

**HCL**

## **Supply Chain 4.0:**

Navigating the journey  
to a digital ecosystem

Produced by  
**TechPros.**





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# The supply chain opportunity for visionary leaders



There has rarely been a better moment to reinvent and reengineer a company's supply chain through digital tools and digital transformation.

Over the past few years, we have all experienced first-hand many of the reasons why such change is sorely needed; this has included logjams and staff shortages at ports, route delays due to the Ever Given blockage in the Suez Canal, a global lack of raw materials and parts, plus fast-changing demand exceeding an ability to supply.

However, around the world there are no shortage of technological solutions readily available to solve these problems, with the costs to implement them falling steadily.

So why then has progress and adoption been relatively slow?

For some this has been caused by the wrong corporate approach and C-suite governance, while others have been impacted due to shortages of suitable investment, confusion around the right type of change management techniques to utilize, or a lack of visionary thinking within such businesses to steer digital transformation programmes.

What we are now witnessing is sustained pressure on the supply chain - and it is likely to continue for a number of years yet. To counter this, CEOs and their boards must look internally and externally to prioritize the supply chain areas they view as ripe for digital change.

Successful leaders of the future need to accept the existing status quo is now damaged, and choose to stand at the forefront of their industries through the right implementation of technology-led transformations that will revolutionize their supply chain operations.

According to [Pierfrancesco Manenti, VP Analyst at Gartner](#), supply chain leaders have a

## “once-in-a-lifetime chance”

to raise the profile of the supply chain function - and the experts we have spoken to in this eBook -sponsored by HCL Technologies -are in agreement. Graham Saunders, Global SAP Offerings Lead at HCL Technologies, says:

**There were common messages about having a dedicated lead and budget to coordinate, getting the right skills and partners, and understanding the importance of change management.**

**A key idea was to focus on risk mitigation rather than marginal improvement, with the majority of people we spoke to having a SAP core as an enabler. However, we know many companies in the supply chain still use non-SAP point solutions to elements of DSC.**



**Graham Saunders**  
Global SAP Offerings Lead  
HCL Technologies

Throughout the following pages, we will explore our contributors' thoughts to show how CEOs have no choice but to act immediately, working with their Chief Supply Chain Officers (CSCOs) and other experts to build a more robust, agile, flexible and ready-for-anything supply chain function; one that uses technology and digital tools to take advantage of the transition ahead.

We do hope you enjoy reading this eBook and that it inspires discussion and action among your own C-suite.

### You will learn:

- ▶ The four main obstacles to digitalizing the supply chain
- ▶ Why too many pockets of siloed implementation stifle innovation
- ▶ How to tackle change resistance and the reasons it can occur
- ▶ The importance of having an ERP backbone
- ▶ How to mitigate for the sudden supply chain shocks still to come

# Four obstacles to the digitalization of the supply chain

The journey ahead for extensive supply chain digital transformation will not be an easy one to navigate - with many problems, hidden traps and people challenges along the way.

However, it can be achieved if leaders make advance plans to identify and overcome the greatest obstacles they will face. [In this section, we outline four to focus on.](#)



## 01. Understand what supply chain digital transformation means

It sounds a simple term but ask a selection of supply chain experts and you will get many different answers and definitions as to what digital transformation actually means in their own individual circumstances.

But we do already know Supply Chain 4.0 is ultimately about improving performance through intelligent automation, while integrating connected applications and systems that will remove many repetitive and human-tasks supply chain processes.

There is also a key role for smart sensors amid the wider push towards an Industrial Internet of Things (IIoT), helping companies adapt and react much faster to market forces and global demand changes thanks to increased real-time data flows.

“Digitalisation is becoming much more urgent, both to get the foundations in place, but even more so to now speed up aspects around collaboration with suppliers and the visibility of flows, ERP or integrated business planning aspects. The urgency is rising on the corporate agenda.”



Håvard Jörgensen, Vice President Global Supply Chain at Electrolux, suggests this transformational shift forward is imperative. He argues that the technological tools to offer visibility across all connecting system elements must be brought in so companies can prepare the right analytics for the strongest and quickest decision-making.

“Digitalization is urgent, both to get the foundations in place, but even more so to now speed up aspects around collaboration with suppliers and the visibility of flows, ERP or integrated business planning aspects,” he says. “The urgency is rising on the corporate agenda.”



**Håvard Jörgensen**  
Vice President  
Global Supply Chain  
Electrolux



## 02. Identify the organizational roadblocks impacting planning

A company's ability to adopt the most efficient new technology to manage supply chain function can be hampered by many limiting factors, from the availability of adequate finance to receiving the green light from the C-suite.

Many are still running legacy on-premises solutions, and this will have a major bearing on how fast new processes and solutions can be implemented, with it being much easier to do when running cloud-based infrastructure.

Another major constraint is the existing workforce's skills, knowledge, and vision.

But developing new products, new value propositions and new ways of working for a simpler and more streamlined digitalized supply chain operation - with real-time data at its heart - is certainly time critical.

Jason VanDeven, Head of Global Supply Chain at Northrop Grumman AOX, suggests using a bulleted list of simple questions to break through the blockages and deliver meaningful change.

**“How do we simplify our supply chain with less connections, less processes and less paperwork? We want to reduce our inventory burden. There's a digital way to do that. How do we accurately forecast and plan? How do we continually improve? That's the key.**



**Jason VanDeven**  
Head of Global Supply Chain  
Northrop Grumman AOX

## 03. Too many pockets stifle long-term innovation

A focus on quick wins can quickly become the enemy of all transformation projects.

Relying too much on siloed pockets of innovation may yield fast results, but these will be activated on a far smaller scale to what the business needs overall.

When you attempt to solve a problem or make a change in a pocket, it demonstrates a lack of joined-up or future thinking. This can be costly financially and hamper the critical importance of connected transformation progress across all departments.

Using small cloud apps as point solutions could damage longer-term programmes that require

integration across the full value chain. If too many people internally purchase individual solutions to only solve their key issues, the business cannot benefit from the wider and more holistic change technological disruption offers.

Integration across organizations will always be a huge constraint, but among the leaders we spoke to, those with a modern ERP architecture already in place - or the ones willing to implement this throughout the business - found it much easier.





## 04. Positive change management and building trust is imperative

If the supply chain function is to change through digitalization, then getting all your people involved and thinking differently is the important first step. For those on a more automated supply chain frontline, this also means placating job loss concerns.

Undoubtedly, fear leads to a lot of change resistance, not just from employees but from customers and suppliers too. All groups want to be certain how any new automation-led processes and operational changes will benefit them, and not make their own responsibilities harder to deliver... or leave them open to sudden, unforeseen shocks.

Handing over decision-making to systems in intelligent organizations does come with perceived risks, therefore building trust on all levels - from C-suite to warehouse floor - is imperative.

One way to reduce what is often unfounded fear is by using data modeling or digital twins. The latter produces a virtual representation of a current process in order to show how things would look and act when the full impact of digital transformation is achieved.

Michael Muilenburg, Director of Operational Technology & Connected Manufacturing - Film, Materials, Technology and Eng, at 3M, believes this is valuable. His team are “scouts for the latest and greatest in anything that can help our workforce” and this includes across the shop floor, process engineering and supply chain quality all the way up to division manufacturing management.

3M started the digitization journey five years ago by looking at data modeling and simulations via digital twins, and while initially theoretical, the pandemic forced them to address speed to customer and distribution centers, as well as question all aspects of the company's systems.

Michael says: “We learned what our capabilities are, we learned that computing power and programming are not the bottleneck. It is possible for lots of learning and practical changes to come out of our other initiatives.”

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**Michael Muilenburg**  
Director of Operational Technology & Connected Manufacturing - Film, Materials, Technology and Eng.  
3M



## Seven solutions to drive the supply chain function's future

The transition to Supply Chain 4.0 is not an overnight one and it might take several years in the planning, and the same again for the implementation.

However, few doubt this is a journey that must begin now. Failing to do so will not only impact productivity and profitability, but it will also put a company at risk of failure or allow it to be consumed by a more forward-thinking competitor.

Supply chain leaders and CEOs can begin by taking the following seven actions.

### 01. Centralize governance and budgeting

If you don't already have one, it is beneficial to appoint a digital supply chain lead. This would be business-driven rather than IT-driven, as simply automating what you do today using technology won't produce a transformational result.

To achieve the greatest return, the process must be a strategic one, allowing the business to decide first what it wants to achieve from digitalizing its supply chain operations, and then delivering on those priorities.

Electrolux's Håvard Jörgensen suggests having one department in charge that can

#### “paint the picture of the holistic view”

“If you have a very strong central organization, well connected to the needs of business, that owns the money and also owns the decision, then I think you can move faster as opposed to having a more decentralized organization,” he explains.

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**Håvard Jörgensen**  
Vice President  
Global Supply Chain  
Electrolux



## 02. Don't kill groundswell innovation

As much as it is important to take a connected approach to supply chain transformation, it is vital for overcoming change resistance that employees feel engaged enough to come up with new ideas of their own.

People should be encouraged to continue innovating within their own spheres, as they will each know these best. However, this must be fed into a central programme.

3M's Michael Muilenburg promotes “small wins” at his company to showcase advancements and encourage more by demonstrating industry leadership. “These efforts include a big internal communication plan to inform and engage our employees. It sends a message that ‘we are leading edge’ and this is a great place to work,” he adds.

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**Michael Muilenburg**  
Director of Operational Technology & Connected Manufacturing - Film, Materials, Technology and Eng.  
3M



“The one good thing we have, in terms of an ecosystem, is a good ERP system in place, which is key to the supply chain, and used across the organization. We use tools and technologies like rapid response, which sits right on top of our ERP, and enables us to understand and run reports and get whatever data we need.”



**Deepa D**  
Director of Global Supply Chain at a leading medical manufacturing organization

## 03. Create a strong ERP backbone

Approaching digital transformation with an ERP system at the core of your supply chain operations allows you to safely bolt on new pieces of technology to solve very specific problems.

The trend observed with the participants in this study was that those organizations who already had a good quality ERP, such as SAP as a backbone, were making significantly better progress in implementing large scale digital supply chain solutions. They were also able to deploy solutions across regional and global operations much faster than those working on side-car technology projects.

IT projects delivered without any thinking as to how new processes or applications can be integrated with an eventual full-scale digital solution might solve an immediate need, but in the long run it is very likely you'll have to decommission these and start over again.

Deepa D, Director of Global Supply Chain at a leading medical manufacturing organization, says: “The one good thing we have, in terms of an ecosystem, is a good ERP system in place, which is key to the supply chain, and used across the organization. We use tools and technologies like rapid response, which sits right on top of our ERP, and enables us to understand and run reports and get whatever data we need.”



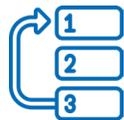


#### 04. Draw up a discussion and priorities framework

Both suppliers and customers must fully understand what your priorities are as your supply chain digital transformation gets underway.

Choosing an implementation simply because it seems like a neat piece of technology (or worse, it's really cheap) is not going to help you work towards the most impactful outcome from your newly-digitalized processes.

That end point should be the starting point. For instance, if you wish to include new lines within your business, add service elements, diversify your products, or allow for more demand-led customization or personalization, it is advisable to showcase this as part of a high-level consultation. Feedback can then determine how to achieve it.



Supply chain digital transformation

#### 05. Take your people with you

Traditional change management plays a strong role when dealing with change resistance. Openly and transparently sharing ideas and plans helps everyone understand what any new implementations will deliver, and crucially it also shows them what their new or changing role would be within the company.

It is critical to make clear that not all supply chain digital transformation is about robots, artificial intelligence, and machine learning replacing people. Such concerns don't only exist at lower

levels of the business hierarchy either, with Northrop Grumman AOX's Jason VanDeven explaining fear exists even among leaderships.

“Any change management process requires a lot of heavy lifting in the beginning to overcome the barriers and perceptions that make it difficult for change processes to be successful,” he says. “Employee and leader resistance, in addition to some customer resistance, makes it difficult to implement these processes.”

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**Jason VanDeven**  
Head of Global Supply Chain  
Northrop Grumman AOX



## 06. Understand data flows and connected applications

Real-time data interpreted by artificial intelligence and machine learning will allow companies to move away from more static and traditional supply chain patterns.

Cloud connectivity of applications will ensure customer and partner data is visible across the supply chain, regardless of its location, and this will enable flexibility, agility and resilience.

Kenneth Creasy, Senior Director, Manufacturing Technology & Innovation and Advanced Engineering at Johnson & Johnson, says his company spent a lot of time understanding what

digital progression for big data and analytics meant.

“It’s really setting up that digital stack appropriately, making sure the data is available to support things, and doing it purposefully,” he advises. “Instead of a data lake, or data swamp, you actually say, ‘Ok, what data will we need and how do we best go about getting that?’”

“Answering that means the ability to do more effective service work for customers and patients.”

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**Kenneth Creasy**  
Senior Director, Manufacturing Technology & Innovation and Advanced Engineering  
Johnson & Johnson



**The best thing digital will get any company is visibility. Visibility to see what’s going on and where things are allows us to ask better questions, and better questions drive further efficiencies, allowing us to be more agile and responsive.**



**Kenneth Creasy**  
Senior Director, Manufacturing Technology & Innovation and Advanced Engineering  
Johnson & Johnson

## 07. Keep an eye out for sudden shocks

Of course, there are many things the digitalization of the supply chain cannot always be prepared for. For example, the heavyweight impact of the Covid-19 pandemic would not have been on many critical incident plans.

However, we do know that more automation and better-connected planning systems can mitigate the negative outcomes of most third-party disruptions, because they can have a real-time overview of what is happening and where, either pinpointing more efficient and alternative routes quickly, or predicting when and how fluctuations in demand are going to occur.

Tracking where capacity is, and where it isn’t, will be critical to the most successful supply chain operations of the future. Johnson & Johnson’s Creasy adds companies must be far more agile, more responsive and more resilient in their ability to respond.

“The best thing digital will get any company is visibility,” he says. “Visibility to see what’s going on and where things are allows us to ask better questions, and better questions drive further efficiencies, allowing us to be more agile and responsive.”



## Conclusion: The strategic imperative to get it right

For all those who lead the supply chain function at their company, there is a real strategic advantage to getting digital transformation right.

And for all those who lead the company itself, that strategic advantage will be translated into greater market share, increased productivity and bigger profits.

It is for those reasons that many in this space would naturally be protective of their ideas and successes in this area, and reluctant to talk publicly about them.

The commercial imperative means having an upper hand vs. the competition.

However, for those at the start of this journey, a lack of information about what everyone else is doing does not need to be a barrier to beginning.

The wealth of supply chain digitalization technology readily available now at accessible prices, means you can get on with the transformation of your company simply by identifying and modeling one or two of the challenges it faces.

Johnson & Johnson's Kenneth Creasy rightly predicts **“automation and robotics will drive a lot of efficiencies within supply chain” as these offer “the ability to do more things with the amount of space or resources you have.”**

Taking the first steps on this path to reinvent your supply chain function should not be something to fear, especially if you invest in developing the right digital approach from the start; one that can fully embrace real-time data across your company.

As Creasy advises: “You need the best data to have the best solutions. That data becomes a blood that flows through everything. That is what keeps your operation alive, functioning and efficient.”

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**Kenneth Creasy**  
Senior Director, Manufacturing  
Technology & Innovation and  
Advanced Engineering  
Johnson & Johnson



## Further thoughts



*More and more supply chain practitioners focus on the idea of robustness, as opposed to just-in-time. It goes beyond the aspect of being resilient. Robustness is how you make sure that even if you encounter a failure, you can still deliver.*

**Jean-Philippe Lebudel**

Chief Supply Chain Officer, Firmenich

*Supply chain digitalization is an important shift to be made. A factory may be well connected, with great leadership and ERP system, however with many you find that the demand planning is weak or broken. Blockchain has the potential to improve connections and shorten lead times.*

**Manju Parkhe**

Group Vice President, Ecolab

*Sales is a key input to any DSC optimization. Having an accurate view of sales pipeline has a far bigger and more positive impact on cash flow than reactively managing inventory.*

**Ciprian Florea**

SVP Supply Chain EMEA and Global Manufacturing, member of the Taste and Beyond Executive Team

*Creating any digital ecosystem is not just thinking about current compliance, risk and standard protocols, or for one part of the global market. You need to focus on future-proofing, as much as possible, in order to be agile and fit for purpose worldwide.*

**Eunice Alcantara**

Health Care Compliance Officer  
Latin America J&J Supply Chain  
Johnson & Johnson

*Digitalization is currently the weakest part in the supply chain process.*

**Jose Everaldo Morelli**

Global Supply Chain Director  
for Measuring Tools, Bosch Power Tools

*Digitization is bringing technology to the table in order to develop new products, new value propositions, new ways of working, and new value streams. This is the most important thing currently going on in the industry.*

**Henning Udo Goldmann**

Global Head of Warehousing and Distribution,  
A.P. Moller - Maersk

*When planning, it's important to identify the different skill sets needed to run and support the technology. Any programme is usually cross-functional, and it plays a big part in the success of digitalization that you know the competencies, alignment and cultural change needed.*

**Donna Kuenzler**

Head of Procurement Process Excellence & Digital Transformation, ABB

*We can simplify our supply chain through less connections, less processes and less paperwork, reducing our inventory burden. There is a digital way to achieve all this and continually improve at the same time.*

**Jason VanDeven**

Head Of Global Supply Chain, AOX,  
Northrop Grumman

*A mindset shift is needed. You need to help people understand that the work environment is digitally evolving. Once they grasp this, they will have a better understanding that reskilling and upskilling is in response to creating the business environment we want to evolve in order to win.*

**Christophe Villain**

Global Head of Supply Chain  
& Procurement Technology, Nestlé

*We are working towards digitalization. On the customer side, this means getting more things online for customers and enabling automatic confirmations on purchases. We are also looking to make improvements by digitizing processes, meaning certain things are carried out by bots or robots, AI.*

**Pei-Iaan Chao**

Head of Finished Goods Planning  
Market Group Europe, Signify

*You have to move away from PoV's and pilots, showcasing what the transformation would look like. Present that five-year plan, that three-year plan, that one year plan. Break it down and decide if you want technology or process to lead the journey, and then follow through.*

**Riaan Pienaar**

Head of Supply Chain

*Instead of focusing on the technologies themselves, we need to focus on the problem first and then figure out how we are going to solve that problem. Collaboration among disparate groups is vitally important to success.*

**Kenneth Creasy**

Senior Director, Manufacturing Technology & Innovation and Advanced Engineering, Johnson & Johnson

*In the supply chain, it takes a village to do something efficiently. For example, each country has certain expertise, and to build an optimal supply chain, one needs to take advantage of all those strengths. Bring everything together and put the right part in the right place with the right quantity.*

**Dharmesh Kumar**

Acting Director- Supply chain Portfolio, Architecture and Development

*When you put in place systems and new processes to optimize value and benefit, you need to make sure that you have the right data literacy and analytics capability in the organization. You're dependent upon people being able to adapt to new opportunities that the systems offer you.*

**Håvard Jørgensen**

Vice President Global Supply Chain, Electrolux

*There will be a lot of focus on the digital supply chain to see the end-to-end system ahead of time. ESG goals are important as they want to be sustainable in packaging, ethical sources, carbon neutral, especially with younger generations.*

**Deepa D**

Director Global Supply Chain at a leading medical manufacturing organization

*The need for Automation has increased post-pandemic due to the risk associated with over dependence on human processes. The driver has shifted from efficiency (cost saving) to increased business resilience through automation.*

**Zera Zheng**

Global Head of Business Resilience Lead Logistics, A.P. Moller - Maersk

*Understanding the end-to-end value stream and flow and then balancing the speeds, rate and yields are all obvious. But digitization, making data available, and training the end-user to use the data should also be part of the focus.*

**Michael Muilenburg**

Director - Operational Technology & Connected Manufacturing - Film, Materials, Technology, and Eng., 3M

## Further thoughts



# Acknowledgements



**Christophe Villain**  
Global Head of Supply Chain  
& Procurement Technology  
Nestlé

Results-oriented and visionary business leader with nearly 25 years' experience within blue chip Consumer Packaged Goods and Management Consulting organizations, of which, more than 12 years were in senior management positions across Supply Chain, Sales, Information Technology and Procurement. Demonstrated successes in leading structural and digital business transformations within complex international environments.



**Ciprian Florea**  
SVP Supply Chain EMEA & Global  
Manufacturing, member of the  
Taste and Beyond Executive Team

Operations Leader with extensive experience in performing and transforming complex global supply chains in FMCG/CPG, GPM and equipment industries. Core competencies include transforming operations for competitive advantage. A passionate believer and implementer of digital technologies and Industry 4.0 solutions as an essential enabler for both value creation and human wellbeing.



**Deepa**  
Director Global Supply Chain  
at a leading medical  
manufacturing organization

Born and raised in Bangalore, India, Deepa got her Masters in Industrial Engineering in Michigan. Bold, Energetic and Innovative leader with over 16 years of experience across multiple functions in Global Supply Chain. Worked in Automotive, Electronics, Medical Device industries and managed global teams in multi-site, multicultural environments.



**Dharmesh Kumar**  
Acting Director - Supply Chain  
Portfolio, Architecture  
and Development

A technology leader with 27 years of progressive experience in designing and implementing ERP applications, building alignment with both business and IT to drive design for business transformation. Has experience in managing global teams, supplier relations, building strategic relationships, implementing complex supply chain solutions and in numerous domains.



**Donna Kuenzler**  
Head of Procurement  
Process Excellence & Digital  
Transformation, ABB

Donna is a process improvement leader with over two decades of professional experience. She has spent most of her career working for Big 4 Accounting firms and multinational companies globally and has led a variety of assignments focusing on business and IT process improvement, risks and controls assurance, and transformation program delivery.



**Eunice Alcantara**  
Health Care Compliance Officer,  
Latin America J&J Supply Chain  
Johnson & Johnson

Executive with robust experience in implementing and managing all elements of Compliance & Ethics Programs and promoting the culture of integrity in multinational healthcare sector companies. Solid academic background with a professional master's degree in Business Administration and multiple certifications in Compliance. Healthcare Compliance Certification program development and professional speaker.

# Acknowledgements



## Håvard Jörgensen

Vice President  
Global Supply Chain,  
Electrolux

Håvard Jörgensen is VP Group Supply chain, leading the work on the strategic direction and plans for the Electrolux supply chain. Specific focus on digital development, E2E SC integration, processes and capabilities. He has +20 years of experience within Supply Chain and Operations from various leadership roles in Procter & Gamble, Arla Foods and Coca-Cola European Partners.



## Henning Udo Goldmann

Global Head of Warehousing  
and Distribution,  
A.P. Moller - Maersk

25 years of experience in the logistics and digital industry. Previously heading the global warehousing and distribution business. Experienced CSCO, managing DAMCO's Supply Chain Management business prior to integration into Maersk. Deep business development experiences through organic growth as well as merger & acquisitions. CDO & CIO, confidentially driving innovation and digitalization, inventing market disrupting products.



## Jason VanDeven

Head of Global Supply Chain, AOX  
Northrop Grumman

20 years of management and technology experience. Skilled Certified Manager with proven experience in building professional relationships, developing successful business strategies, and providing value-added results. From Jason's background as a US Marine (1996-2001), and broad experience within complex, high-technology global corporations, he thrives in fast-paced, high demand environments.



## Jean-Philippe Lebudel

Chief Supply Chain Officer,  
Firmenich

JP Lebudel leads the operation of supply chain activities of Firmenich's Perfumery and Taste & Beyond businesses. He is focused on building strong collaboration capabilities across the supply chain and has launched an ambitious restructuring of the Customer Experience and Planning functions supported by a full revamp of the CRM and IBP platforms.



## Jose Everaldo Morelli

Global Supply Chain Director  
for Measuring Tools,  
Bosch Power Tools

Expert in implementing and managing Sales & Operational Planning in different organizations and markets. Experienced in developing and implementing inventory management processes to reduce working capital, improving service level and increasing efficiency through increasing flexibility within the supply chain. Also in TPM Methodology and in implementing Sales and Operational Plans.



## Kenneth Creasy

Senior Director, Manufacturing  
Technology & Innovation and  
Advanced Engineering,  
Johnson & Johnson

Kenneth is a Senior Technical Director with R&D, Manufacturing and Quality experience in bringing innovations to global healthcare markets. With degrees in Chemistry and Biology and experiences in engineering functions, he has insights that lend themselves to strategic, tactical and technical challenges.

# Acknowledgements



**Manju Parkhe**

Vice President, Global Engineering Leader, Supply Chain Ecolab

Manju is Ecolab's Global Engineering Leader, responsible for automation, controls, process safety and cyber security. She brings a strategic mindset, global perspective, and expertise in operations, sourcing and engineering to the role. Under Manju's leadership, Ecolab will develop sustainability initiatives to meet 2030 commitments.



**Michael Muilenburg**

Director - Operational Technology & Connected Manufacturing - Film, Materials, Technology, and Eng., 3M

Michael is currently the Director of Operational Technology for 3M's Film and Materials Science, Engineering, and Technology Division. He leads a high performance team of specialists supporting US and OUS manufacturing operations, researching and piloting leading edge operational technologies to drive improvements in stability, capability, availability, flow, and pull. He is a practitioner, speaker, teacher, and author.



**Pei-laan Chao**

Head of Finished Goods Planning Market Group Europe Signify

Currently Head of Finished Goods Planning Europe for Signify (Philips Lighting). Has worked for Signify for 15 years in different Supply Chain and Improvement roles, ranging from Planner, Team Leader, Lean Six Sigma Black Belt, Supply Chain Improvement Project Manager to S&OP Manager. Has worked across Shanghai, Hong Kong, the US and the Netherlands.



**Riaan Pienaar**

Head of Supply Chain

Riaan is an innovative, results-oriented leader with a commitment to optimizing the planning and supply chain network within an industry leading organization utilizing people, process, and technology as the most important drivers. With more than 15 years of multi-functional value chain experience in JSE listed companies (FMCG, Pharmaceutical, Management consulting).



**Zera Zheng**

Global Head of Business Resilience Lead Logistics, A.P. Moller - Maersk

Zera is the Head of Business Resilience Lead Logistics at Maersk. She has vast experience in building robust business resilience programmes from scratch and bringing employees and stakeholders along on the journey by ultimately enabling them to see the importance in business resilience as a key contributor to safety, reputation, and revenue.



# HCL

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To get the best return on your digital investments in supply chain, you need a partner that doesn't just do SAP right but does it better.

Our SAP practice works seamlessly with HCL's digital consulting, engineering services, IoT WoRKS™, and cloud infrastructure practices to design, implement, and support tomorrow's integrated, intelligent solutions today. As an SAP Global Strategic Services Partner, our 10,000+ consultant base leverages insights, advanced accelerators, and industry-acclaimed frameworks to deliver award-winning services from local offices across Europe, Africa, Asia, and the Americas.

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# TechPros.

## About TechPros.io

TechPros.io interviews senior enterprise leaders on emerging topics covering changing customer engagement strategies, digital innovation, partner ecosystems, location strategies, and many more.

By featuring in content programmes shared widely within their sector and participating in follow-on virtual roundtables and workshops, TechPros.io interviewees learn from and connect with industry peers solving similar business challenges.

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