

# The Magazine for Supply Chain Executives

**APRIL 2021** 

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# How many critical capability boxes can you check?



# Is there a Real-Time Single Version of the Truth (SVOT)?

Otherwise it's impossible to optimize. Without SVOT, you'll be limited to sub-optimal solutions based on guesswork and stale data. A Control Tower needs to surface the critical facts as they stand now, so that you can make effective decisions based on fact, optimize based on actual resources and constraints, and respond to potential problems early, before things get critical and costly.



## Is the Visibility Truly End-to-End?

Across your entire supply network and every business partner. It's required to optimize operations across all customers, not just one.



# Can You Plan and Execute in One Platform?

Essential in today's environment that has turned planning on its head. When past trends are no longer a good predictor of future demand, you need to ensure an agile response regardless of what the future holds. You'll need a way to incrementally plan and execute all day long.



# Does it Enable Autonomous Supply Chain Management and Optimization?

Automate routine tasks and apply intelligent agent technology for more complex optimization, attaining Level 4 autonomous capabilities.



# Are Alerts, Prescriptive Analytics and Decision-Making Real-Time?

Solve problems in real time with predictive and prescriptive analytics. Identify and solve problems early, when you still have many options, and optimize at the network level rather than one-issue in one-silo, at a time.



# Can You Perform Global Demand-Supply Matching?

Consolidate all demand across all channels, and view every source of supply for continuous demand and supply matching to optimize service levels and costs.



## Is it a Hub-to-Hub Network Model?

This is vital. The architecture matters as it enables or inhibits every transaction and process in your Control Tower. Point-to-point integrations are costly to maintain, inefficient, and not scalable. You need a multi-enterprise, many-to-many business network across multiple supply chain functions and trading partners.

# One Network 's Control Tower checks all the boxes.

Learn more at: www.onenetwork.com







## FROM THE EDITOR

# .....with Q1 2021 over, what do we expect moving forward.....

Dear Readers,

As we start Q2 2021, April is always a very important month of the year. It is the month when deep reflections take place. Analysing Q1 results is the obvious one, detailed reviews of product order books and customer backlog orders. But April is more than that.

We are testing assumptions on which financials for the year are prepared. Re-validating budgets and forecasts made in Q4 of the previous year. Evaluating customers' new outlook and evolving market conditions. It's also employee appraisals time and payments of incentives. There is a lot going on in the best of times.

But in April 2021, the landscape is even more challenging than usual. Business activity is seemingly ramping-up but it is not business as usual. Whilst demand is challenging many manufacturers to meet their customers' requirements, the reality is that suppliers are now short of capacity to meet these customer demands. And why is this so?

The gaps emerging between demand and supply, are creating new paradigm shifts. Booking demand and aligning capacity used to be part of a normal business transaction—pay on delivery of goods. But now a new trend, seems require payment for booking demand—a new condition?

These realities are taking shape in some sectors of the semiconductor industry. An industry that is known to give advance signals of economic upturns and downturns. This has a major impact on logistics, supply chain providers, carriers and the huge knock-on effect on their customers. The most dominant customers are the well-known tech giants of mobile equipment, but other sectors are also raising high demands.

But the big questions many ask is what is driving such robust demand and which industries are gobbling up the supplies? Is the consumer segment more dominant or is there something else that is driving the big demand? The automotive sector has awakened after months of being dormant, but also industrials have shown strong demand.

Are we finally seeing a strong response to a renewed interest in Industry 4.0? With Industry 4.0 laden with technological applications that demand components, systems, hardware for robotics and clean energy applications—power cells, distribution systems, and low-cost energy solutions.

Whatever the reasons for the surge, there will be renewed issues of visibility, tracking, cost of logistics, capacity and people—looks like the rest of 2021 will be a very action packed year!

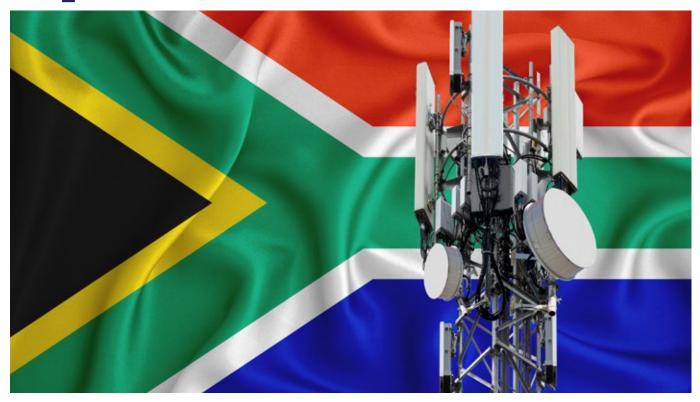
This edition has several great feature articles and opinion editorials on varied industry issues. We hope that you will find them informative and interesting. I would also like to thank all those who have put pen-to-paper to share with us their insights and experience.

As usual I look forward to receiving your feedback at info@lscms.com and even publishing an article of yours.

Meanwhile take care and stay safe!

Joe Lombardo International Editor info@lscms.org

# Africa's Largest Provider MTN Upgrades Supply Chain With Imperial & One Network



MTN, the largest mobile network provider in Africa and ninth largest worldwide, with over 270 million subscribers, has awarded Imperial the contract for an optimal handset demand, supply planning, and balancing process that is aligned to best practices for mobile telecommunications network providers using One Network's NEO platform.

The scoping phase of the contract commenced at the end of 2020 and full implementation is expected to occur in the second quarter of 2021.

"Creating and implementing this solution for MTN in South Africa aims to improve operational efficiency by driving improved product availability and customer service whilst reducing excess

inventory and product obsolescence," says Cobus Rossouw, Executive Vice President: Digital & IT at Imperial. "Providing a robust, autonomous, analytical capability to manage handset demand and supply means better forecasting and a more comprehensive view of flow of stock through the value chain. The platform drives MTN's desire to focus on proactive exception management to maximise performance."

The cloud-based supply chain planning and execution platform enables collaborative demand, supply and logistics management. The platform manages the end-to-end supply chain in real time, from consumers and retailers to raw material suppliers. Imperial is the African partner for implementation, hosting and re-selling

of One Network's platform.

The platform manages the endto-end supply chain in real time, from consumers and retailers to raw material suppliers. One Network's Control Tower Solution for Retail will include demand and supply balancing, demand planning, inventory planning, demand forecasting, suggested store ordering, order management, replenishment planning, and last-minute allocation where the system autonomously reallocates short supply to minimise lost sales and maximise customer service. It will also include a command-and-control dashboard featuring real-time data, as well as customisable and interactive charts and reports.



#### **OVERVIEW**

#### By Chris Edwards

One of the industry's biggest concerns is how to digitise and transform quickly, without starting from scratch and having to throw away your enormous investment in traditional systems. The good news is that you don't have to—even if you have hundreds of legacy systems and ERP instances across your company. With a network technology layer in place, the key idea

is that you begin moving business functions onto the network over time in a systematic way that matches your priorities—while retaining the best of your legacy systems. This unlocks enormous value as you eliminate time lags, lower costs, and slash inventory buffers across the network. You decide where to start moving capabilities onto the network, in a phased-way that lowers risk. Best of all, it will be self-funding because you're capturing value at every step.

The Dual Platform Strategy takes into account your current operational and technology environment, and streamlines it with a business network layer that connects all trading partners and key IT systems to a single version of the truth. This enables real time data sharing, multiparty business processes and decision making, to optimise and automate supply chain processes. This strategy enables companies to achieve four critical objectives:

- 1. Unlock value trapped in the supply network that is due to poor data quality and communication
- 2. Eliminate the huge costs associated with maintaining and upgrading legacy systems
- Leverage new technologies like AI and machine learning in concert with current systems
- 4. Identify and respond quickly to capitalise on new market opportunities

The Dual Platform approach provides complex global businesses a path to a rapid, high return digital transformation, while minimising risk.

In this article, we explain how to manage this process in an efficient and cost-effective way.

#### THE DOWNFALL OF ENTERPRISE-CENTRIC TECHNOLOGY

The planning-to-execution work-flows are typically both within the enterprise and across supply chain tiers. This typically uses multiple disconnected algorithms and optimisation engines, along with dozens of ERP instances and systems. It requires armies of planners to cover all the touch points. Planners then implement inventory buffers to cushion and absorb obvious conflicts that arise between trading partners. This then sub-optimises the supply chain.

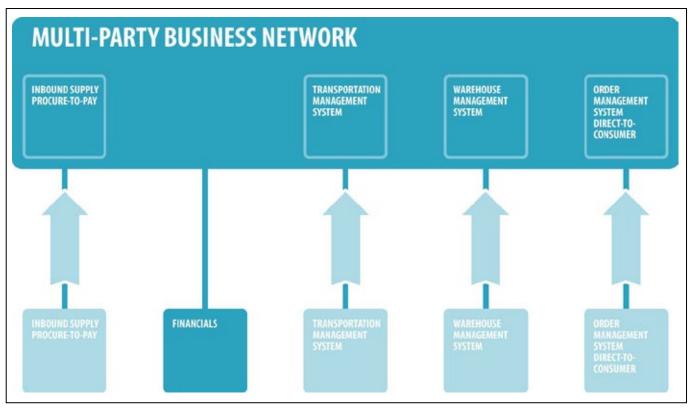
Even worse is the stale data that is used for decision-making across trading partners. This problem is never addressed, given the technology being used isn't capable of leveraging real time or multi-tier data anyway.

This results in a set of oversimplified, aggregate and gross average-level decision making that generates today's poor performance, because increased inventories, capacity, transportation and logistics costs are required to buffer all such variances. Even with costly buffers, the results are still poor, with low order fill rates and associated customer service levels.

# NETWORKS BUILT TO OPTIMISE SUPPLY CHAIN PERFORMANCE AND WORK WITH YOUR CURRENT SETUP

A network-based approach, with a purpose-built cloud-based Business Network Platform with endto-end supply chain capabilities, is the structure for success. This enables realtime data sharing, multiparty business processes

The Dual Platform approach provides complex, global businesses a path to a rapid, high return digital transformation, while minimising risk



Multi-Party Business Network diagram

and decision making through codified industry best practices. This will enable business process flexibility and improvements through an SDK-based developer environment—see the *Multi-Party Business Network diagram* above.

A Business Network Platform runs a SVOT (single version of the truth) for all parties. It provides a new business process environment across the business that federates the financials across your multiple ERP installations.

# THE LOGIC OF A DUAL PLATFORM ENVIRONMENT

While a monolithic enterprise platform is no longer useful in today's network-based world, it can still play an important role in aggregating and reporting the financial performance processes of the enterprise.

Meanwhile, the Business Network Platform operates, enabling plan-

ning, operations, orders, and execution processes across all trading partners. Financial related inputs and outputs of trading transactions can easily flow from the cloud to the financial modules in the enterprise ERP system. This Dual Platform approach solves the three major problems in digitalising, how to:

- Gain competitive advantage in today's marketplace
- Eliminate the tremendous costs of maintaining and migrating the current ERP monolith
- Gain the flexibility required to take advantage of new market opportunities

#### KEY CAPABILITY IN DIGITALISATION: THE "TUNEABLE" SYSTEM OF CONTROL

Evolving from the current state

to a Business Network Platform, the ability to tune what is being processed within each system is crucial. One Network's unique "Tuneable System of Control" coordinates business processes across multiple parties and systems, leveraging new technology while empowering legacy systems, to deliver optimal results fast.

A tuning capability enables users to assign system-of-record responsibility to each state and action in a Network process to either (1) One Network's NEO Platform layer; or (2) another legacy application. In other words, the NEO Platform manages the end-to-end processes, but designated steps can be processed by legacy systems, and either one can act as the system of record.

This "tuneable" environment will also run across multiple blockchains. If trading partners are using "Ethereum or Hyperledger", the platform provides cross-chain

# Even if you have the "Rolls Royce" of WMS systems, but run it with big inventory buffers, have poor carrier communications, long replenishment times and an inability to forecast demand—does it really matter?

connectivity as it runs on top of both as a multiparty ledger. The Dual Platform approach ensures that your daily/weekly/monthly work investment is focused on your organisation's most strategic and tactical execution objectives and is done in the most efficient way.

#### MAKE A NETWORK PLATFORM YOUR PRIMARY PLATFORM FOR SUPPLY CHAIN PLANNING AND EXECUTION

What's different from today? Rather than looking at a Business Network Platform as a bolt-on to ERP, it actually becomes the primary multiparty platform across the silos and old ERP monoliths. Over time, these ERP systems become the bolt-ons to the Network for financial processing. With this Dual Platform construct, operating information/data is in the cloud, is real time, and flows to ERP financial modules through the standard Network API's.

Today, the "best-of-breed" and "best-in-class", is defined by what best maximises overall network performance—costs, time, service levels, scale, and flexibility to adapt to market changes. It is no longer defined by the level of performance within a siloed business function. Even if you have

the "Rolls Royce" of WMS systems, but run it with big inventory buffers, have poor carrier communications, long replenishment times and an inability to forecast demand—does it really matter?

The enterprise will be better served with a Network Platform where every supply chain participant and function has the same SVOT. Operations will be transparent and synchronised and near-realtime decision making will be the norm. That's what maximises performance in business networks today.

#### RAPID RETURNS WITH A VALUE-BASED, AGILE IMPLEMENTATION OF A NETWORK PLATFORM

A Dual Platform Strategy delivers a number benefits in key areas. Notably, it eliminates the many burdens of current Enterprise Platforms—being overly expensive, difficult to maintain / upgrade and unable to keep pace with the current fast-paced business world. This alone is good reason for the Dual Platform to take center stage and provide a technology environment that enables rather than hinders the enterprise from reaching its full business potential.

Unlock value quickly. One Network's NEO Platform can be implemented in a matter of months through a series of value-focused business releases with minimal disruption to the current business environment. You focus on highest value areas first, moving business capabilities onto the network layer systematically in a way that lowers risk, maximises project success, and creates momentum for the next focus area.

#### Get out from under ERP silos.

Limiting ERP to running the financial modules and over time running more and more of your supply chain on the Network in the cloud, you reduce the need for an extensive IT team at each location to maintain and troubleshoot legacy ERP systems. In a Network architecture, trading partners can interact and collaborate at will, based on their secure permissions within the Network. With full visibility and productivity related metrics maintained at the corporate level, all levels of management have access to real time data simultaneously, and can monitor daily operations as they happen, addressing issues or errors immediately.

Automation offers enormous value. The key opportunity benefit from moving to the Dual Platform is around process automation. With autonomous agents powered by artificial intelligence and machine learning (a topic for another time), we can automate repetitive business operations and decision making, such as the handling of routine supply chain exceptions. Expert staff can then focus on the big impact decisions that deliver the highest value. They'll also have advanced predictive and prescriptive analytics to spot problems early—when there are still many low cost optionsand resolve them optimally at the network level with problem-solving workbenches, optimisers, and "what-if" scenario analysis.

The potential of the business network-based approach to supply chain management, is significant as proven by recent case studies. Some companies are already achieving forecast accuracy in the 95% range, driving order fill rates/OTIF to 99% and reducing inventories by 20-30%, and in some areas even 50%. Some other radical improvements that have been achieved include:

- Reducing supplier expediting costs by 60%
- Reducing premium transportation by 50%
- Reducing COGS by 3%

- Reducing volume purchasing cost by 10 to 20%
- Reducing planning and execution effort by over 40%

In short, value and flexibility are front and center with a Dual Platform Strategy and a networkbased architecture. Companies can more easily meet business demands while maintaining the flexibility to implement changes that make the business run smoothly with highest possible service levels at the lowest possible cost. Given the results to date, there is absolutely no doubt that a Dual Platform Strategy will provide the competitive edge that most companies are striving to achieve. To learn more, please visit www.onenetwork.com.



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With over 25+ years of supply chain software experience, Chris is One Network Enterprises' (ONE) Senior Vice President for the region, supporting partners and leading a team of sales and solution design specialists across Asia Pacific.

Chris has a deep supply chain software consulting background. After retiring from the Australian Navy in 1995, Chris has assisted both military and commercial enterprises across Asia Pacific and the Americas, in leveraging software to reduce cost and increase business effectiveness. Chris has a Masters of Strategic Information Systems Management. Chris is based in Australia

