

o9 x AAPN Digital Brain & Sustainable Supply Chain

Updated 5.17.23 - L0 Process

Agenda

1. **Intros**
About o9 & The Digital Brain
2. **Our POV**
Sustainability as an integrated process of supply chain management
3. **Sustainable Supply Chain**
An overview of our solution approach
4. **Q&A**
Interactive discussion



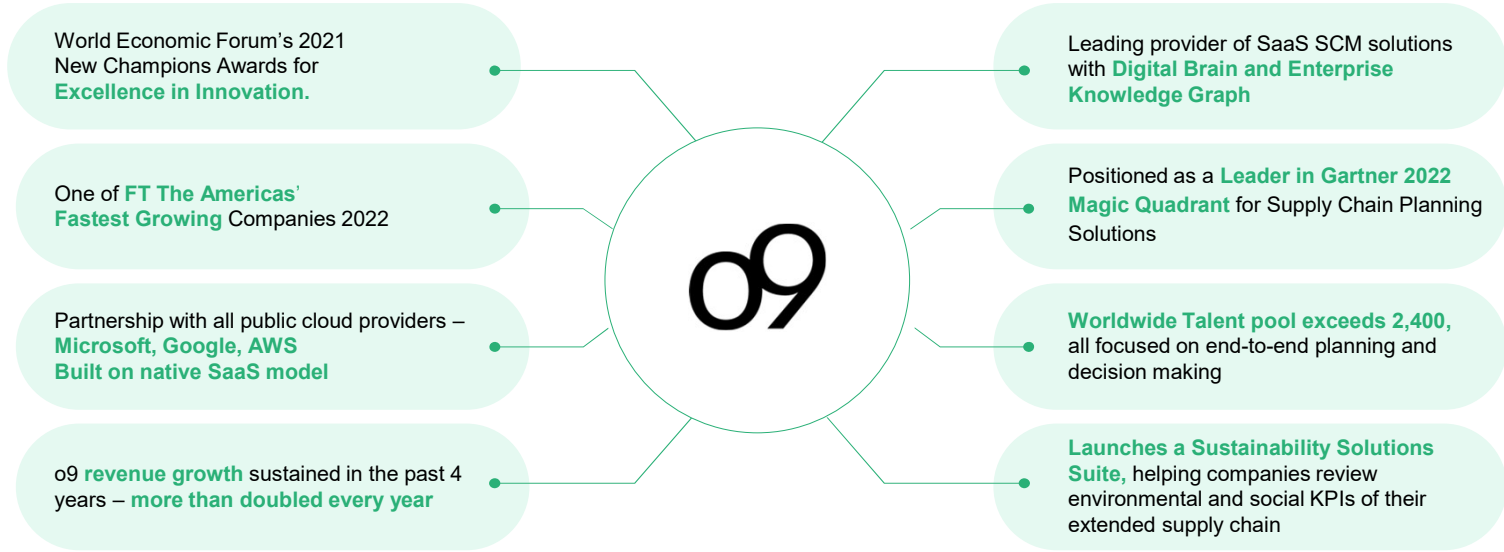
About o9

Who we are



o9's continued diversified growth is a true testament to the power of the o9 Digital Brain platform, which has been built from its inception to fundamentally transform planning and decision making across the enterprise for a wide range of industries, company sizes, and planning use-cases.

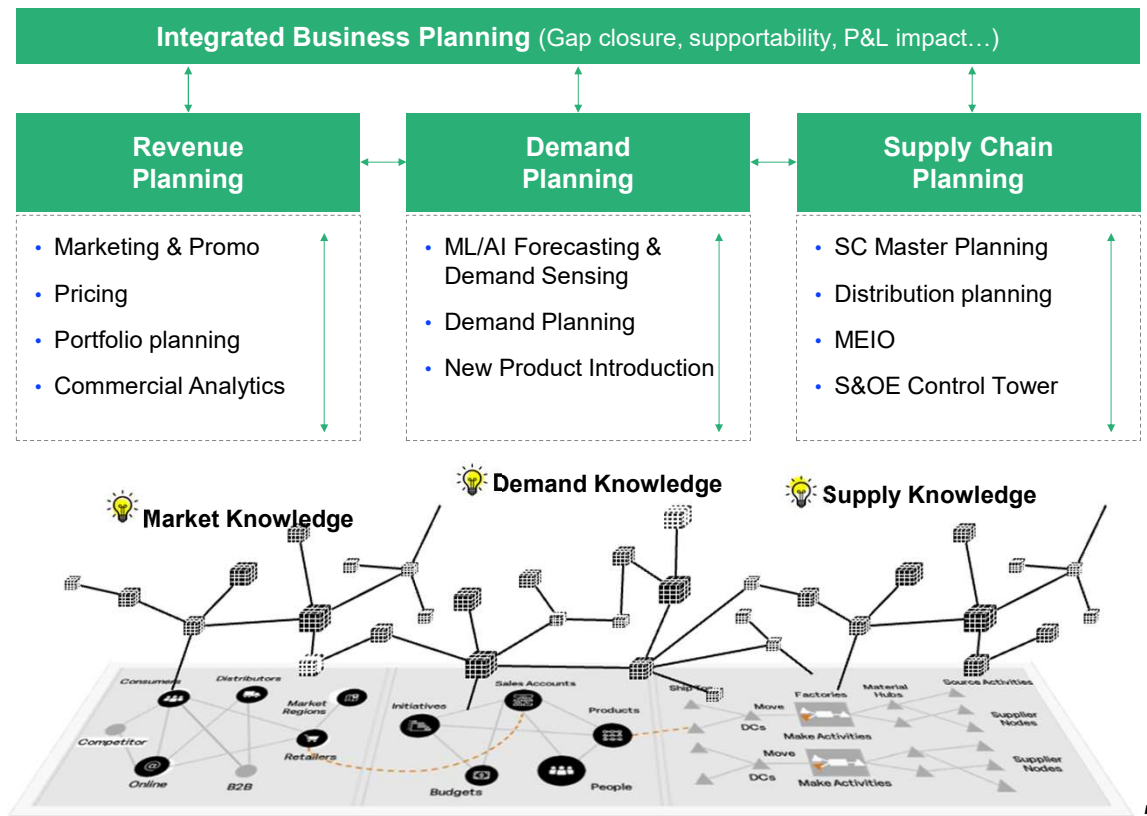
Chakri Gottemukkala
Co-founder and CEO of o9



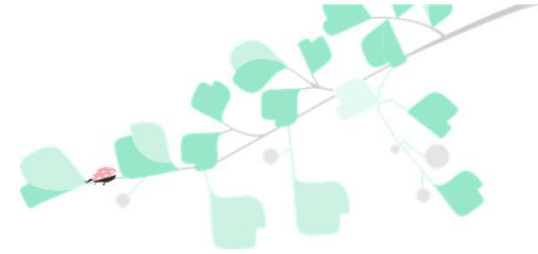
- 2009** (Icon: Person with gear): Founded by Sanjiv Sindhu founder of **i2 Technologies** (pioneer of Advance Planning & Supply chain Software) and Chakri Gottemukkala
- 2014** (Icon: Buildings): **Launched o9 Platform** powering digital transformations at global companies, across industry verticals
- 2020** (Icon: Bar chart with upward arrow): Tremendous growth with KKR minority investment of **\$100M increasing company valuation to \$1B**
- 2022** (Icon: Hand holding coin): General Atlantic, Its **BeyondNetZero Venture**, and Generation Investment Management Join as Investors in o9, **Valuing the Company at \$2.7 Billion with \$295M investment.**

o9 Digital Brain: Next-generation planning & decision-making platform

- > o9 is a next-generation **planning and decision-making** platform...
- > ...supporting **all key planning processes** on one single data model...
- > ...at **any level of granularity**, in a telescopic planning view...
- > ...connecting to **real-time market and enterprise knowledge**...
- > ...achieving **true integration** within and between functions



Industry leaders

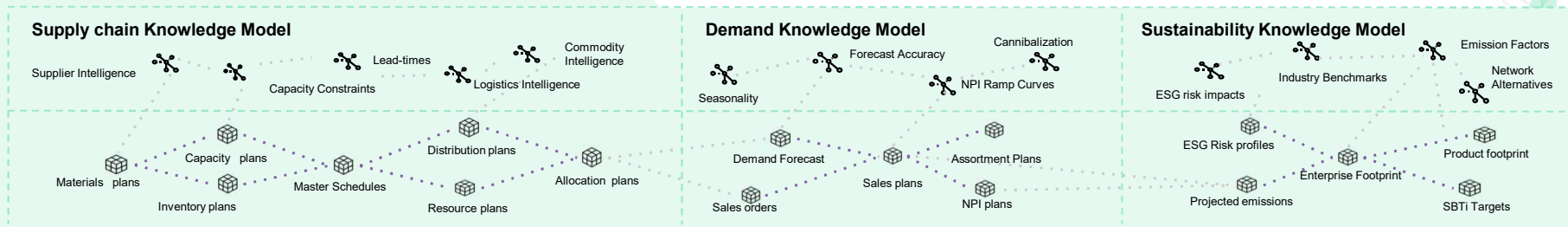


o9's POV

o9's Vision of Sustainable Supply Chains

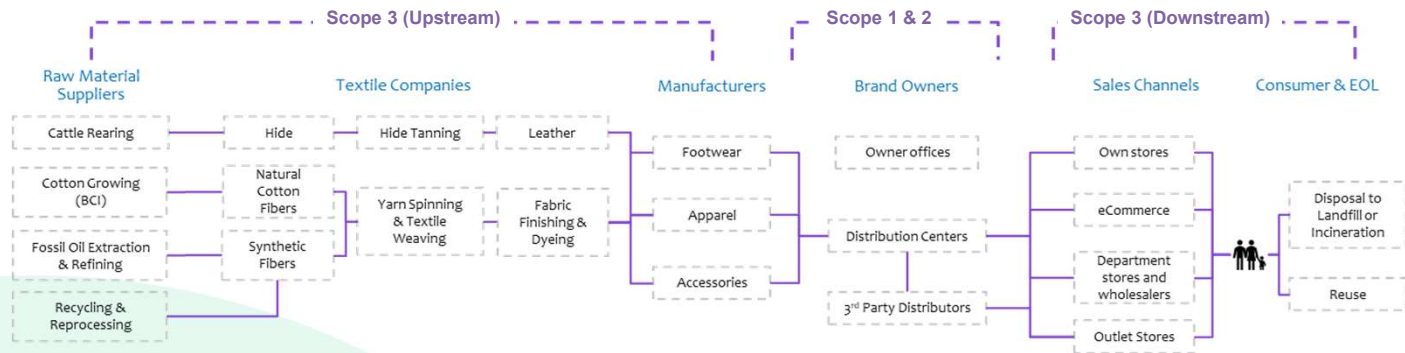
“Organisations with superior decision-making processes are better stewards of the Earth’s precious resources and are more inspiring, happier, places for employees. Making it happen is our mission” – Sanjiv Sidhu Chairman and Co-Founder of o9 Solutions

- **Supply chains** - primary driver of environmental & social impact*
*Scope 3 accounts for 80 percent of overall climate impact (McKinsey, 2020)
- **Supply chain + sustainability** - integral elements of a common process.
- **ESG-enabled supply chain digital twin** - standards-based (ISO, GHG Protocol, GRI, SASB) sustainability attributes, measures, and KPIs
- **Actionable intelligence** - by linking ESG data to forward planning and decision support, companies can effectively drive supply chain KPIs towards a sustainable operating model



o9's Digital Brain Sustainable Supply Chain Transformation Pathway

Fashion & Apparel sustainability context



Compliance / License to Operate

- Introduction of stringent regulatory frameworks such as:
 - Corporate Sustainability Reporting Directive (CSRD)
 - Circular Economy Action Plan (CEAP)
 - Digital Product Passports (DPP)
 - Ecodesign for Sustainable Products
 - Extended Producer Responsibility (EPR)
 - REACH
 - SEC sustainability directive
 - The Corporate Sustainability Due Diligence Directive

Data challenges

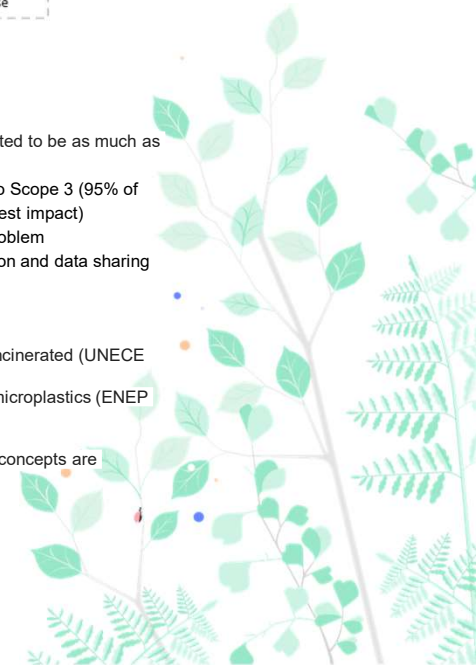
- There is a need for more accurate scope 3 data
 - By consumers, investors and regulators
 - Need of more depth and breadth of data from contract manufacturers and material suppliers
- Most scope 3 or environmental information is coming from 3rd party reference databases, decreasing the accuracy of the data
 - Industry's leading sustainability assessment tool (SAC Higg Index | Worldy) has been called out for providing misleading ESG data to fashion brands
- Low connectivity with suppliers and lack of communication, which makes the acquisition of high-fidelity data difficult
- Low visibility of the upstream tiers of the supply chain, which increases the low accuracy of the environmental data

Environmental & social impact

- GHG emissions associated with the fashion industry are estimated to be as much as 8% of annual global emissions
- Focus has been Scope 1&2 emissions reduction, now shifting to Scope 3 (95% of emissions) via supplier/fabric mill transition to renewables (highest impact)
- Long lead-times & shifting demand → persistent air expedite problem
- Supplier chain transparency & traceability – industry collaboration and data sharing is needed, but hampered by anti-trust issues.

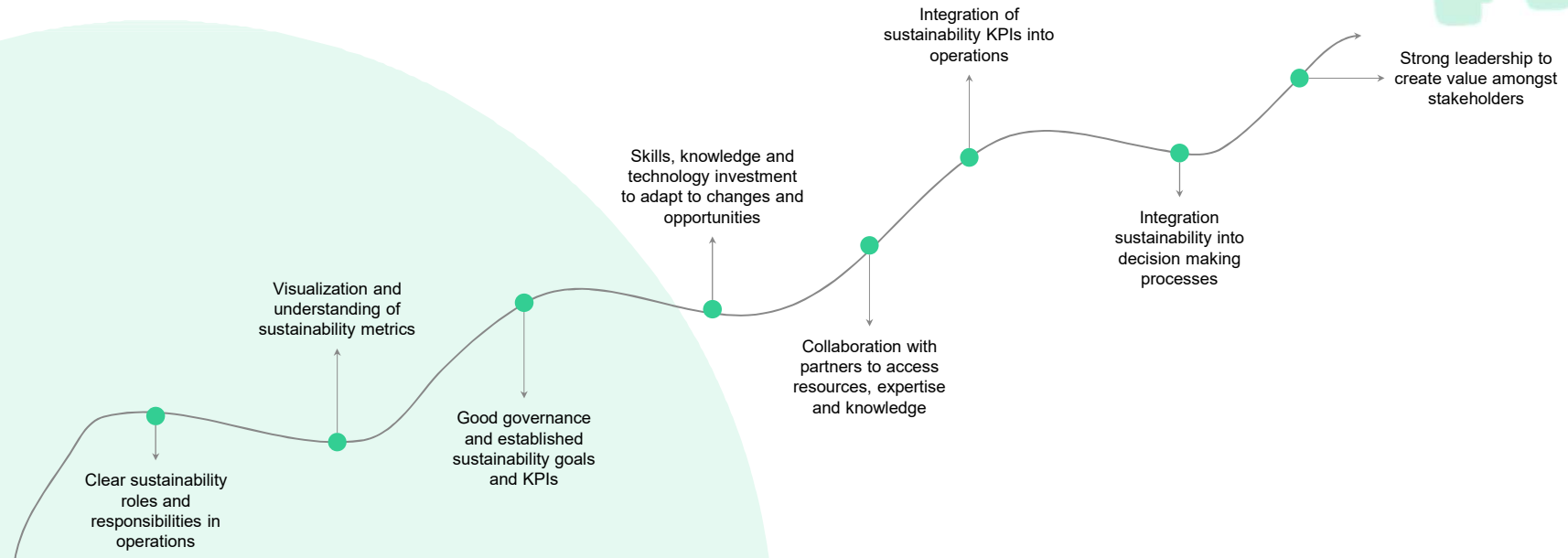
Circular models

- Overbuying drives waste - 85% of textiles go to landfill or are incinerated (UNECE 2018).
- Approx 60% of F&A's raw materials are plastic which become microplastics (ENEP 2019)
- Resell & reuse → closed-loop circularity models
- Lack of understanding (and enablers) of how circular economy concepts are executed in day-to-day core planning

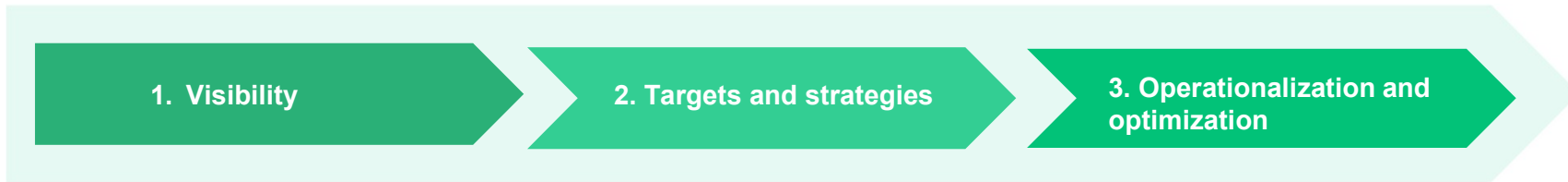


Critical success factors in the path to sustainable supply chain transformation.

For organizations to get started on the path to a more sustainable operating model, it is important to understand what “success” looks like.



Sustainable supply chain transformation journey



1

Industry collaborative framework and systems to share relevant sustainability data

- A collaborative approach where different tiers of the supply chain are involved in a standard approach to share data downstream
- Current frameworks to share carbon footprint data of products can be leveraged (WBCSD Partnership for Carbon Transparency (PACT))
- Identify risks in your multi-tier upstream supply chain
- Trace your raw materials to the source

2

Identify environmental impacts of the value chain through E2E visualization, set targets and mitigation strategies

- Visualize your e2e supply chain and understand what is its sustainability footprint (scope 1,2,3 emissions, ISO 14001 series environmental footprint)
- Set measurable targets and identify hotspots to address reductions
- Track your performance over your targets and understand if you need to restate your focus

3

Operationalize your sustainability actions, embed sustainability KPI into your planning processes to have a systematic view of the impact of your decisions

- Engage your stakeholders in the sustainability journey by embedding sustainability KPIs into your operational and tactical business planning processes
- Identify the sustainability effects of the decisions and actions you take within your supply chain
- Model circularity use cases within your planning capabilities:
 - Reverse logistics capabilities
 - Integrating circularity KPIs into your integrated business planning process

Selected sustainability use cases

Enterprise Footprint

- Scope 1, 2 and 3 emissions
- Data collection process management/tracking, cleansing, harmonization, computations, analytics
- Energy (use by type, renewable/non-renewable)
- Water (withdrawals, discharges, recycled)
- Waste (Hazardous, non-hazardous, recycled)
- Logistics carbon footprint
- Multi-tier visibility / hotspot identification, impact and mitigation analysis

Product Footprint

- Top-down / Bottom-up
- Product ranking by sku, group, category

Transparency / ESG Risk Management

- Risk detection by ESG category
- Risk impact analysis

Supplier collaboration

- Recollect environmental information to understand the supplier's contribution to the company's:
 - Product, corporate or site-level carbon footprint
 - Product environmental impact content
- Identify higher offenders in sustainable KPIs
- Track acquisition of primary data vs secondary data
- Feed information to other systems

Supply Chain Planning

- Network design for shorter lead times, consolidation, co-location
- Analyze impact of alternative utility providers, energy sourcing
- Analyze impact and trade-offs of alternative 3PL providers, logistics equipment, processes, materials and sourcing:
 - Co2e - cost – service level
- Circular material and production workflow planning & scheduling

Demand Planning

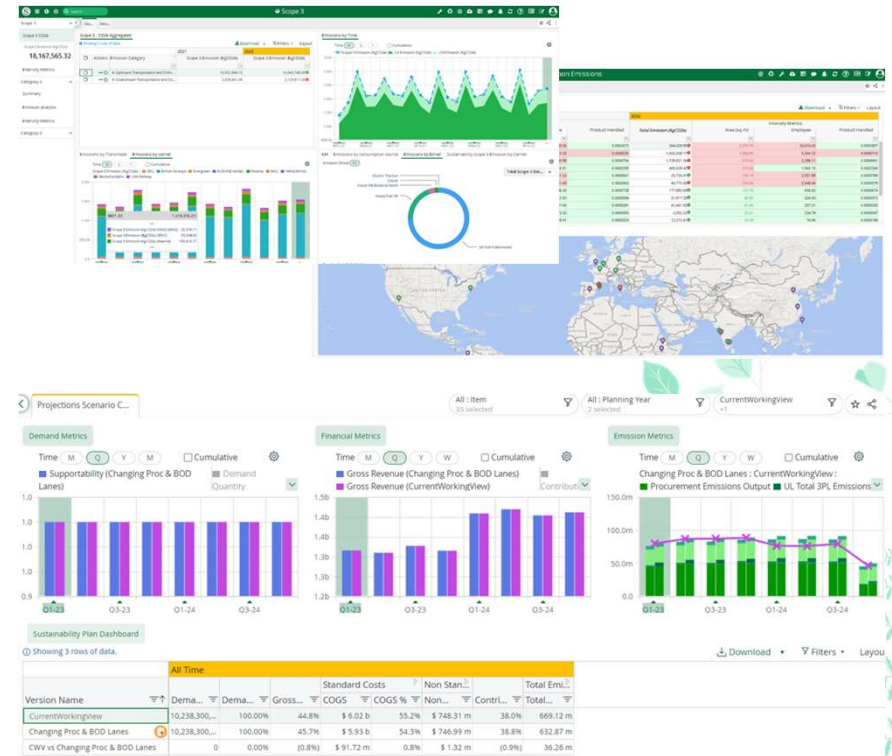
- Forecast GHG/Co2e emissions for product mix scenarios
- Identify product high offenders
- Optimize product portfolio, keep vs leave analytics,
- Analyze trade-offs: price – volume – margin - Co2e

Innovation/NPL

- Forecast Co2 for new products
- Optimize BOMs, sources, etc. prior to launch to meet targets
- Design network for optimal/target Co2e, price points

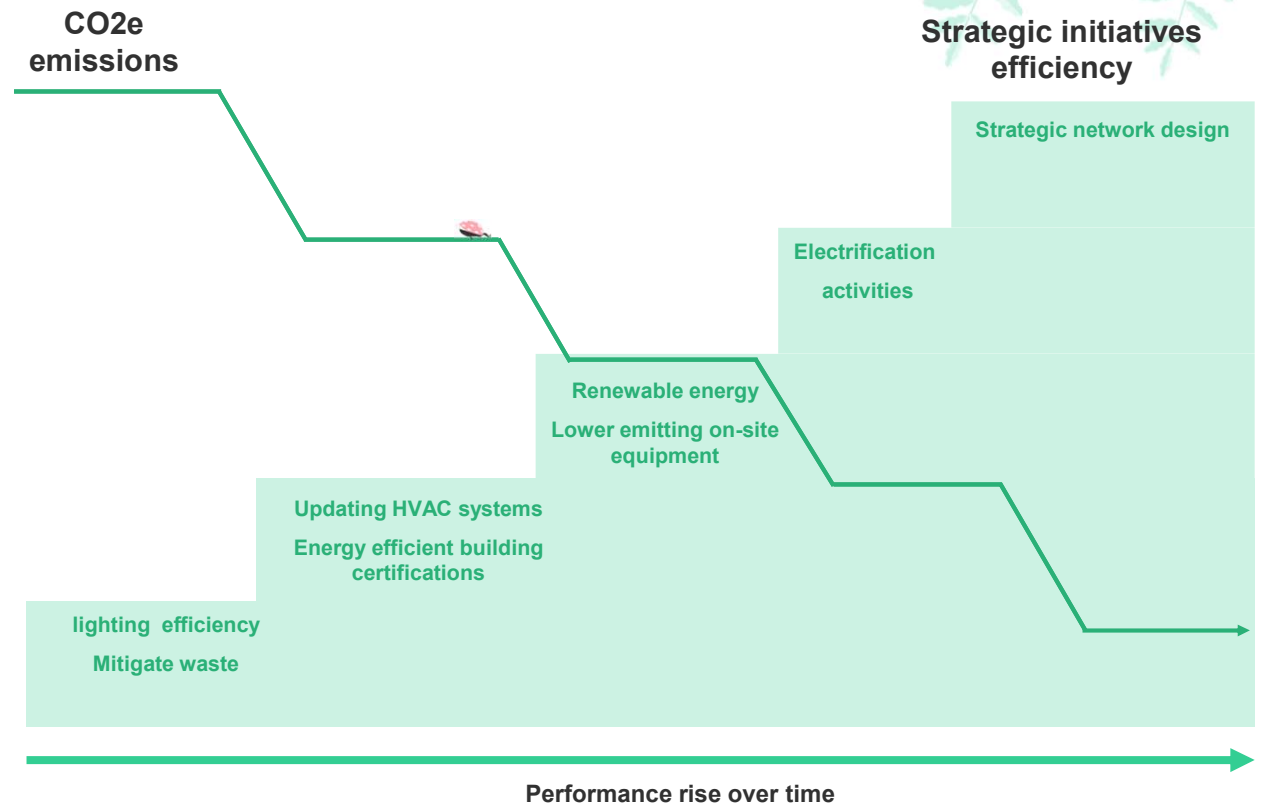
Integrated Business Planning (IBP)

- Co2e target performance, gaps, gap closure - similar to S/D balancing
- Co2e reduction initiatives - ROI, postgame, effectiveness
- Risk and compliance monitoring, corrective initiatives

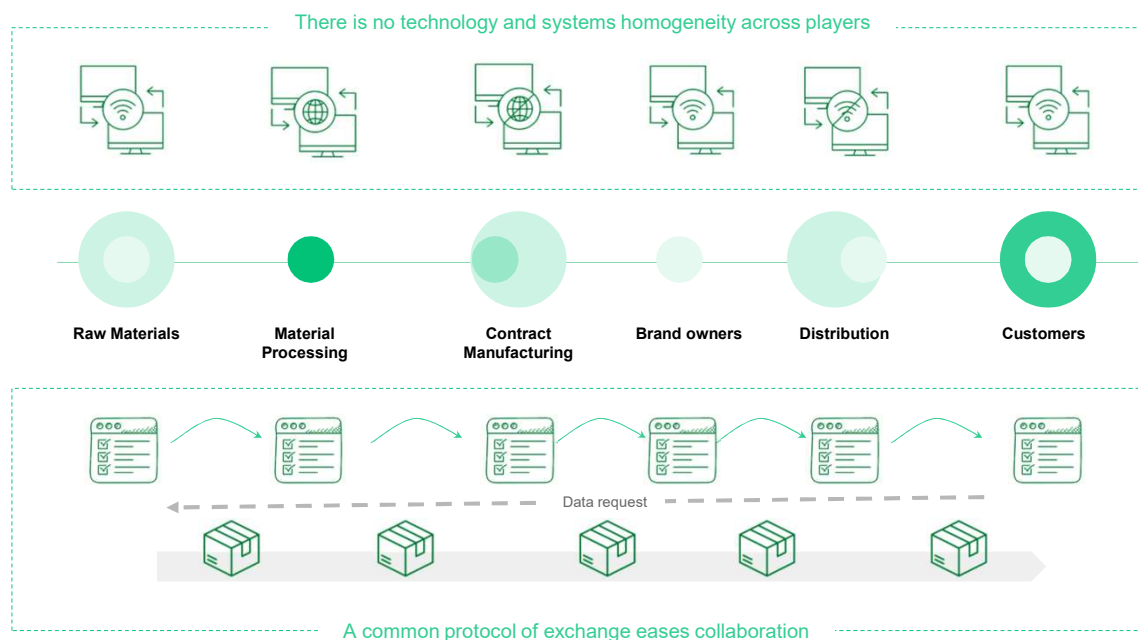


Strategic initiatives support operational success in reducing carbon emissions

- Strategic initiatives promote efficiency in reducing emissions over time
- Operational planning degrees of freedom increase along with strategic efficiency
- Growing the strategic initiative toolbox increases the capability of abatement of the operational plans



Sustainable supply chain transformation is not possible by individual companies acting alone



Benefits

- Improve visibility allowing all the nodes of the supply chain to have a standard view of ESG data across the network
- Increase efficiency streamlining the process for data entry and harmonization
- Increase collaboration between stakeholders of the supply chain since fewer customizations of data requirements are needed
- Reduce risk of errors and inaccuracies

Potential framework

- The Partnership for Carbon Transparency (**PACT**), hosted by the WBCSD is an effort that aims to establish a global methodology and technical infrastructure for primary and verified product-level GHG emission data exchange as well as other sustainable and impact category KPIs

How o9 can facilitate this play

- o9's collaboration capabilities can connect into this network and not only help companies collaborate on supply chain issues but also in the sustainability landscape by streamlining acquisition of data

Q&A

**Thank
you!**