IBM Strategy Consulting

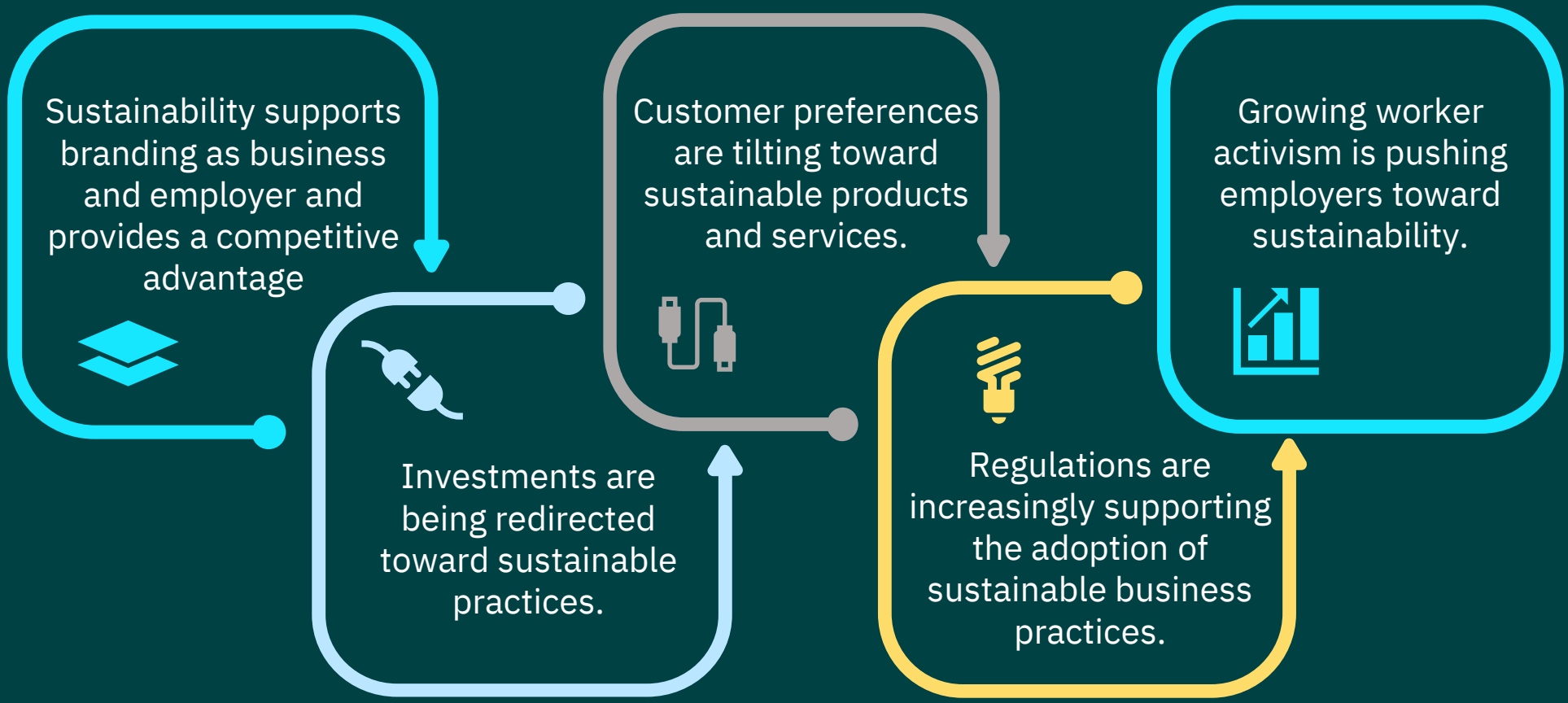
IBM Sustainability Transformation

Powered by Microsoft Sustainability Cloud

Sustainability Transformation

Sustainability is becoming more important for all companies, across all industries. Businesses are accelerating their sustainability transformation to find new opportunities and avenues for growth.

Key drivers for sustainability transformation



Sustainability as a Transformation catalyst

Sustainability has roared to the forefront of corporate priorities, with 73% of surveyed executives saying their organizations have set a net-zero carbon emissions goal

Survey: 1,958 executives in 32 countries

Respondents: Chief Sustainability Officers, Chief Operating Officers, Chief Information Officers, Chief Technology Officers, Line of Business Heads, and Chief Innovation Officers

Industries: Agriculture, Automotive, Chemicals, Consumer Products, Electronics, Engineering and Construction, Industrial Machinery, Life Sciences/ Pharma, Metals and Mining, Petroleum, Retail

Sustainability archetypes	**13%** ***Transformation Trailblazers***	**10%** ***Sustainability Strivers***	**38%** ***Execution Stragglers***	**40%** ***Commitment Sideliners***
Sustainability commitment	Strong Board and C-suite commitment to sustainability	Strong Board and C-suite commitment to sustainability	Strong Board and C-suite commitment to sustainability	Little or less Board and C-suite commitment to sustainability
Sustainability effectiveness	High effectiveness at environmentally sustainable business processes	High effectiveness at environmentally sustainable business processes	Limited effectiveness at environmentally sustainable business processes	
Sustainability integration	High alignment of sustainability and digital strategy	Limited alignment of sustainability and digital strategy		

Transformation Trailblazers stand out against the other three archetypes in key areas:

1. Leverage sustainability as catalyst for transformation
2. Tap the potential of emerging technologies and data
3. Embed sustainability within operations and the wider organization
4. Broaden C-level and CEO involvement and responsibility
5. Collaborate with ecosystems and supply chains
6. Engage with employees and customers

*Research conducted by IBM Institute of Business Value

Sustainability Transformation is powered by exponential technologies and radical transparency

Compliant

- Sustainability driven by regulations
- Focus on organizational reporting and compliance
- Technology used to monitor

Data to **inform**

Operational

- Sustainability driven by efficiency
- Focus on operational improvements
- Smart technologies used to optimize discrete processes

Data to **optimize**

Transformational

- Sustainability driven by purpose, open innovation, and ecosystem engagement
- Focus on sustainability as business opportunity
- Exponential technologies used to redefine value creation

Data to **transform**

Key challenges

Increasing pressure to show corporate sustainability stewardship and initiatives

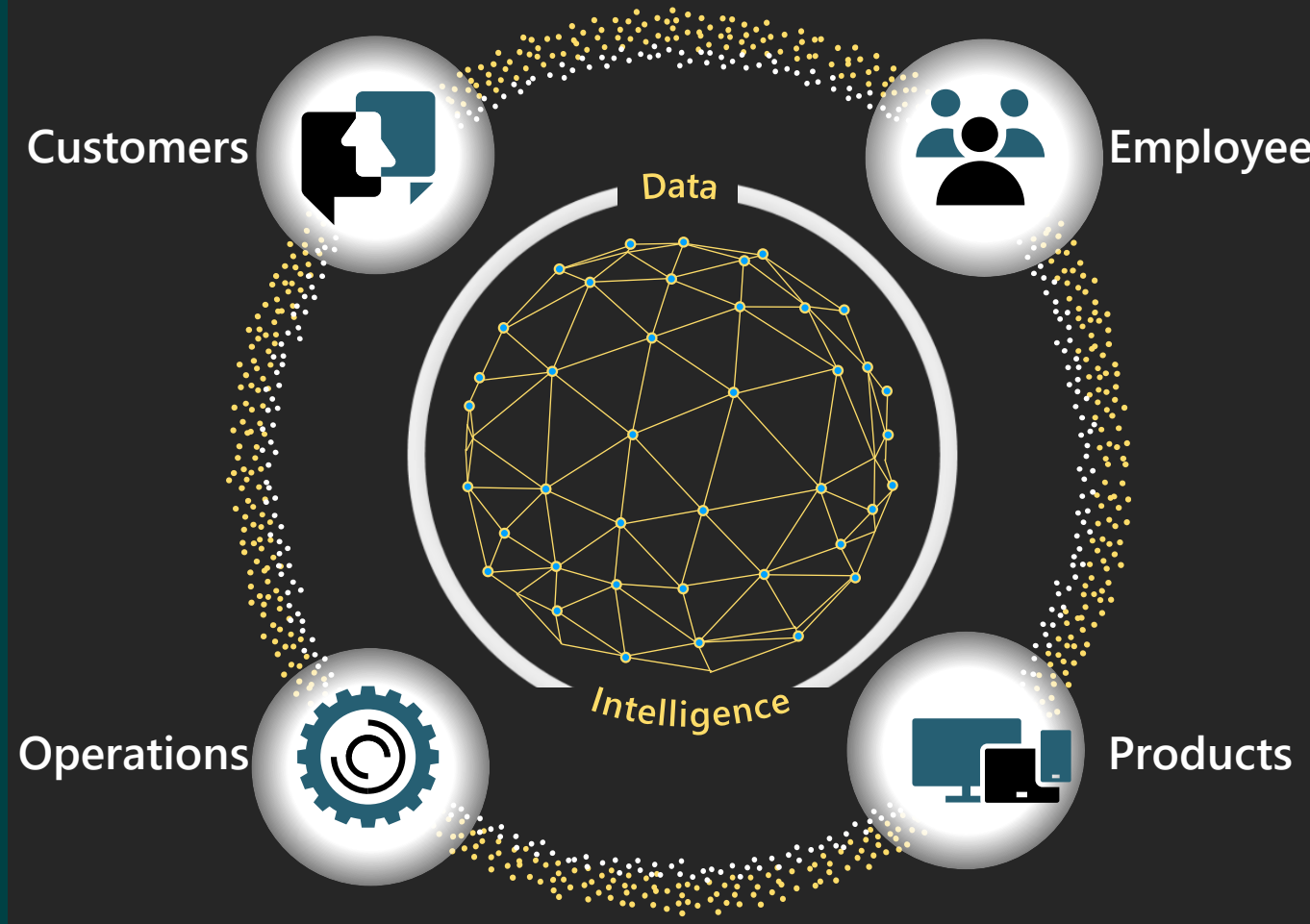
Measure, monitor and report key metrics for sustainability

Create more sustainable supply chains while being agile and efficient

Communicating and collaborating more efficiently, improving traceability and analytics

Reducing emissions & minimizing waste without forgoing profit

How IBM and Microsoft can help you unlock new value and attain net-zero carbon emission goal



Microsoft Cloud for Sustainability

Microsoft Cloud for Sustainability is designed to help companies measure, understand and take charge of their carbon emissions, set sustainability goals and take measurable action. Furthermore, organizations can drive more sustainable value chains with greater transparency and accountability, from sourcing of materials through product distribution.

Record

Connect data to more accurately represent the emissions footprint of your operation and value chain.

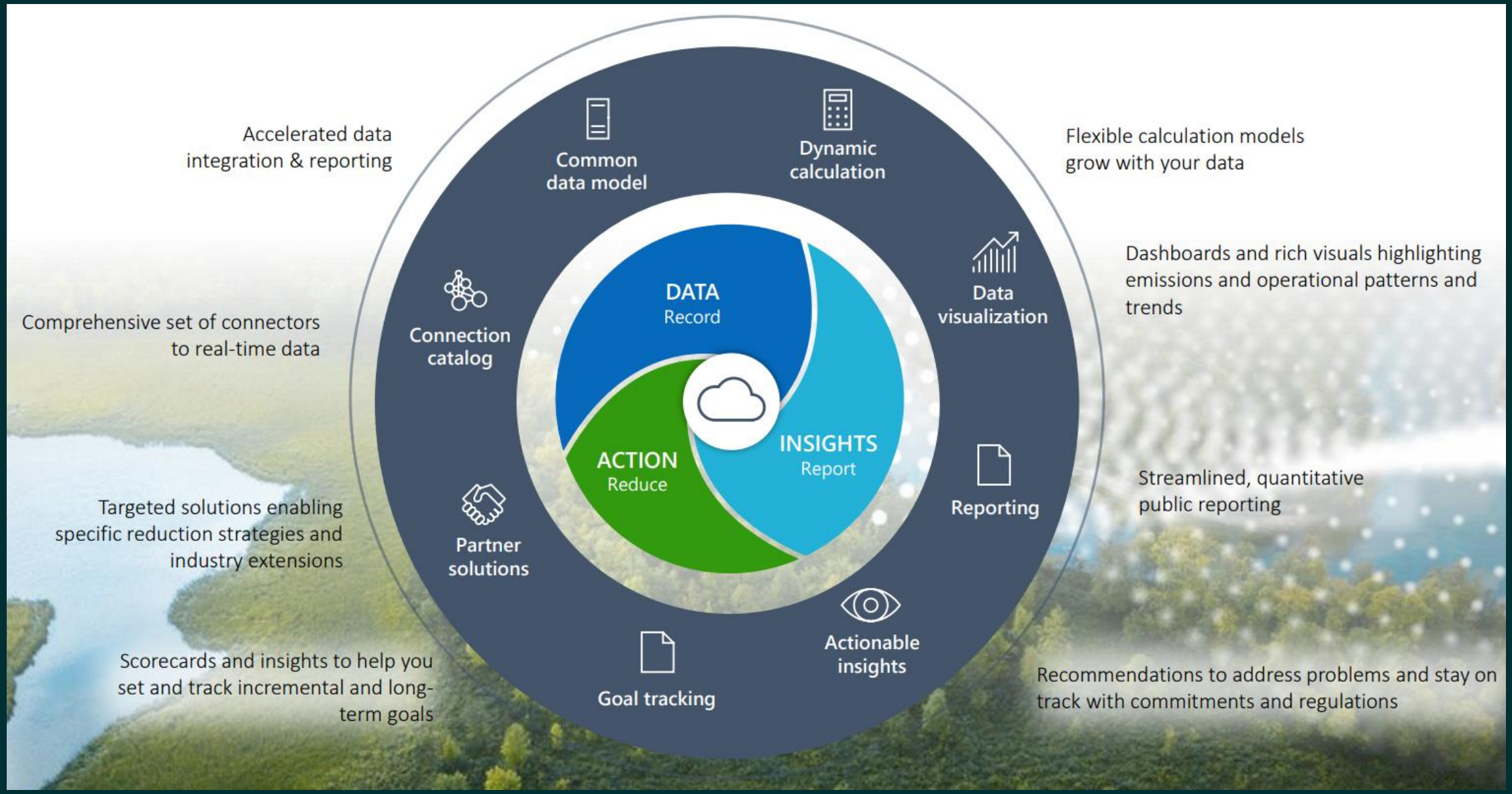
Report

Visualize and report your environmental impact and sustainability progress in near real time.

Reduce

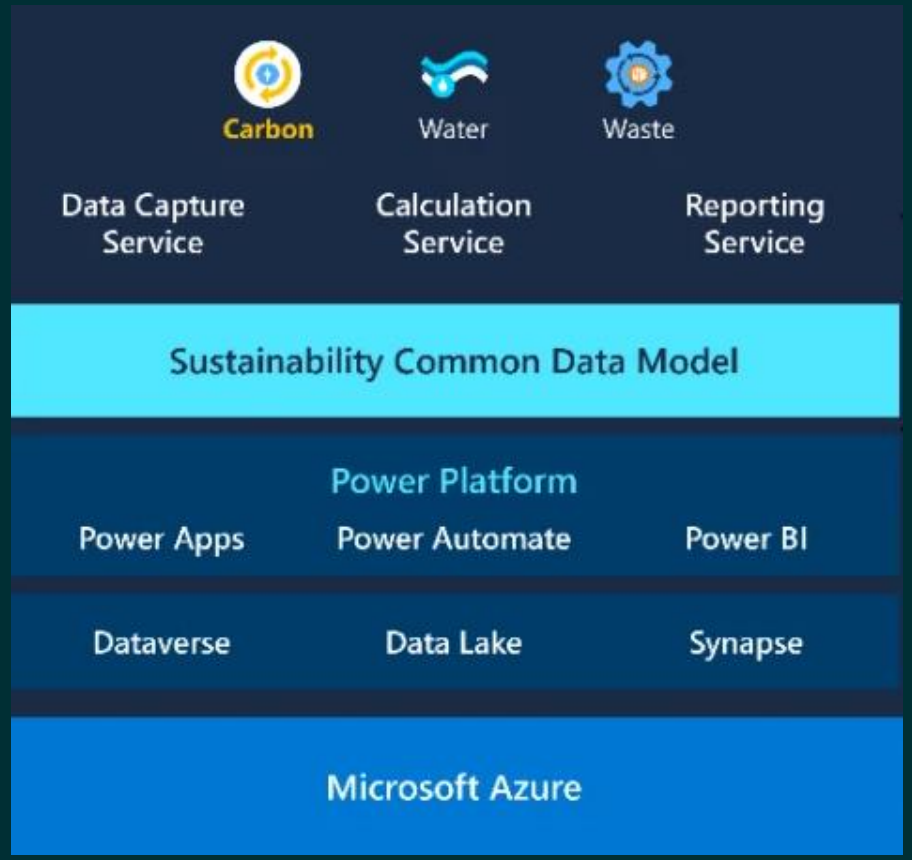
Learn how to advance your efforts to reduce emissions, gain efficiencies, and make lasting changes.

Microsoft Cloud for Sustainability – Key Capabilities



Sustainability Transformation - Offering Overview

IBM Offering for sustainability transformation powered by MS Sustainability cloud can help enable clients to make sustainability core to doing business and accelerate their transition towards a low carbon future by unlocking the power for Microsoft sustainability cloud.

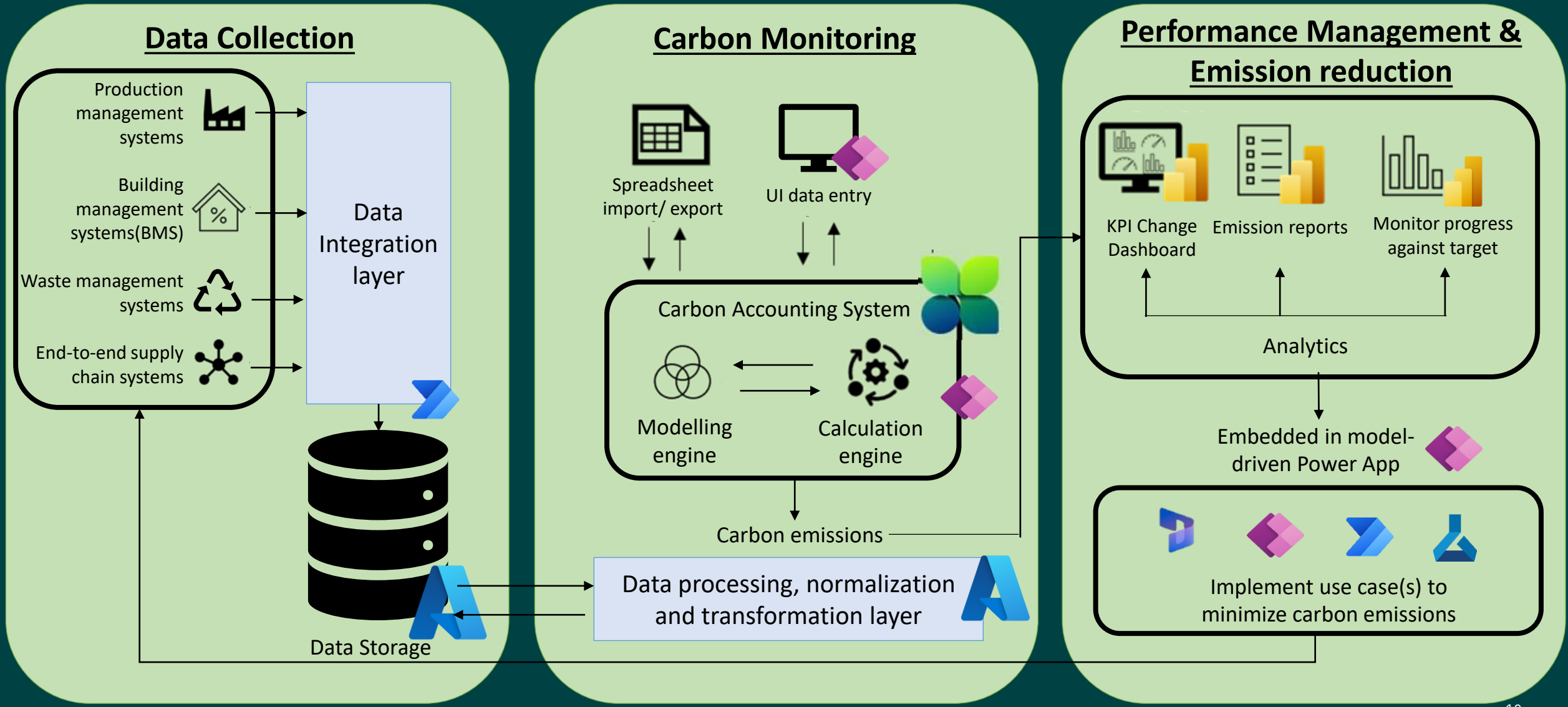


Microsoft Cloud for Sustainability

- Automate importing of internal and external carbon emissions data
- Leverage industry knowledge of IBM SMEs to configure necessary algorithms specific to emission source (with industry-standard coefficients) to correctly calculate emissions
- Identify & implement use cases to help enable clients accelerate towards net zero emission target.
- Develop powerful dashboards to get rich visualization and insights enabling clients to take appropriate actions

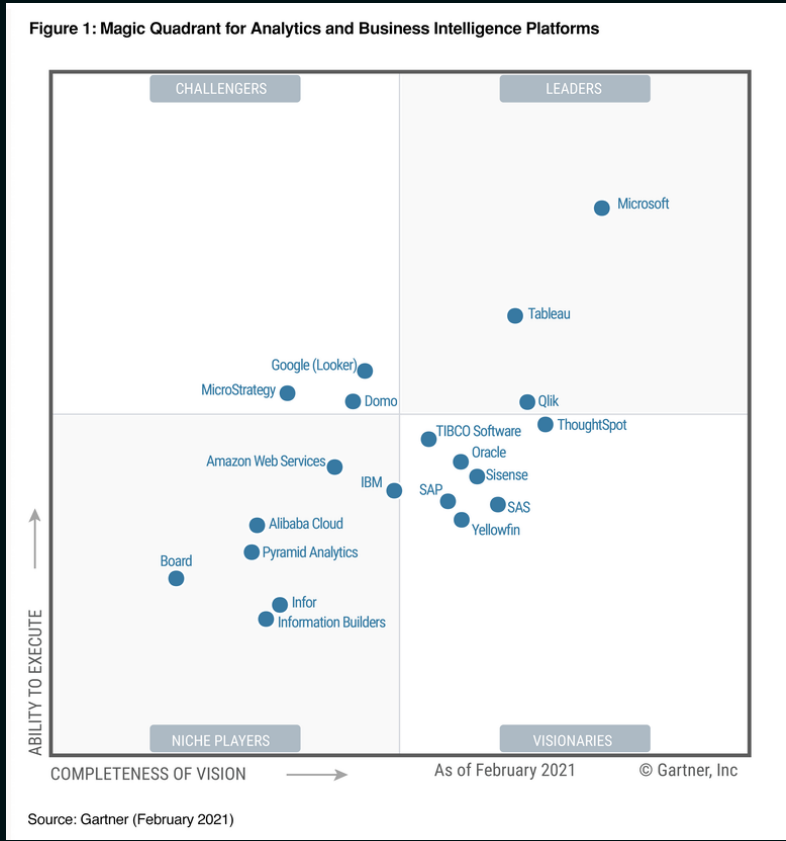
IBM Services

Sample Functional Architecture Diagram

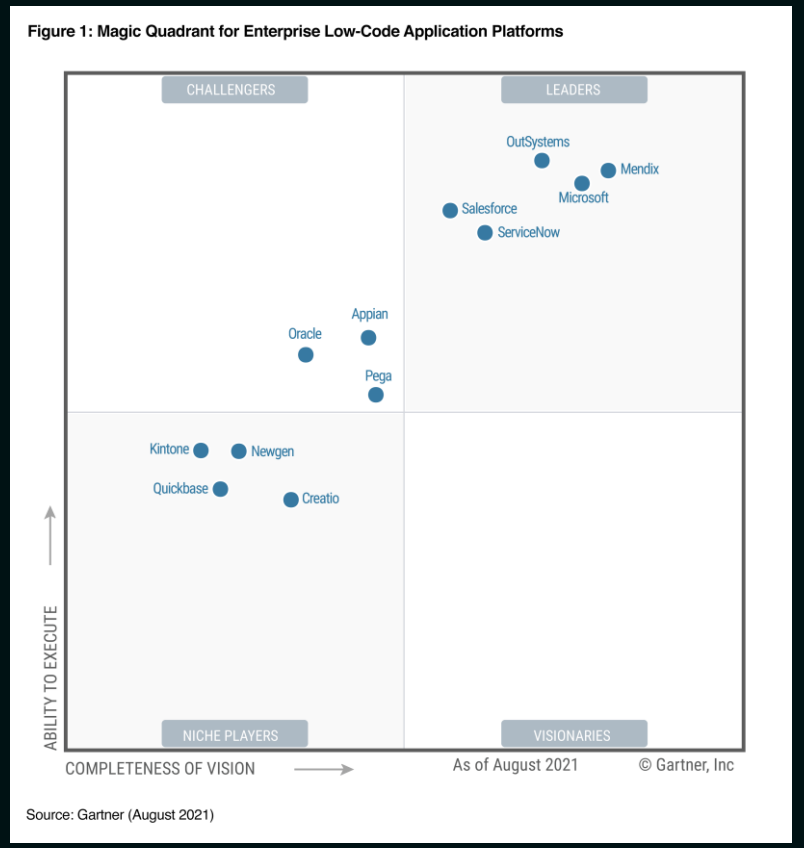


Why Sustainability Transformation with IBM powered by Microsoft Sustainability Cloud?

- IBM strategic partnership with Microsoft
- Our clients' investment in Microsoft technology stack (Azure, Biz Apps, Power Platform, etc.).
- Massive scalability offered by Microsoft
- Microsoft's investment and leadership in following underlying technologies:



Power BI (Analytics)



Power Apps (Low code platform)

Sample Use Cases for sustainability transformation

Recommendations for sustainable options to source materials

Transport optimization

Digitizing paper based manual processes

Replacement of parts based on product usage data

Travel optimization

Demand planning optimization

Predictive maintenance to extend manufacturing equipment timelines

Deployment of smart sensors and meters to monitor, analyze and optimize energy usage in buildings

The co-creation journey to Sustainability Transformation can begin anywhere…

Strategize

Envision the future

Solve

Test and measure to get it right

Scale

Activate sustainable transformation

…let’s identify the best entry-point together

IBM Garage is a bold, comprehensive approach to innovation and transformation that **quickly creates and scales new ideas that dramatically impact your business**

+ De-risk innovation by starting with strong business outcomes and ruthless prioritization

+ Focus on what is essential to realize impactful benefits

+ Fully integrated solutions created by experts; yours and ours

Getting started with IBM Garage Jumpstart

One-day workshop bringing together your key stakeholders to begin envisioning your desired **future state for sustainability transformation** (North Star), identify **current challenges** against that North Star, and determine **key enablers** – Technology, Data, People, Process

What is it?

A half-day or full-day fast-paced session with IBM experts (Sustainability domain, MS technology, and Facilitators) to quickly, efficiently, and collaboratively identify challenges and limitations at the persona and workflow levels to converge on future state.

How can it help?

- Opportunity to **bring together stakeholders** from across the business to begin a sustainability transformation with the **end state experience in mind**
- Early input and analysis around key challenges and limitations from the lens of functional personas to– **better inform requirements**
- Exploration on the **'Art of the Possible'**
- **Faster alignment** on transformation objectives and plan

What elements are included?

- MS tech stack & Sustainability expertise
- Enterprise Design Thinking with Agile
- Transformation Framework
- Persona Development
- Starter Threads
- Technology Enablers

1 PERSONAS

Relevant to your organization and most representative of your user population

- Persona based challenges and pain points
- Alignment on future-state aspiration

2 STARTER THREADS

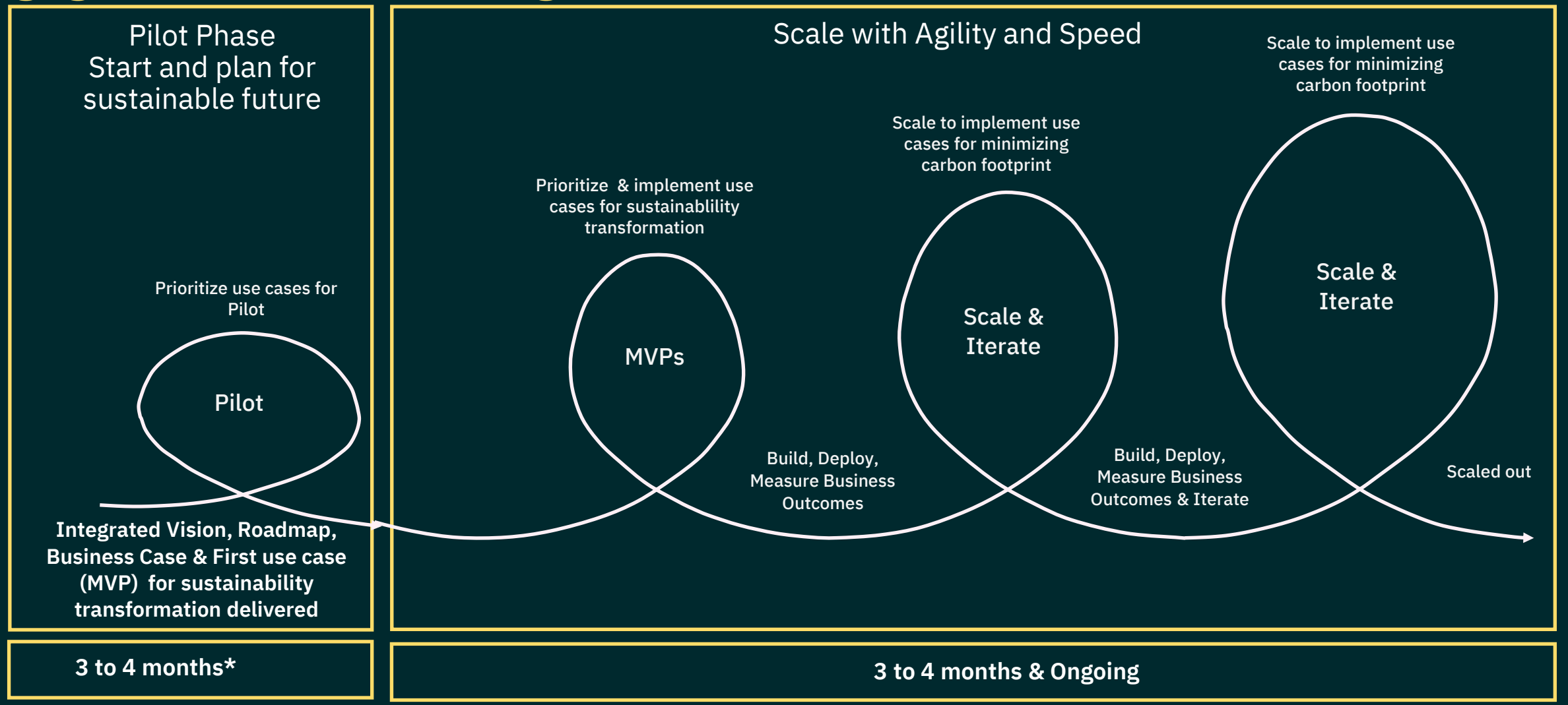
Conveying the North Star workflows that help to envision a future state, brainstorm, and prioritize

3 QUESTIONS

Answered to kick-start your Sustainability Transformation

- **What** will the Future look like?
- **How** will Technology help get us there?

Engagement Model: Garage Method



Redefine how work gets done with an iterative framework that guides you from ideation, to build, to scale.

Co-create across stakeholders to define vision.

Co-execute using a fast, scalable, iterative approach

Co-operate scales your solution & team's capabilities.

Engagement Model: Pilot (3-4 months)

2 WEEKS

IDEATE

- Identify the internal and external sources of carbon emission data
- Understand the current challenges
- Identify key use cases to enable clients transition towards low carbon future
- Finalize pilot use case

3 WEEKS

DESIGN

- Use case (pilot) elaboration
- Define To-Be architecture (for carbon emission computation & pilot use case implementation)

8-12 WEEKS

BUILD

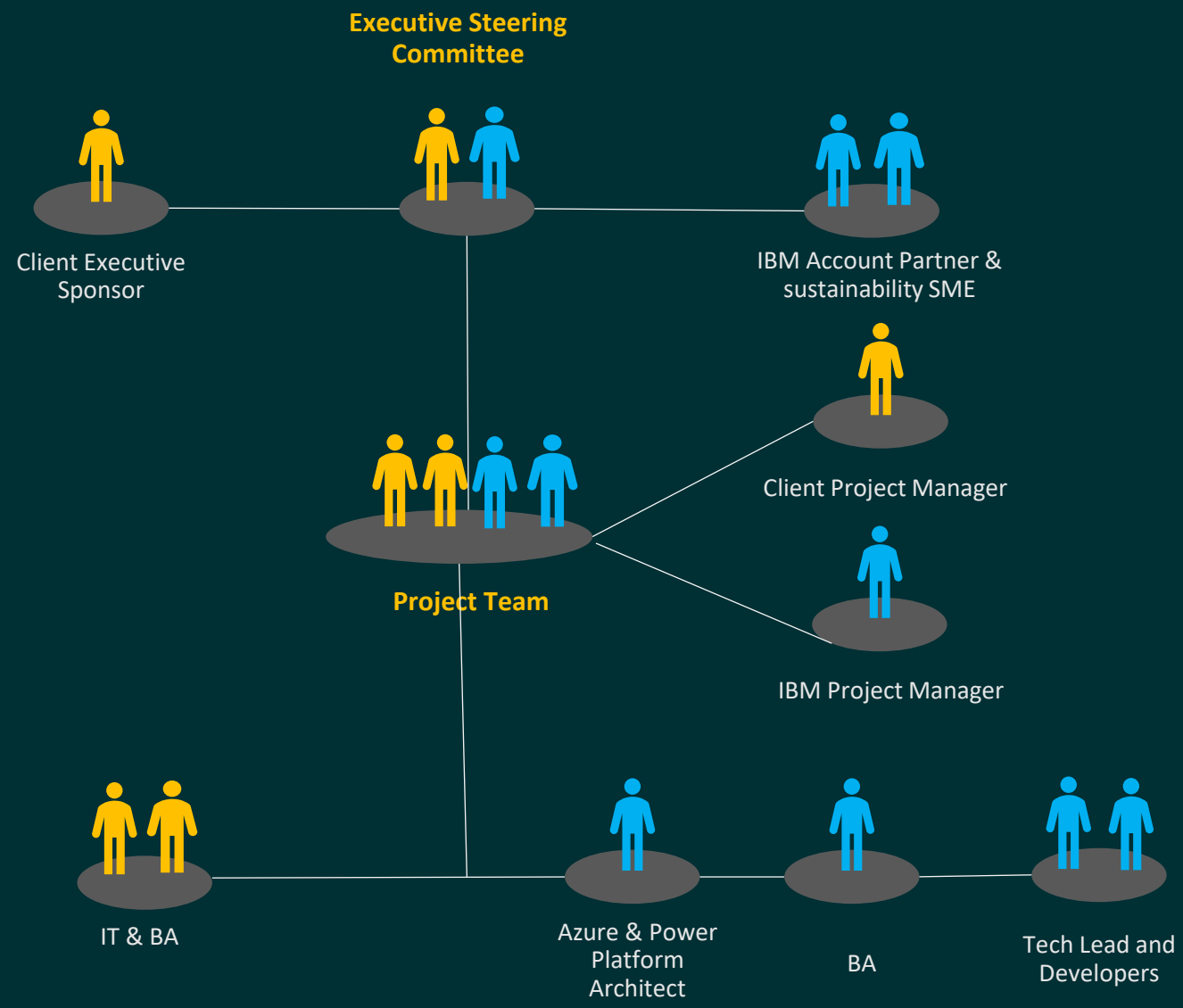
- Automate importing of carbon emission data from identified sources
- Configure calculation for Scope 1, Scope 2 and Scope 3 carbon Emissions
- Implementation of identified use case (MVP)

OPERATE AND SCALE

- Iteratively scale solution with Garage methodology across new use cases to minimize carbon footprint

* Depending on client requirements

Team Structure



Client Resource

IBM Resource

Note: Team hierarchy illustration only; not actual resource count