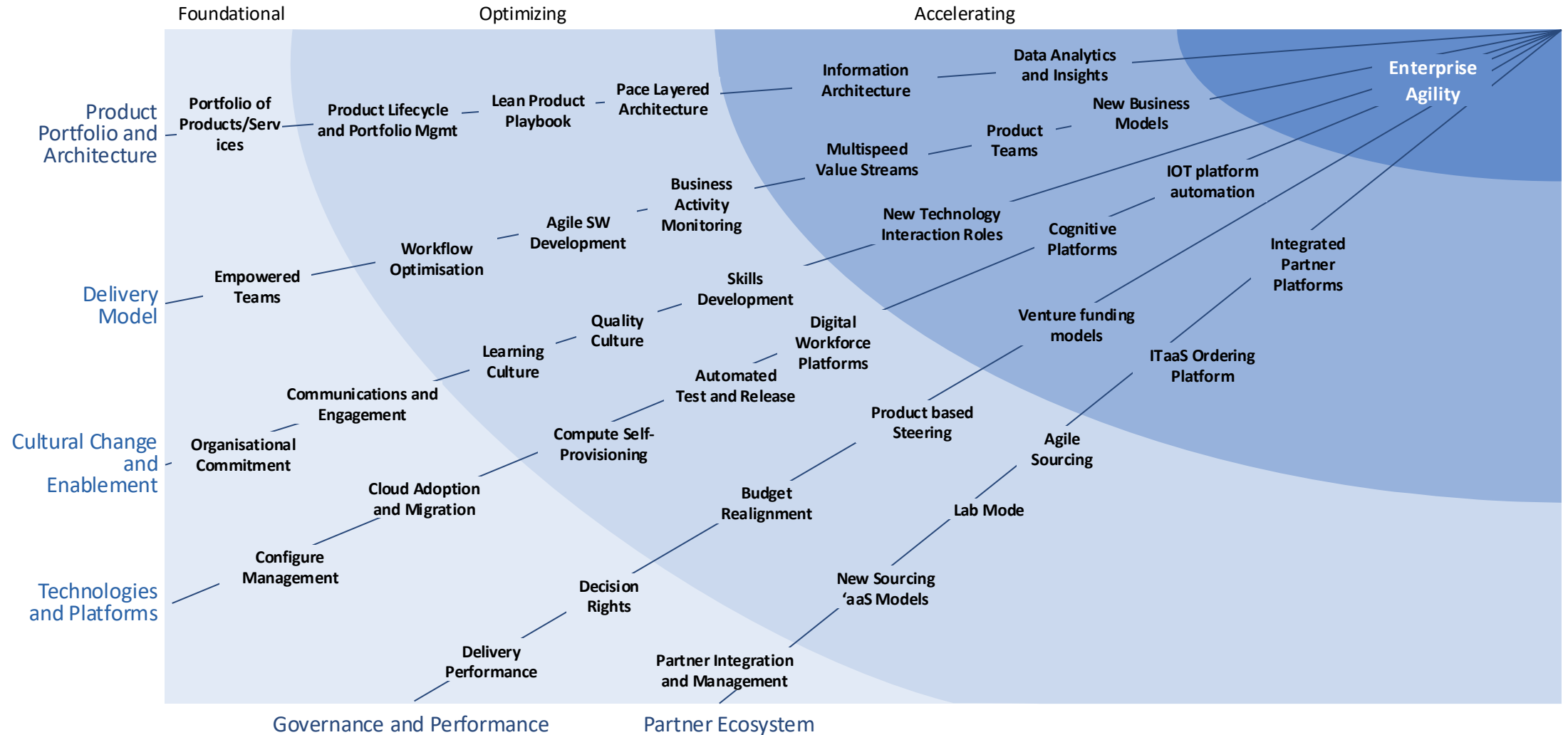
Stop
doing
agile ...
and start **being** agile



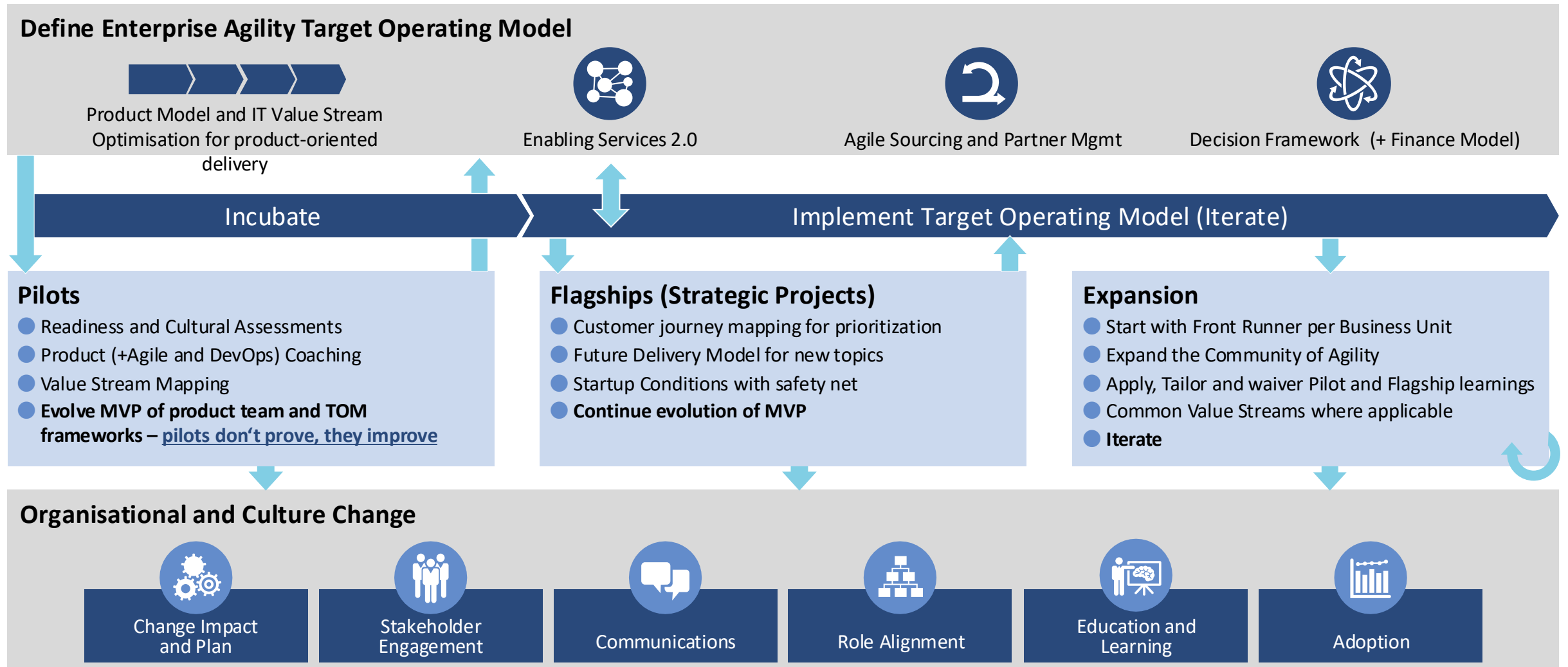
Enterprise agility is
about being able to
change gears and lanes
as needed – applying
the right delivery method
at the right time

using Agile, Lean,
and DevOps principles.

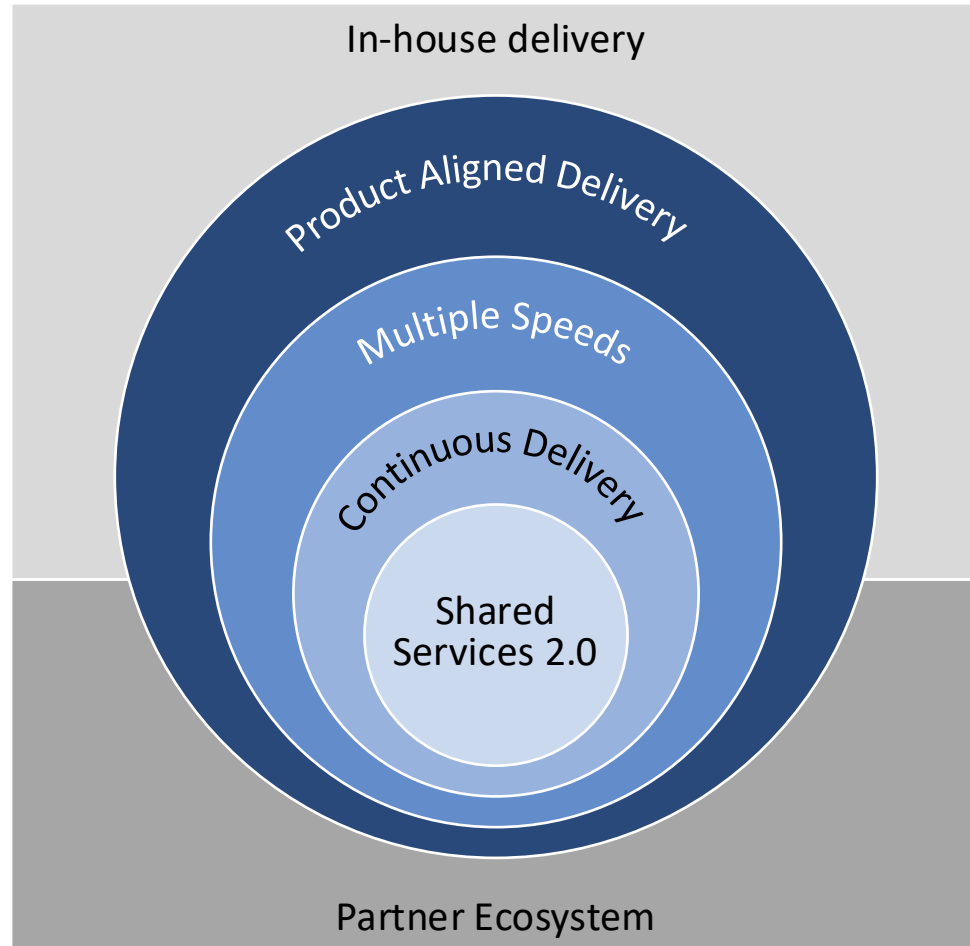
Getting to Enterprise Agility – Where Are you in This Journey?



Enabling the Journey

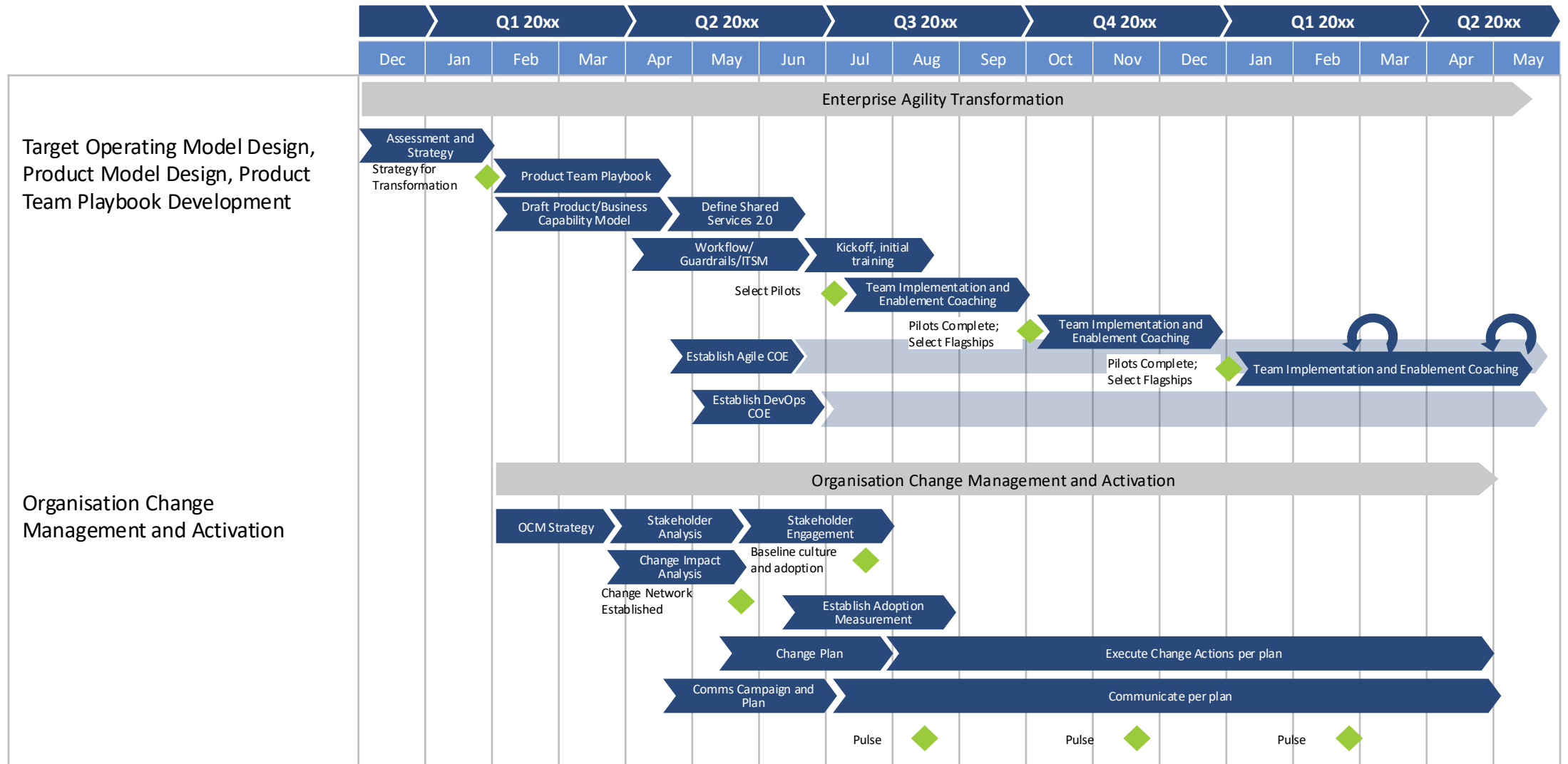


Summarising the Journey to Enterprise Agility



- 1 Product Aligned Delivery of IT ensures end-to-end responsibility for business outcomes.
- 2 Enterprise Agility = Speed of Business driving Delivery Model of choice.
- 3 Automation and Continuous Delivery for speed/repeatability/compliance.
- 4 New shared services to enable Product Aligned Delivery.
- 5 Agile Sourcing – Flexible, enables DevOps, enables Niche and Scale vendors.
- 6 Transformation Approach to enterprise-wide agility depends on culture change.

An Example Enterprise Agility Transformation Roadmap





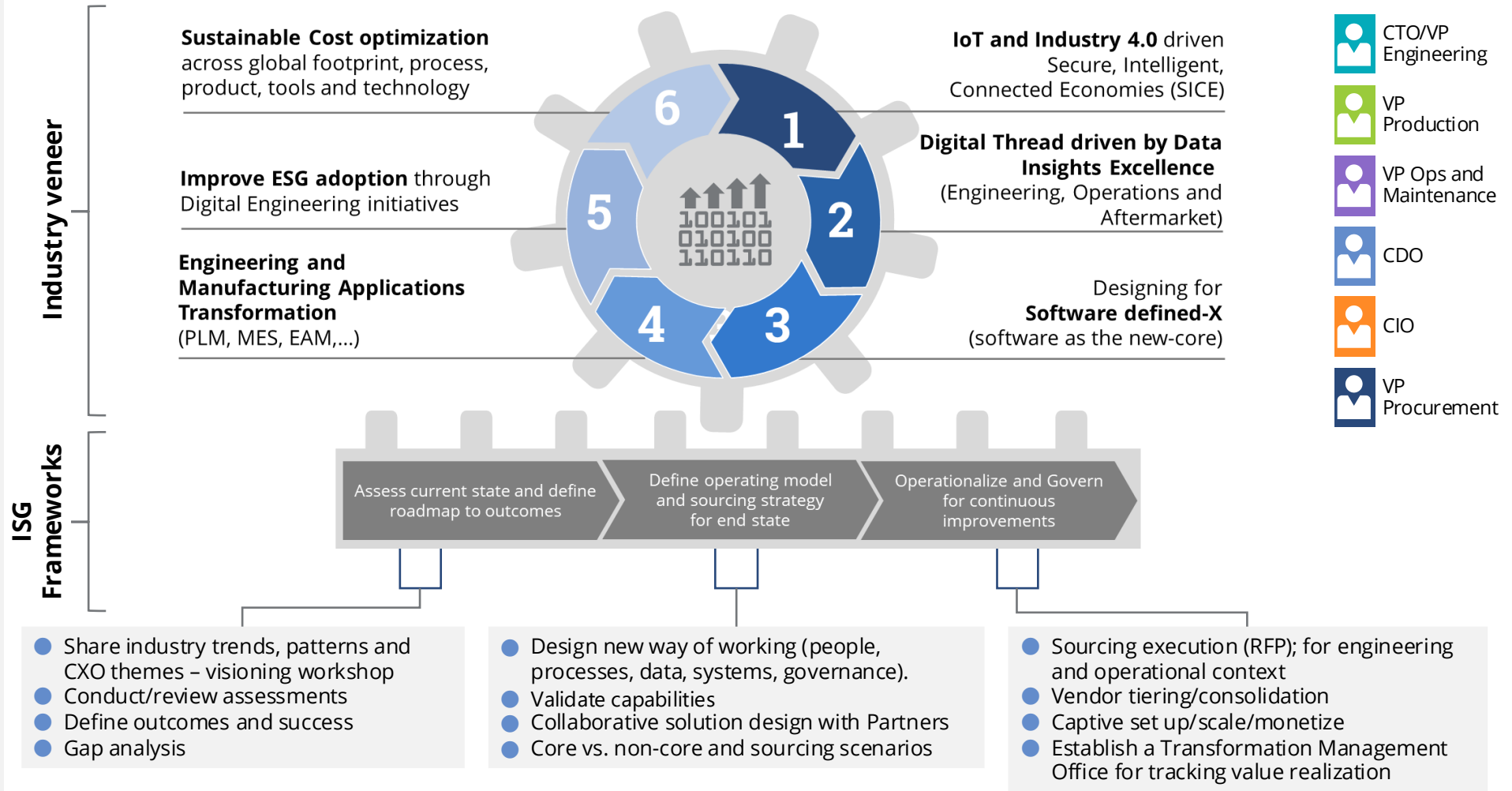
Engineering Solutions

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ISG Digital Engineering Operationalises Client's Transformation Vision

Typical client challenges

- Digital Engineering deals involve **business transformation** necessitating **operating model & organisation redesign**
- Digital Engineering programs most of the times have **zero baseline**
- Absence of **value realisation** framework leads to **expectations mismatch** between Digital Engineering provider and client.
- Most often the initiatives are **stuck in pilot and face scaling issues**
- **Legacy ET-OT** Apps and Technology create roadblocks for a flexible and predictive organisation.
- **Misaligned** skill and capabilities leading to **high costs**.
- **Lack of IT-ET-OT-CT** data integration to enable data insights.
- Poor **asset performance** and availability.
- IT **security** is inadequate to cover ET and OT domains



ISG Digital Engineering Value Enablement Areas

1



Data Insights Excellence+
(Engineering, Operations and Aftermarket/ IIoT data)

2



Operating model for **Software defined-X++** (software as the new-core)

3



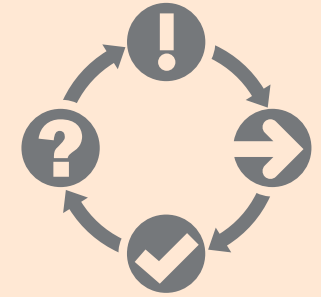
Industry 4.0 driven Intelligent, Resilient and Secure **Operations** and Supply Chain

4



Engineering Services & Applications **Modernisation** and rationalisation*

5



Global engineering Organisation including **talent footprint** & **Ecosystem** optimisation**

+ Including establishing PLM, Digital Twin-/Thread

++ Including product modernisation / smart, connected product design, Software factory

* Including Engineering, Ops & Maintenance Apps like PLM, MES & IOT, and Covering Core Engineering topics around cost & agility

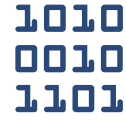
** Including Sourcing and Captive Strategy

How ISG Digital Engineering helps to enable value for Clients



Strategy Realisation Office

1. Strategic Alignment – Conventional & New Business
2. Transformation Management & Governance
3. Organisational Change Management
4. Strategic Sourcing
5. Cost Optimisation War Room



Digital Threads

1. Industry best practices to unlock and sustain value
2. Value Chain Optimisation – Design → Manufacturing → Logistics → Aftermarket Services
3. Cross Industry Benchmarking
4. Blockchain – Spare Parts & Recall Tracking



Platforms Harmonisation – Agile & Lean

1. Smart Design & Product Lifecycle Management (PLM)
2. Enterprise Content Management (ECM)
3. Enterprise Asset Management
4. ITSM & ITAM
5. Intelligent & Resilient Supply Chain
6. Experience Management



Autonomous Operations

1. Virtual Manufacturing
2. Digital Factory/Factory Twin
3. IT/OT tools selection, sourcing and implementation
4. Connected Worker
5. Predictive Analytics



Data Insights and Security

1. Data investment ROI improvement
2. Forecasting
3. Security – Process & Product
4. Governance



Design to Cost - Think Global, Act Local

1. Center of Excellence
2. Localisation evaluation
3. Target Operating Model

ISG Digital Engineering Advisory enables value as per the business objectives of Clients (Exemplary)

Quick Hits



Smart Design NPI
Design to Cost

Digital
Threads

In-Quarter Major
Software Renewals

Warranty &
Aftermarket
services

Product Costing
Continuous
Improvement

Cost Optimisation Programs



S/w defined
Manufacturing

Transformation
Sourcing

Platforms
Harmonisation

Intelligent Supply
Chain

Operating Model
Transformation

Big Ideas



Connected
Ecosystem

Data
as-a-Service

Business Model
Change
(Products to
Services)

Industry/
OEM Cloud

XaaS



Digital Operating Model Design & Implementation

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What is an Operating Model?

An Operating Model describes how an organisation plans, delivers and governs its work.



It defines the **functional organisation** as well as the **disciplinary organisation**. It defines who makes which decisions and is responsible for certain outcomes. How the interplay between teams is organised.

No two clients are the same – nor are their operating models!



Scope of projects can be very different, too!

We created the Operating Model Framework to have
a re-usable set of tools to describe the aspects of a client specific operating model.

Client Operating Model Realities

Every organisation has an **Operating Model** it follows to meet its business goals and create value for its customers.



Sophistication

However, their Operating Model can be either ad hoc (i.e., formed on-need, on-the-go basis) or designed (i.e., purposefully created) and either tacit (i.e., in people's heads) or documented.



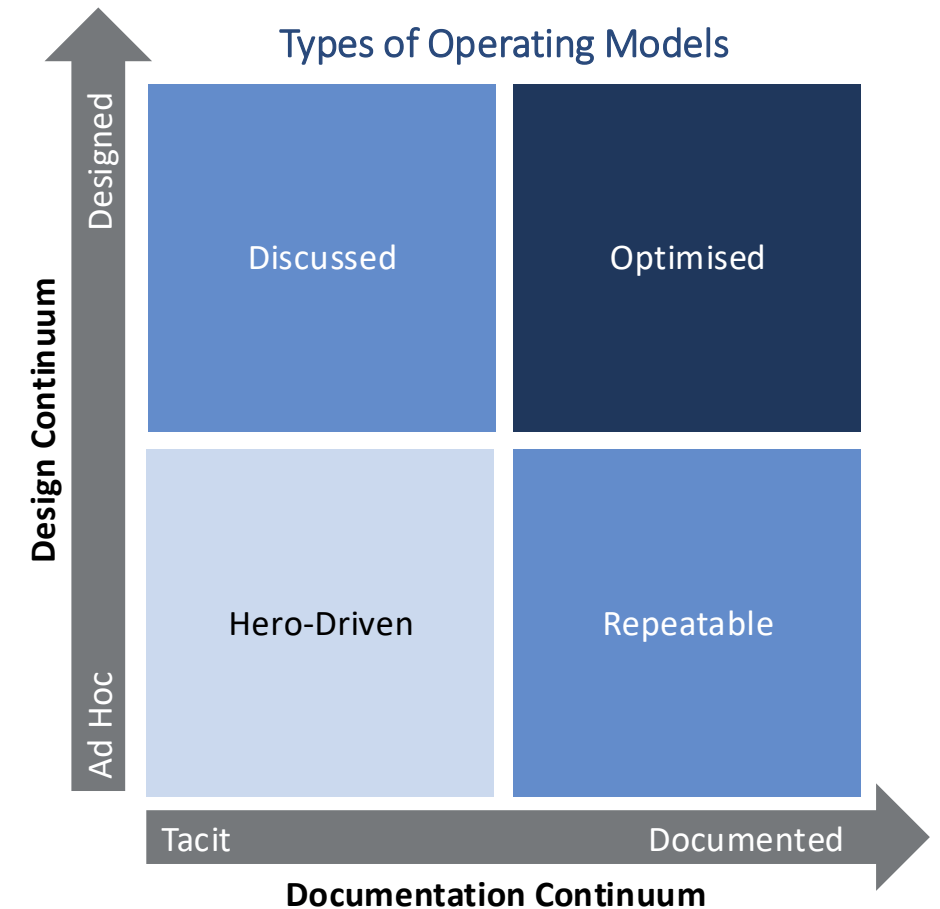
Maturity

Thereby **Operating Models can be grouped in different types** based on level of design and documentation.



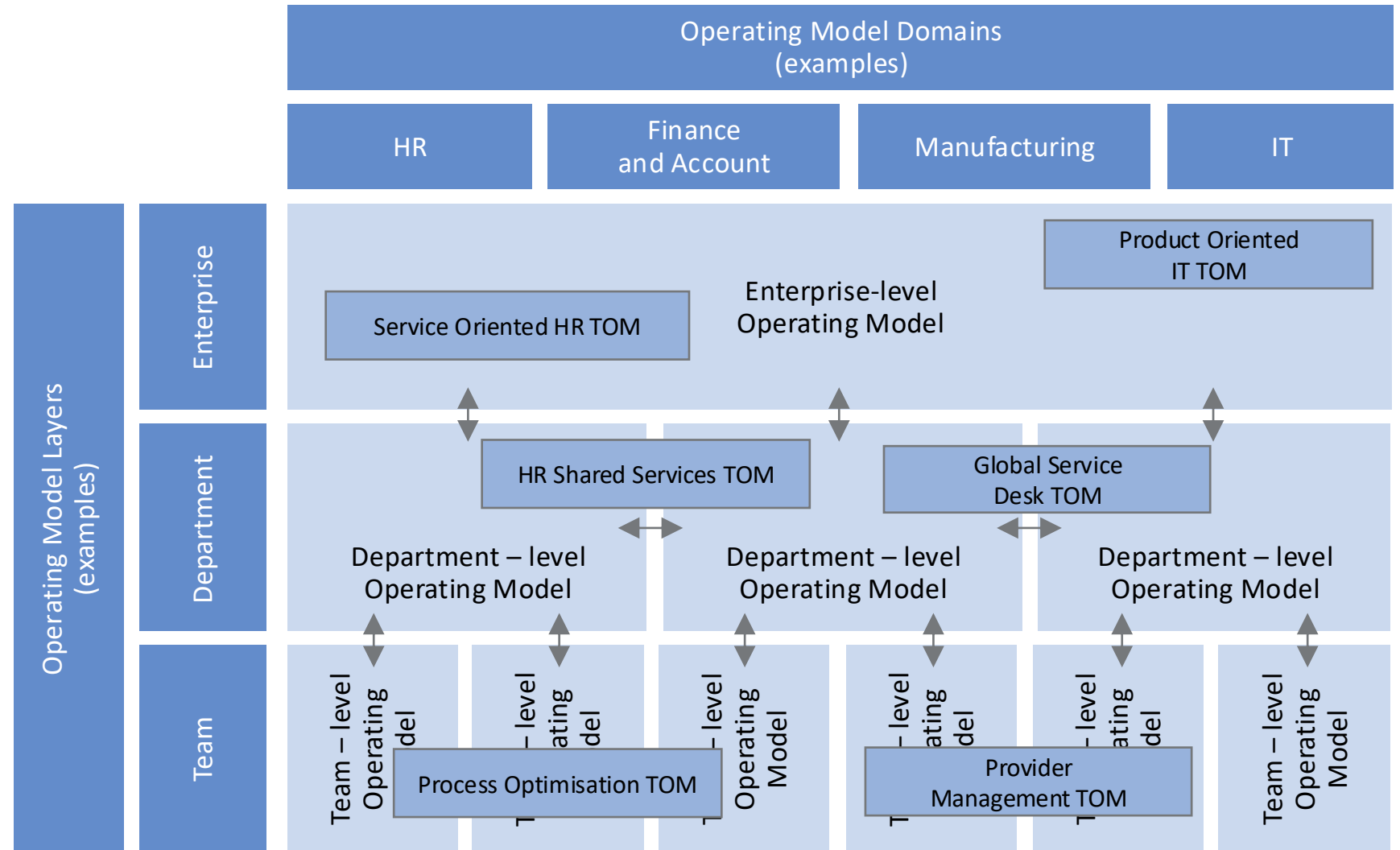
Time

In a typical client situation, there is the **As-Is** Operating Model, i.e., reality of how the organisation actually operates, and **Target** Operating Model, describing how the organisation needs to operate in the future.



Layered Approach to Operating Models

- In practise, **large enterprises do not have one Operating Model encompassing the whole enterprise.**
- Instead, the **Operating Model is divided into multiple Layers** (levels of detail) and **Domains** (area of applicability), which themselves are typically described at the highest layer.
- When documenting as-is or target Operating Model **it is important to define “for what”**, i.e., the Layer and Domain under discussion.
- Each Operating Model dimension might have **specific deliverables depending on the Layer or Domain in scope.**



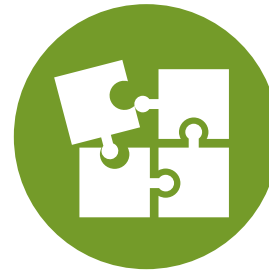
What are the Advantages of a Unified ISG Operating Model Framework?



Unified vision
and **professional**
communication towards
our clients
and ISG internally



Easy to be understood by
clients and
ISG consultants



Generic enough to
be **suitable for**
all ISG solutions
and teams



Leaves freedom to the
solutions to define their
specific deliverables
within the dimensions

All Eight Dimensions of the iFlex Operating Model Framework Should be Addressed for Optimal Delivery

Business Value: Alignment to key components of business value are at the **center of the operating model** and drive the operating model **strategy** based on **business objectives**.

Products/Services

Defining a **portfolio of products/services and enterprise architecture**, recognising different types of products, their business value and customer centricity may drive **different delivery models**.

Ways of Working

Simplifying workflow across the multiple **delivery value streams** and appropriate ways of working – such as **light-weight processes** – as speed to market, technology, provider landscape, and objectives change over time.

Organisation

Organisational structure that enables a **business/customer centric culture** which includes **business-aligned and flexible team setups** with **new empowered roles and skills**.

Partner Ecosystem

Creating an ecosystem of **partners** where **scarce skills** are **available** and/or **innovation** is shared; engaging culturally and managing the **ongoing relationship**.

Workforce Enablement

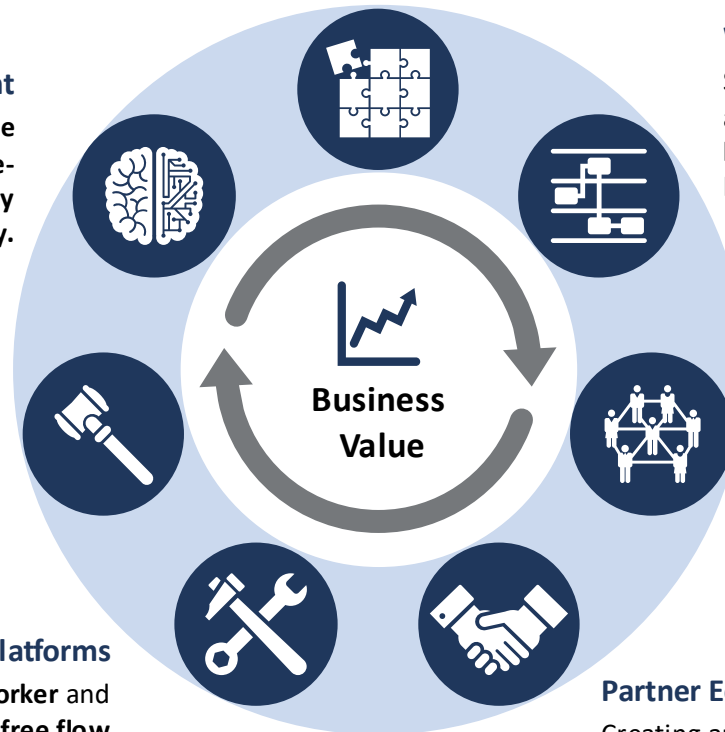
The Human Side of “X” Acknowledging and enabling the **cultural shift via change-leadership**. Fostering **employee-driven learning**, continuous improvement, **adaptability** and **accountability**.

Governance

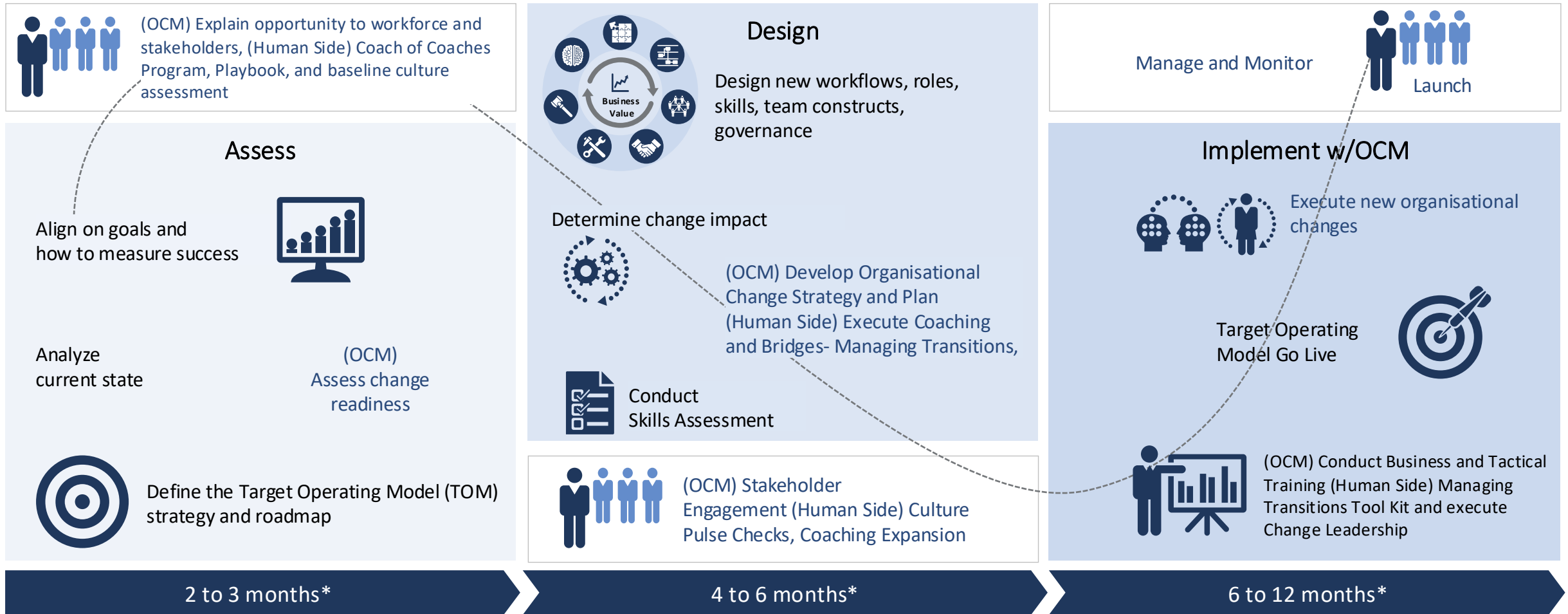
Providing the governance of the environment through appropriate **controls, visibility of performance**, legitimised **shared accountabilities** and clear **decision rights**.

Tools and Platforms

Focusing on the **experience of the skilled worker** and **select platforms** – enabling **collaboration, free flow of information**, and applying **automation** to repeatable process and flow by providing **the right tools**

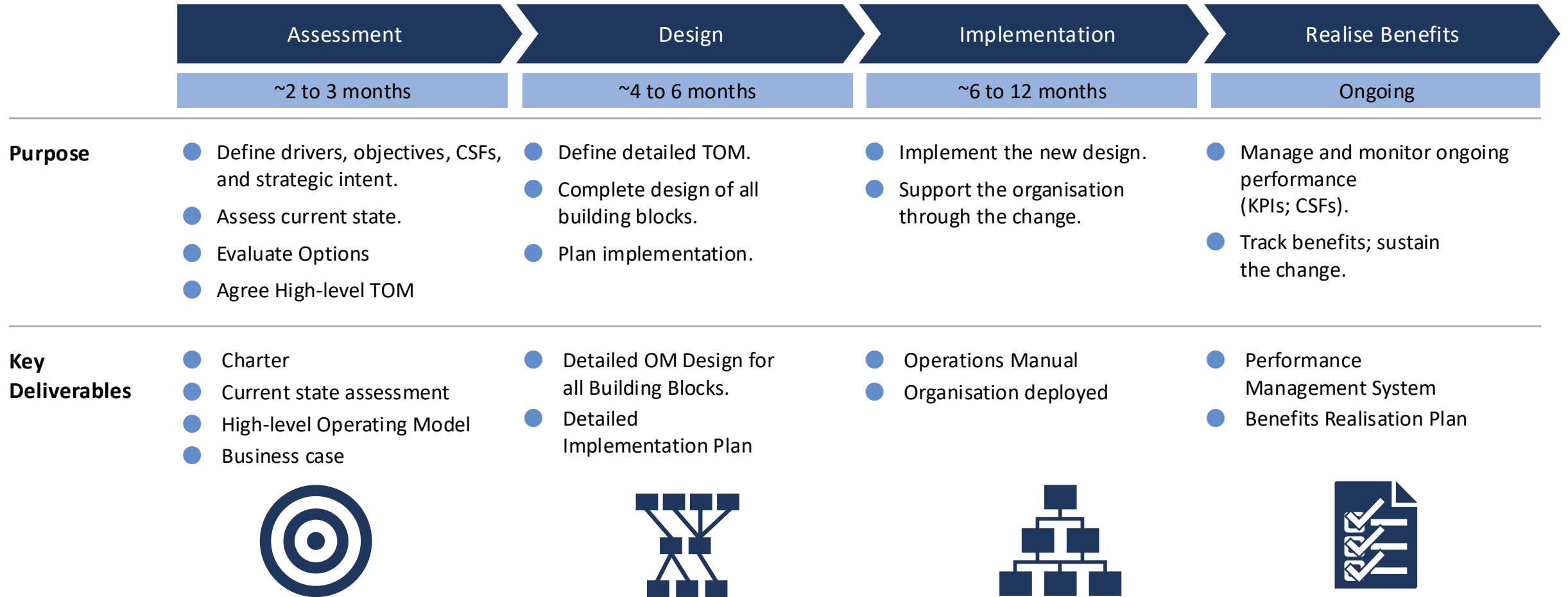


Changes to the Operating Model will Follow a Transformational Journey, Where we Support the Client through their Journey



*Typical timeline for Enterprise-level operating Model projects

Target Operating Model Transformation Approach





About ISG

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ISG is the partner to help you: answer the critical questions, find the right providers, get the most out of your digital transformation and navigate major industry-defining trends.



ISG is a global technology research and advisory firm.

1,600 employees

In more than 20 countries

900 clients

Including 75 of the world's top 100 enterprises

We are technology advisors and researchers **who help your enterprise:**



Determine a future vision.

Evaluate, establish and prioritize your most critical long-term business objectives.



Find the right partners.

Source, evaluate and help you get the most from technology service providers, without conflict or compromise.



Lead rapid change.

Redesign your operating model, using technology to drive faster and positive change across your organization.



Realize value at scale.

Provide data and tools to optimize cost, governance organizational change, vendor management, and more.

What matters most to your business?

Our advisory is focused on it.



Automation

Leverage robotic process and cognitive automation technologies.



Cognitive and Analytics

Accumulate data capital and monetize it effectively.



Digital Engineering

Move into a differentiated position in a secured, intelligent and connected economy.



Networks

Create an optimal, right-fit network services strategy that adds significant value to your business.



Sourcing

Find the right partners and make the best deals.



Benchmarking

Track and meet your cost, performance and quality objectives.



Cost Optimization

Drive greater value for your enterprise and get the most efficient and effective business operations and technology.



Future of Work

Integrate the best of digital, physical and human solutions.



Organizational Change Management

Empower your people to realize benefits faster and increase productivity through technology usage.



Cloud Advisory

From strategy to implementation to managed services, we help you to define your Cloud journey.



Business Operations

Transform general and administrative processes to deliver new efficiencies and unleash superior business value.



Cybersecurity

Transform your existing information security into an agile and vigilant operation to protect your enterprise.



HR Technology and Transformation

Engage the workforce of tomorrow and deliver value to the business in a new way.



Software

Optimize your strategic software suppliers and ecosystems.



Technology Modernization

Architect your organization's infrastructure and applications for success.

Our data-driven research can help ground your buying decisions in objective and balanced evaluations.

Access the authoritative source
for the latest data and trends
in the global IT and business
services industry with

ISG Index™

Track, compare and benchmark
cost, quality and productivity
across all functional areas of
business and IT with

ISG ProBenchmark®

Monitor, understand and improve
your partner relationships with

**ISG Experience
Assessment Center**

Gain intelligence and insight
on technology providers with

ISG Provider Lens™

Fuel your learning
and networking with

ISG Events™



Our SaaS platforms help you

benchmark your entire IT landscape,
drive operational excellence,
govern your third-party relationships
and make strategic decisions.

ISG GovernX®

turns your third-party risk management complexity into clarity.

ISG ProBenchmark®

provides IT price benchmarking to ensure your outsourcing contract is price competitive.

ISG Inform™

is the only IT benchmarking solution that goes beyond cost and combines service quality and personnel productivity to provide a complete picture of your IT landscape.

ISG Executive Insights™

is an integrated data analytics platform that addresses the challenges of supplier proliferation and enables you to gather real-time insights to make strategic decisions.

But what really sets us apart?

Our data put us in a league of our own. It's data from:

\$485

billion in sourcing deals

32,000

total engagements

**This results in insights,
perspective and
experience
that no one else can deliver**



Thank You

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ISG (Information Services Group) (Nasdaq: IHI) is a leading global technology research and advisory firm. A trusted business partner to more than 900 clients, including more than 75 of the world's top 100 enterprises, ISG is committed to helping corporations, public sector organizations, and service and technology providers achieve operational excellence and faster growth. The firm specializes in digital transformation services, including automation, cloud and data analytics; sourcing advisory; managed governance and risk services; network carrier services; strategy and operations design; change management; market intelligence and technology research and analysis. Founded in 2006, and based in Stamford, Conn., ISG employs more than 1,600 digital-ready professionals operating in more than 20 countries—a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry's most comprehensive marketplace data. For more information, visit www.isg-one.com.