





# LIVE SUPPLY CHAINS:

Resilient. Future Ready





For too long, companies have chosen a 'one-time strategy and long term implementation' approach to model their supply chains. Months of collecting data, more months spent modeling it and then some more months implementing the technology to power the supply chain. This is not only time-consuming but rigid and inflexible as well. Today - in a volatile environment with evolving customer needs, new partnerships budding every day and proliferating competition -

adapting quickly to the disruption with supply chain networks that efficiently flex with market needs is critical.

Most supply chains are well-prepared for supporting businesses running at current course. They are also well-geared

What's hard for them to tackle is long term uncertainty, because the pressures of the short term are so all-consuming, and often the disruption gets underplayed, even misjudged. That's one of the reasons the pandemic is wreaking havoc on enterprises, and the need for resilient supply chains has become so urgent.

Being resilient means being able to respond to disruption, and other market signals, effectively without stepping off the treadmill of continually escalating core business performance expectations.

At Infosys, when we took on the challenge of bringing the benefits of resilience for ourselves and our clients, we looked to natural life for inspiration. Living beings are often seen quickly recognizing situations

that need their response, responding to these situations with precision, and also going further to evolve and build new that better position them to thrive. This is a combination of evolutionary, historic and real-time information processing, relying on best practices while also recognizing exceptions.

Infosys Digital Supply Chain, part of Infosys Cobalt, is investing in helping clients adopt strategies and technology to build their resilient Live Supply Chains.

Ability to sense, reason and respond to changes in supply and demand caused by internal and external factors are quintessential to thrive and grow as living organism do.

Live Supply Chains are characterized by the following traits that differentiate them from

dying or dead supply chains.

#### Supply Chains are "thinking" now:

Our Live Supply Chains are built on a sixlayered architecture that harnesses cloudnative ecosystems and is energized by sentient services and data-driven insights.

"Digital brain' is at the core of the solution, solving tough business challenges in the supply chain like demand sensing, forecasting, plant changeover, workload optimization, order picking in stores, dynamic pricing, inventory balancing in store clusters, optimizing transportation to provide special delivery services like curbside pickup, and ship to home using a host of logistics operators for first and last mile delivery.

We ensure the architecture offers a firm foundation that is scalable, responsive, fast to deploy and **live by design.** 

#### **End-to-end Responsiveness:**

Infosys Digital Supply Chain offerings, part of Infosys Cobalt cover the entire spectrum from strategic consulting and advisory, domain-specific consulting, supply chain network design and optimization to implementation of COTS (commercial-off-the-shelf) and non-COTS solutions. This means our customers can expect us to deliver an end-to-end solution to address their diverse supply chain needs.

For technology led-offerings, we cover digital roadmap recommendations, architectural evaluation, cloud hosting (lift & shift, SaaS) and cloud-native + cloud-neutral IOT solutions that are powered by



AI/ML and Deep Learning. But perhaps the biggest benefit we bring to customers is that we have a deep understanding of every critical component of their operations.

Working with operations and production teams we can help identify components that are sourced from high-risk areas and those that lack ready substitutes. We also gain understanding of the risks of interruption from tier-two and onward suppliers. We supplement this with outside-in analysis, using rich and diverse data sources, to develop holistic risk assessment and action plans to ensure responsiveness and resilience in agile cycles of rapid adaptation.

### Nurturing a Re-skilled Talent Pool:

We help our customers reskill talent to create pools of problem-finders to find the right problems that must be solved for supply chains of the future.

After all, if a task – however complex – can

be mechanically defined, we can build AI systems to execute it. But problem-finding, while leveraging digital systems, remains a human frontier. And can only be fostered with lifelong learning.

#### **Delivering Perceptive Experiences:**

The supply chain can come under stress with increase or decrease in demand for particular products, making the estimation of realistic last mile customer demand harder and at the same time non-negotiable. We help our clients evaluate demand signals in the context of underlying uncertainties in the forecast.

In times of crisis like we are experiencing right now, we help them, wherever feasible, orchestrate the supply chain to make orders smaller and more frequent, while negotiating more flexibility into supplier contracts to improve outcomes for all supply chain participants and finally deliver valuable and relevant service experiences for end customers.

This also results in the relative smoothing out of the peaks and troughs that are often responsible for escalation of costs and wastage.

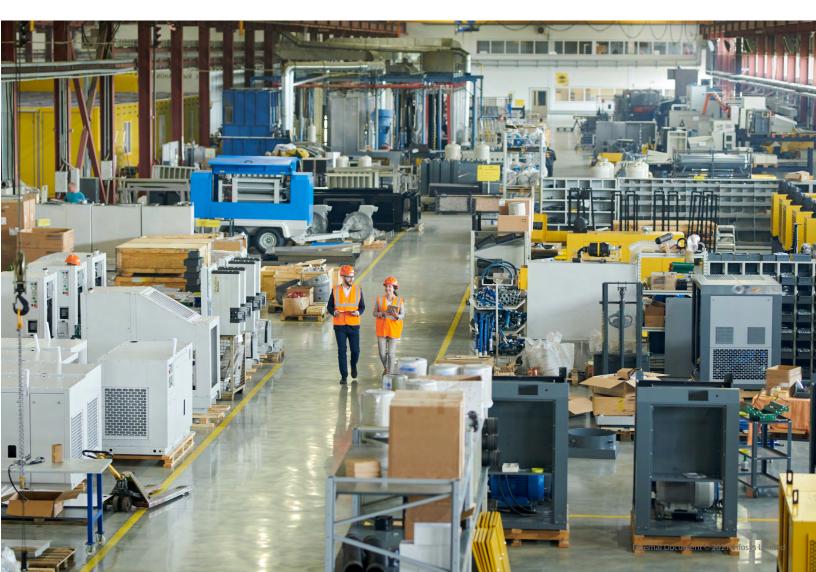
## Rise of Algorithmic Organizations

With decades of experience in digital transformation, Infosys believes in the future of algorithmic organization built around purposeful ecosystems with an all-inclusive workforce that can take advantage of the emerging technologies including open source Al/ML solutions.

Here are chosen case examples of how our clients are "institutionalizing AI".

Manufacturing clients across industrial, automotive and aerospace have started their journey to embrace cognitive computing and data sciences in a big way.

Rise of microservices based "intelligent extensions" to COTS solutions are mainstream. Solutions like Order Sourcing & Fulfillment Optimizers, Advanced Load



Building Apps, Global Inventory Visibility in Real-time, Curbside Pickup and Integrated Delivery Services including First and Last Mile solutions are few of the many examples of whitespace applications specific to Retail industry.

Recently, a consumer product who operates plants in 30 countries realized millions of dollars in cash flow and operating cost savings using AI/ML and Deep Learning models by improving their demand forecasting for their MTS (make-to-stock) and MTO (make-to-order) products. These solutions were deployed as-aservice in 8 weeks, start-to-finish.

Predicting market for carrier rates and available capacity in specific lanes is a ripe candidate for AI/ML and Supply Chain predictive analytics in logistics and transportation industry. Clients can improve their win rates by 2% to 5% using auto-bidding capabilities further.

Robotics Process Automation (RPA) and Voice-enabled AI are improving customer services and enabling man-machine process for hyper-automation in industries such as brokerage. Our 3PL (third party logistics) client has transformed their enterprise in less than 200 days to a cognitive sciences-led operation.

In the Automotive and Aerospace industries, clients are adopting Live Supply Chain solutions to improve their demand forecast for their Aftermarket Spare Parts using internal and external indices such as promotions, seasonality, macro-economic factors and impact from Covid-19 disruptions to their supply chains.

**Touchless and Contactless business** requirements for operations to continue serving their customers have created an environment for API led, light and fast collaborations within supply chain partnering and implementation of control towers to gain visibility and to ensure trade compliance.

A host of AI/ML powered solutions have seen marked growth in areas of Intelligent Invoicing, Preemptive Claims and Dispute Management and enforcing Smart Contracts. We have projects that have Blockchain at its core ranging from B2B for trade compliance to achieving traceability in Food Supply Chains.

At Infosys, we were quick to take on this challenge to create resilience and responsiveness by looking at nature and life for inspiration.

Living beings are often seen to promptly recognize changes and build a response system that's based on experience and the natural intuition to prevail. We have validated our hypothesis and believe that companies can be life-like, responsive and evolving at enterprise scale.

This belief is at the core of our philosophy that fuels the "Infosys Live Enterprise Suite", part of Infosys Cobalt, of digital solutions across Retail/CPG, Manufacturing, Logistics and a list of growing industries.

Infosys Cobalt is a set of services, solutions and platforms for enterprises to accelerate their cloud journey. It offers over 14,000 cloud assets, over 200 industry cloud solution blueprints and a thriving community of cloud business and technology practitioners to drive increased business value. With Infosys Cobalt, regulatory and security compliance, along with technical and financial governance comes baked into every solution delivered.

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