G-Cloud 14

Service Definition - Wipro Sustainable Supply Chain & Logistics Management

Sustainable Supply Chain

Wipro Supply Chain 360

In summary

Supply Chain 360 is an innovative, novel and impactful approach for digital supply chain transformation and innovation

Key features

Technology agnostic and based on the core principles of human centricity, sustainability and supply chain resilience

Leveraging data and A.I. as fundamental enablers of business value generation

Intuitive and rapidly deployable for tangible value generation – through capabilities such as virtualization and digital vision setting

Audience

1. Chief Supply Chain Officers
2. Chief Operating Officers
3. Chief Procurement Officers
4. Digital Transformation Leadership
5. Heads of Finance and Sustainability

The story behind SCM 360

Global supply chain management is undergoing an incredible transformation fueled by changing global dynamics and the exciting possibilities of AI.

This convergence of physical, digital, and human dimensions is driving a paradigm shift. The collaboration between humans and AI will reach new levels of interconnectedness, with human responsibilities shifting towards AI custodianship and "decision engineering."

At Wipro, we've been guiding our clients through the complexities of supply chain transformation in the digital age for many years. We've supported them on their unique transformation pathways, and based on our experiences and successful client transformations, we felt there is a clear business need for an integrated and innovative approach to enable the supply chain of the future.

Our approach is built on core principles of human-centric, resilient, and sustainable supply chains. These principles govern and shape supply chain management in today's world. Around these principles, we weave the dimensions of business value, data, and AI enablement. This powerful fabric connects business performance management with the explosion of information and the innovation of AI and data.

To stay connected to real-world transformational change, we combine virtualization and implementation in an iterative and integrated fashion

Industry context.

SCM convergence is driving significant operational disruption

Convergence of physical, digital, A.I. and human forces - with A.I. becoming part of everyday life and organizational governance openly embracing multi-reality convergence.

- **The collaboration between humans and A.I**. will reach unprecedented levels of interconnectedness - in particular Generative A.I. managing most data and insights-based activities – shifting the human responsibilities into model custodianship and towards 'decision engineering'. This has major change management and operating model implications.
- **Emerging A.I. capabilities** are having an impact on the future of organizational design – moving from historic Centre of Excellence (CoE), Federation of Excellence (FoE) towards anything-of-Excellence (XoE) models
- **Augmented humans** are becoming the new normal, leveraging multi-reality technologies allowing for better immersion into supply chain content and decision making
- **Values & strategic objectives** of Supply Chains are being re-evaluated to align with customer & regulatory expectations for sustainable value generation – often changing underlying business models and business strategies
- **Data, analytics and information processing** will continue to exponentially advance to model, simulate and predict complex behaviors – 'twinning' about everything that can be modelled
- **Physical infrastructure and assets** continue maturing and broadening Sensorisation. Physical object information volumes are expected to exponentially increase – whilst becoming more integrated in M2M connectivity through broader application of open-source standardized communication protocols

The global Artificial intelligence (AI) in Supply Chain and Logistics market size was valued at USD 5,172.68 million in 2022 and is expected to expand at a CAGR of 19.43% during the forecast period, reaching USD 15, 010.88 million by 2028, source: Technology insights Sept 2023

Organizations are facing unprecedented challenges

Today's Supply Chain Leaders[1] struggle to transform their operations - priorities highlight a clear gap between future aspirations and opportunities against the reality of today. Talent is a key concern.

Transformation

"Our legacy debt does not allow any meaningful transformation capacity" ***Supply Chain Technology Lead***

"Whenever we start a project, we face immediate setbacks due to data quality and availability" ***Digital Supply Chain Lead***

"There are too many inter-departmental conflicts to properly address our end-to-end supply chain challenges"

Chief Procurement Officer

Talent

"Key senior talent – knowledgeable in all we do - will soon reach retirement – creating a significant risk to the operation" ***Head of Manufacturing Asset Management***

"I know we have great talent within our organization, but somehow we can't get them to work together on the right things" ***Chief Supply Chain HR Officer***

"Next generation recruits are disillusioned by the lack of sophisticated tooling in managing our supply chain" ***Chief Operations Officer***

Supply Chain operations

"We are dominated by spread-sheet based information management" ***Head of Fulfilment Operations***

"I have lots of great technologies that can prove their value, but we always fail to scale them" ***Supply Chain Innovation Manager***

"Our supply chain is not set up to deliver the agility required by ecommerce" ***Head of Continuous Improvement***

A.I.

"We are under pressure to invest in AI but struggle to develop and fast track high impact use cases"

Chief Technology Officer

"Using AI sounds inevitable, but we need to think through how it will impact skills and how we think about managing talent in the future" ***Chief HR Officer***

"AI will happen that's for sure, but we have so many issues around data quality and connectivity already. These two imperatives go hand-in-hand"

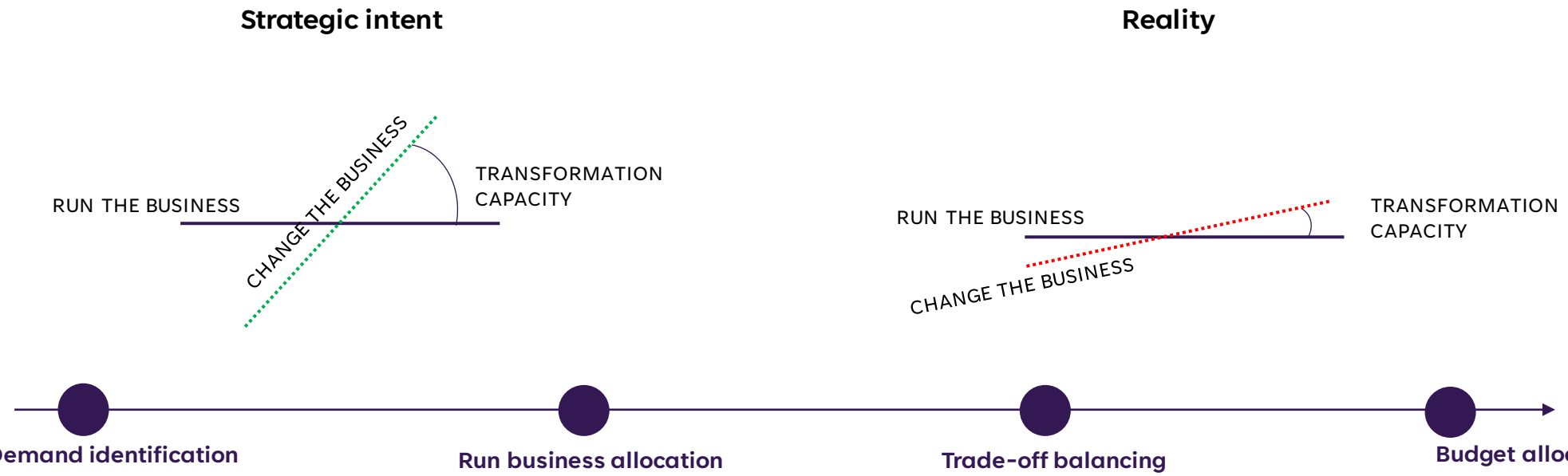
Chief Information Officer

According to Morgan Stanley analysts, AI may be able to totally (or nearly) remove all human touchpoints in the supply chain including 'back office' tasks. Navneet Kapoor, chief technology and information officer at shipping giant Maersk stated that "Generative AI, is a once in a lifetime kind of disruption that's going to happen"

(1) Source: Wipro Client conversations

Legacy constraints impact the capacity for business change

Almost all available resources, budgets and capacity are focusing on running the business – which leads to inadequate capabilities to innovate and transform supply chain operations.



- Identifying new demand & strategic transformation themes
- Defining expected benefits cases and ROI

- Ring-fence legacy upkeep budgets to ensure adequate coverage for 'keeping the lights on'

- Align priorities / business case expectations from both run and change business

- Overall integrated funding proposal (change / run business)
- Agreed operating plan closure

44% of CIOs believe that legacy systems are a major barrier to the growth of the company. Businesses that had modernized legacy technologies improved revenue by up to 14% and boost productivity by up to 40%. (DataScience central, 2022)

How to invest in a fast-paced environment, constrained by reactive budgeting cycles?

The four emerging tiers of the supply chain of the future

Four distinct tiers are continuing to converge through digital connectivity and Sensorisation – with the uppermost tier growth in both scale & impact through advances in A.I.

Human & A.I. decision making

Augmented humans, deeply versed in A.I. lifecycle management and human / machine governance and decision engineering

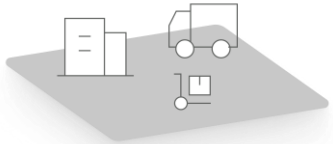
Value & performance management

Real-time value and performance visibility. Shifts in consumer value expectations - reorientation towards sustainability & ethics.

Data, analytics and information processing

Virtualization of anything – creating virtual models of entire markets, internal / external organizational behaviors

Physical infrastructure, asset & products

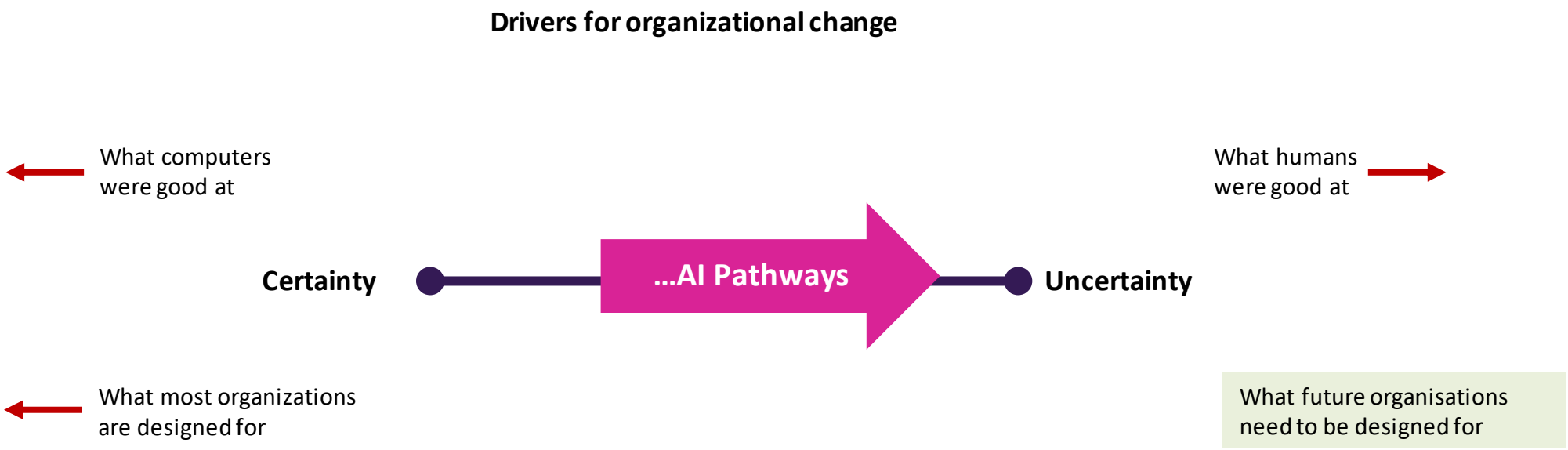


Sensorisation of everything – increasingly leveraging software-defined-anything capabilities

Connectedness of physical objects and real-world behaviors continues to increase at an exponential rate. Broad applicability of open-source communication protocols facilitate 'machine citizen' networks which provide enormous volumes of data for processing into insights, decision making or automation opportunities. The biggest impact is anticipated within the human & A.I integrated operational and decision-making activities serving 'machine customers' (Gartner SCM trends, 2023)

Organizational design for A.I. in Supply Chain

The ability to deal with uncertainty - hitherto the domain of human cognition - is rapidly being supported by advanced technologies. Organizational design is adjusting to adapt to enable the augmented human workforce

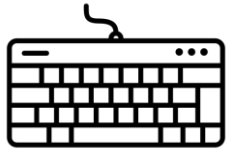


According to Forbes (Aug, 2023) A.I. supported organizations are likely to become flatter as employees more readily gain direct access to critical information and decision-making tools, leading to quicker decisions and greater innovation— essentially an organization is going to move faster – but also AI will disintermediate traditional forms of coordination and control which will require completely new management skills.

Emerging augmented human supply chain workforce

Convergence of multiple technologies like IOT, Digital Twins, GenAI as well as general data and information availability enable an immersive digital realization of multi-reality operations.

Present – 'keying in / extracting / analysing'



Information asynchrony

- Incomplete / assumed information to a large extent
- Tribal tacit knowledgebase usage
- Analysis often biased based on previous exposure

Lagging decision making

- Rarely real-time information usage (volume / availability challenges)
- Decision quality monitoring often several periods behind
- Consensus rather than fact based

Augmented workforce - conversing with an agent

Real-time multi-level integrated

- Always-on connectivity to current information and behaviors
- Pervasive levels of detail available / aggregated at all organizational dimensions

Semantic dialogue enabled

- Asking questions on where to improve – getting detailed opinions
- Implementing improvements using decision engineering
- Using mixed reality to consume information and make decisions

In an MIT experiment (2023) so-called augmented human editors, who were partially enabled through a GenAI capability scored the highest scores on content quality and knowledge, above pure AI generated or pure human generated information (scores based on human judgement – for AI based scoring the highest performing was given to pure AI generated content)

Organizations need to embrace change across boundaries

Convergence of multiple technologies like IOT, Digital Twins, GenAI as well as general data and information availability enable an immersive digital realization of multi-reality operations.

OPERATE SUSTAINABILY

Ensuring supply chain business performance

ENABLE ENTERPRISE AGILITY & CHANGE

Agile digital change

Scaled transformation

LEVERAGE SUPPLY CHAIN INNOVATION

Harnessing the latest in SCM innovations

DRIVE BUSINESS PERFORMANCE

Ensuring supply chain business performance

ENABLING A.I. AS STRATEGIC CAPASBILITY

Designing SCM around A.I. capabilities

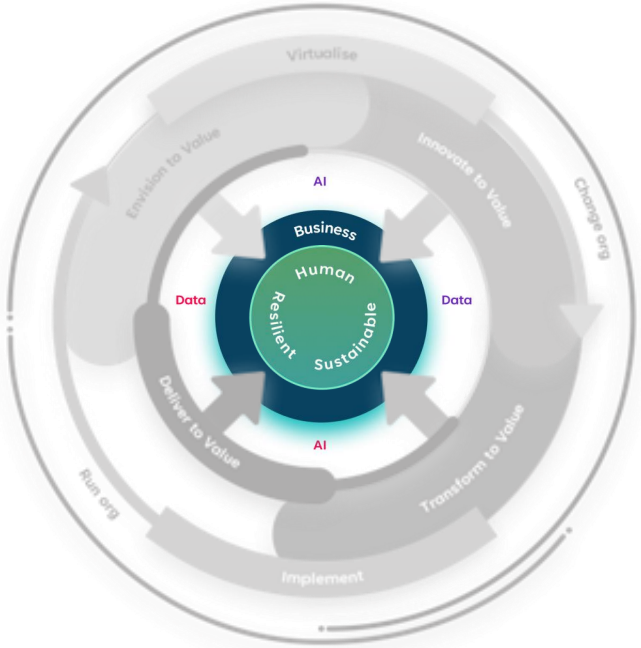
How to define your vision of tomorrow’s supply chain and realistically turn it into innovation and scalable transformation?


wipro
Supply
Chain 360.

Wipro Supply Chain 360 – overview

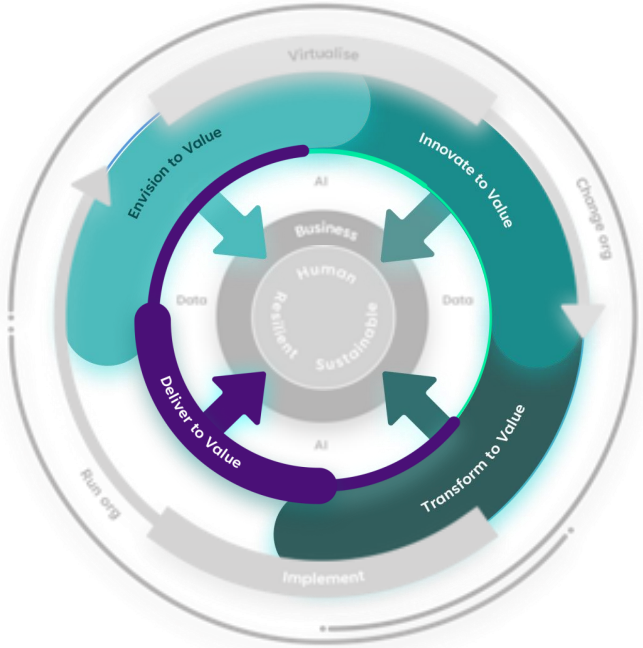
Supply Chain 360 is centered on the core design principles of a human, resilient and sustainable supply chain - enabled by business value, data and A.I.

Strategic



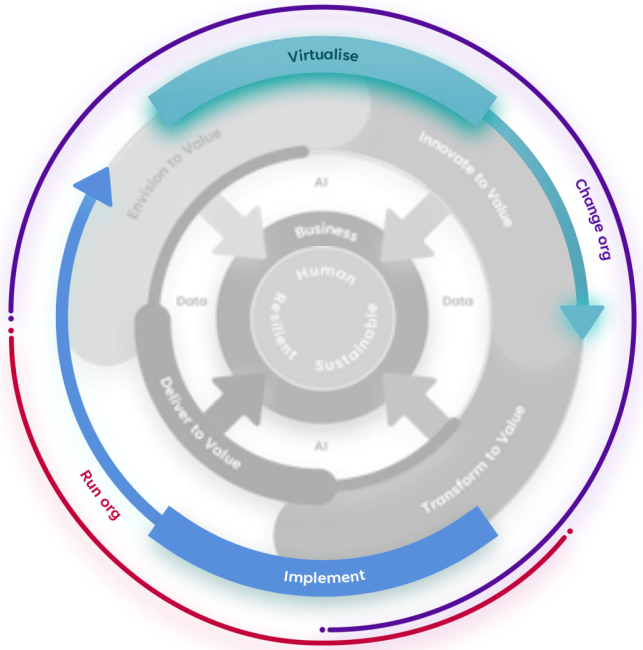
- Human-centric
- Sustainable
- Resilient
- Business value focused
- Enabled by data & A.I.

Transformative



- Envision and innovation
- Innovation-driven transformation
- Delivering the identified business value

Innovative



- Virtualization and experimentation driven implementation
- Focus on change over run

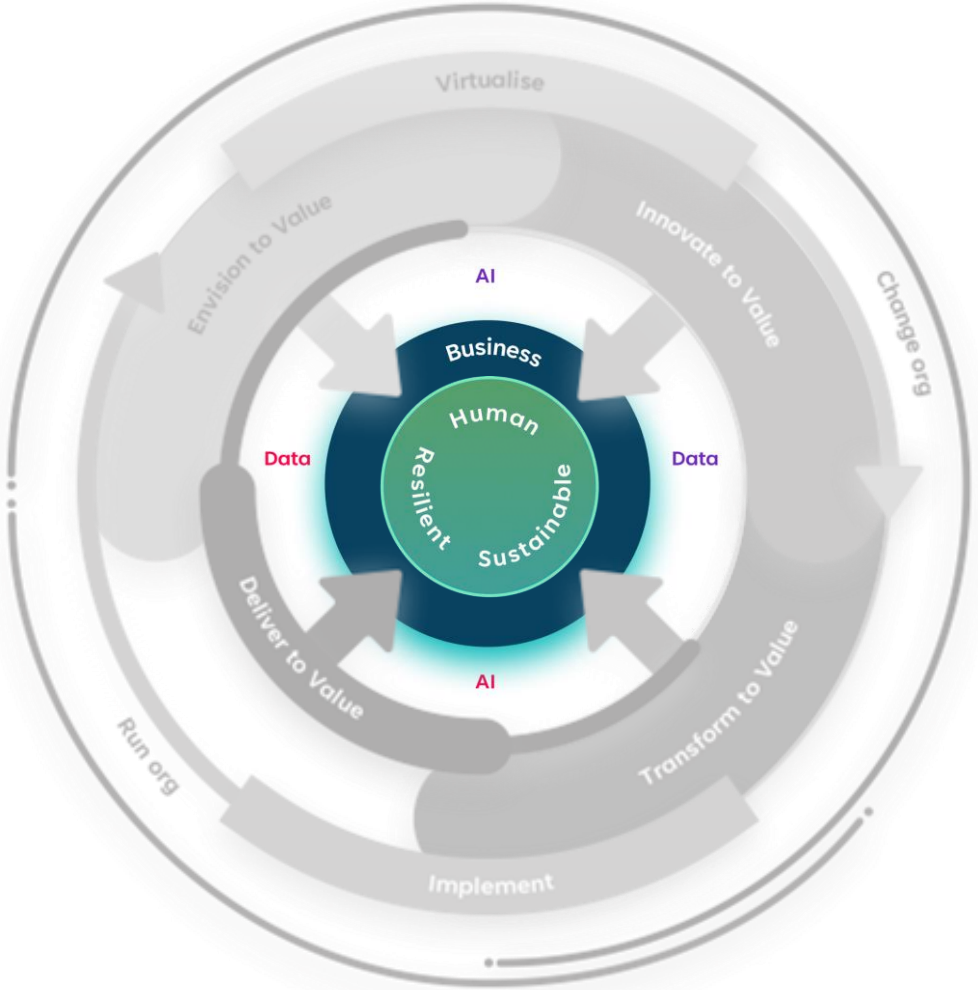
Wipro Supply Chain 360 – core principles

Supply Chain 360 is centered on the core design principles of a human, resilient and sustainable supply chain - enabled by business value, data and A.I.

Human
Human-centricity for customers and supply chain providing organization

Resilient
Risk-avoiding, intelligent and compliant to risk and regulatory environments

Sustainable
Aligned with environmental, social and governance objectives and related customer expectations



Business
Business-value centric and aligned to market demands and economic dynamics

Data
Enabled by closed-loop data availability and transparency

A.I.
Designed around A.I. as a key strategic performance enabler

Supply Chain 360 – key evolution stages

Supply Chain 360 is enabled through four key stages – starting with vision setting and innovation to enabling transformation and ultimate benefits delivery.

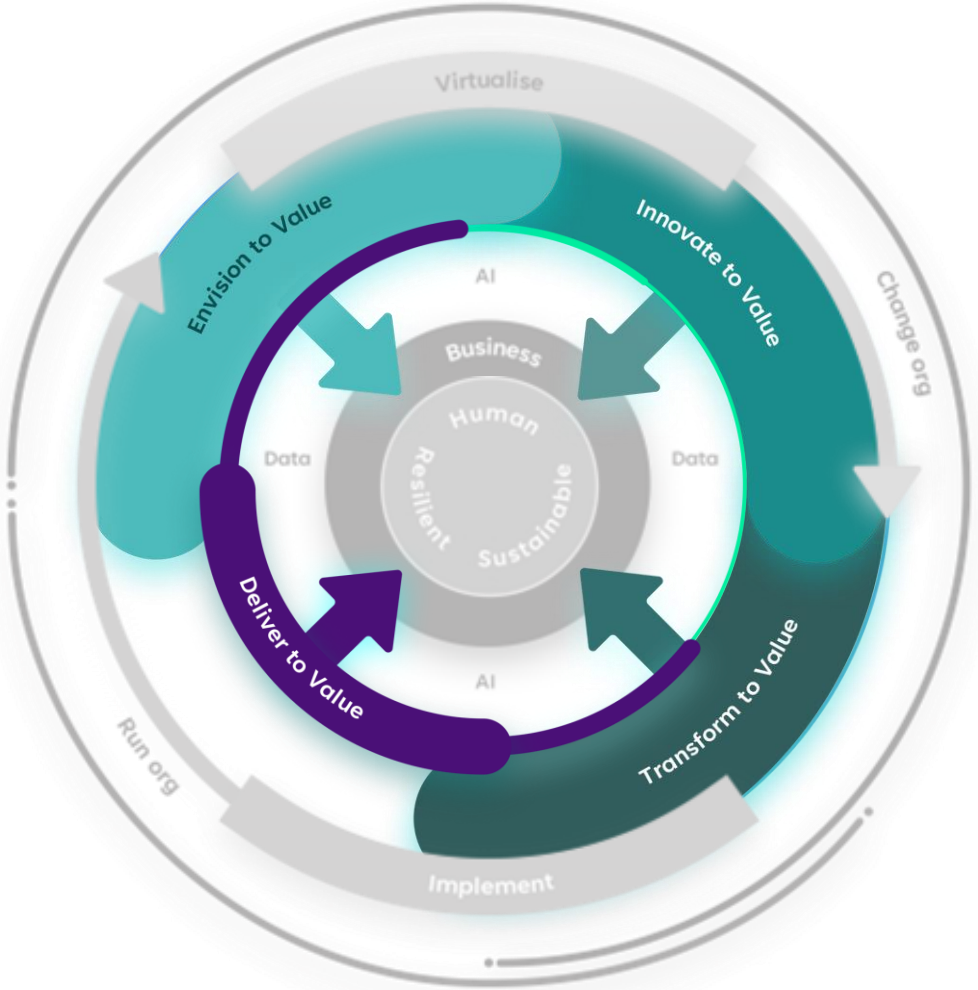
Envision to value

Identify key shifts and disruptive innovators

Assess org readiness

Develop scenarios

Run business case simulations across multiple value dimensions



Innovate to value

Driving innovation funnel conversion

Rapid evaluation and scaling of disruptive ideas and scenarios

Preparation for scale

Deliver to value

Running improved operations & realize identified business benefits

Unlocking budgets for onward transformation

Transform to value

Enabling the workforce to scale innovation

Driving full-scale organizational transformation

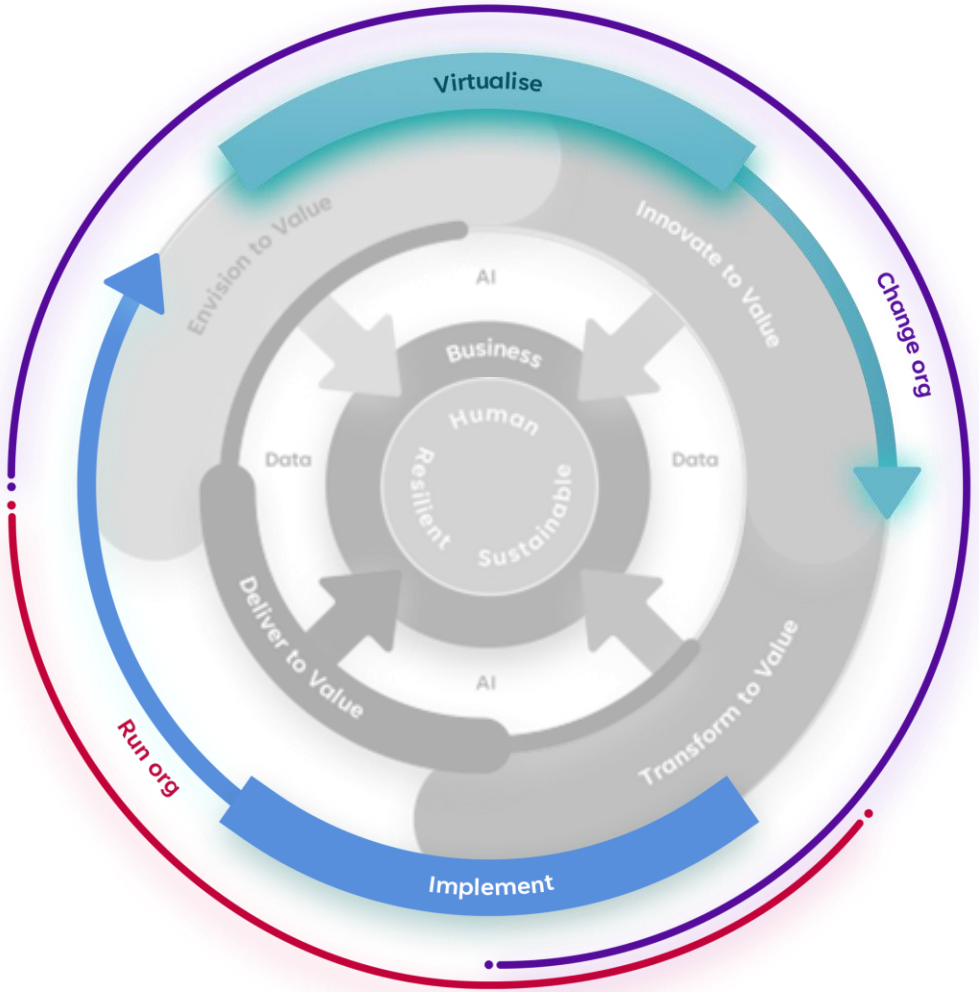
Supply Chain 360 – virtualization and implementation

Advances in virtualization and A.I. enable rapid prototyping and experimentation before scaled implementation – the Change organization being the main player in the iterative approach

Virtualize
Creating a detailed virtual representation of all or a part of your supply chain

Using virtual models to evaluate, experiment, test and refine ideas and concepts

Implement
Translate a virtualization into a scaled transformation to the broader organization



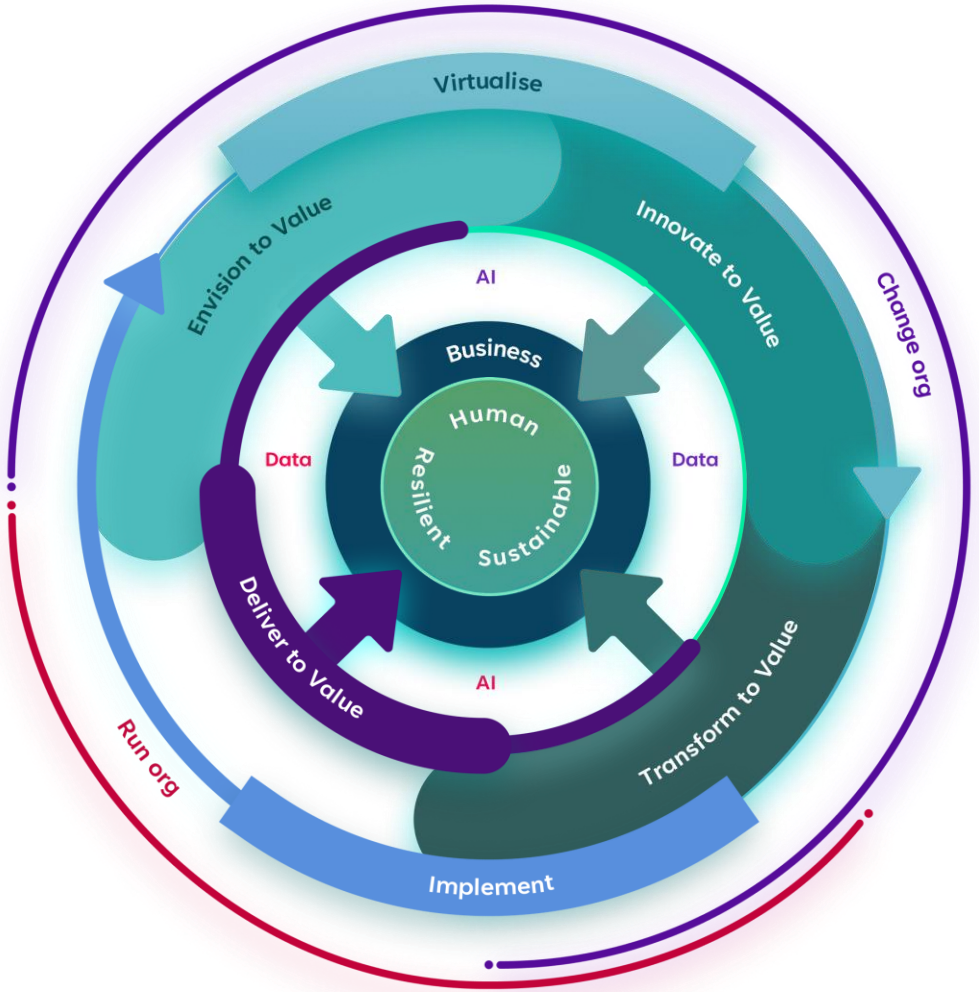
Change organization
Resources and capacity aimed at changing current operations

Agile business transformation enablement

Run organization
Executing operations in improved ways – driving volume and consistency in daily management

Supply Chain 360 - overall capability

Across different dimensions our Supply Chain 360 framework addresses a wide range of capabilities including Human & A.I. centricity, digital transformation and how to drive vision to business outcomes.



LOGITX: Excellence in Logistics Management

Successful management of logistics has never been more critical than in today's volatile markets

Successful management of logistics and distribution is one of the most complex operational challenges for even the most professional organizations. In addition, recent pandemic related factors and geopolitical events have increased complexities and risks to unprecedented levels

Logistics is a critical cost driver for most organizations

- Organisations spend 8 – 12% of sales on their logistics
- Freight procurement directly impacts your ability to serve your customers and recognise revenue
- Is a critical value lever to manage event risks and improve supply chain resilience

Logistics source-to-settle is complex and difficult to govern

- Source-to-pay operations for a multitude of carriers, geographies, modes and different contract terms tend to be highly complexity in freight procurement
- Cost leakage is commonly observed through inaccurate transport planning , low visibility on freight agreements terms, absent spend control processes, rate and volume variances, inadequate tools to analyze

Logistics performance directly impacts revenues & emissions

- Performance of logistics suppliers directly impacts customer service and revenue recognition / billing operations
- Transport optimisation represents one of the biggest opportunity for emission reduction in most organizations

Logit-X combines deep data analytics, subject matter expertise and digital transformation to achieve rapid value unlocking

Logit-X leverages a unique combination of industry expertise, impactful analytics and digital transformation approaches to rapidly identify quantified opportunities and value realization strategies

- Market leading assessment, analytics and simulation models
- Deep logistics & procurement experience and Industry Experts
- Proven business transformation templates and digital roadmaps
- Innovative pricing related to value realization and opportunity unlocking such as gain-sharing and success fees

Shipments

Sales Orders

Invoices

Supplier Contracts

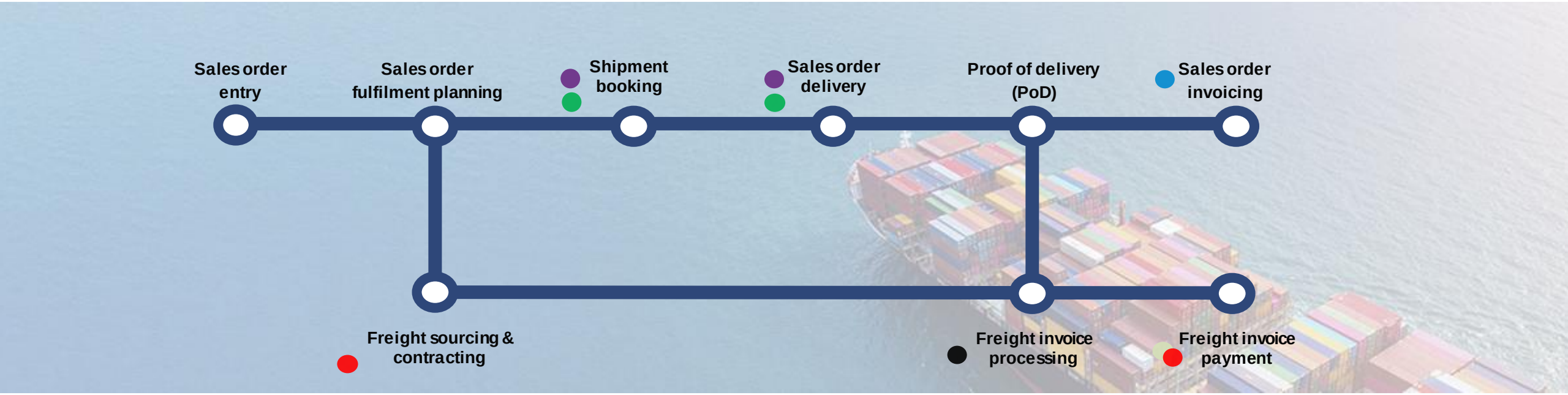
Algorithms

Rapid operational cost savings / contract leakage avoidance	3-8% Opex reduction[1]
Enhanced delivery visibility, revenue realisation and cash collection	2-4 DIO reduction an cash acceleration[1]
Optimised working capital for payables	3-8% improvement in payables working capital[1]
Enhanced logistics sustainability	Up to 30% CO_2 reduction[2]

1 Wipro engagement experience
2 McKinsey research

Logit-X focuses on key steps in sales order fulfilment and related supplier management operations

Logit-X is based on a closed-loop analytics model covering transactions from sales order entry to freight invoice payment and proof of delivery (PoD). A series of focused analytical models identify opportunities across a combination of business drivers: Opex reduction, working capital reduction, revenue acceleration and emissions reduction



Opex

Working capital Inventory

Emissions

Working capital payables

Revenue

Logit-X provides detailed quantified opportunity identification across multiple business benefit dimensions

Illustrative examples of detailed opportunity evaluation areas by benefits lever including. Particular focus is given on inter-dependencies and cross-functional transformation potential between these dimensions

Opex	Are your logistics contracts adequately set for volumes, is contract utilization as planned?	Are you paying the rates you negotiated? How are unplanned charges managed?	How much logistics is procured in the open spot-market?
Working capital payables	Do you have clear confirmation of a logistics service completion before paying for it?	Do you pay in alignment with negotiated terms?	Are sufficient control mechanisms in place to block duplicate shipments being invoiced?
Working capital Inventory	Can transportation times be reduced to lower goods-in-transit inventories?	Are you in control of stocks managed by third party logistics providers?	Does reverse logistics affect your balance sheet with unplanned asset spikes?
Revenue	Is the performance of your logistics service provider impacting your sales and order promising success rate?	Do you obtain proof of delivery (POD) on shipments timely to avoid unbilled revenue building up?	Is the performance of your logistics service provider impacting your sales order delivery / revenue recognition?
Emissions	What is your current logistics emissions baseline? Where are areas to improve this?	Is sustainability a consideration in transportation planning?	Does your logistics sourcing strategy sufficiently leverage sustainability objectives?

Our data-driven approach drives rapid opportunity evaluation and benefits realisation through digital transformation

Logit-X uses a simple approach to rapidly evolve diagnostic / discovery activities into tangible quantified opportunities which are then evaluated to create a digital transformation roadmap for benefits realisation

Thank you.

Kindly contact us at the following Wipro email id for any further information and engagement related details.

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