ONE GIANT LEAP FOR MANKIND

GLOBAL FMCG SUPPLY CHAIN LEADER, RON VOLPE, SAYS, IN THE WAKE OF COVID-19, SUPPLY CHAINS MUST BE MANAGED DIFFERENTLY, WITH LEADERS FOLLOWING HIS FIVE 'MOONSHOT' PRINCIPLES.

Written by **Ron Volpe**

A TRAGIC AND RECURRING NARRATIVE DURING THE COVID-19 PANDEMIC HAS BEEN THE SEEMINGLY RANDOM PATTERN OF HAVE AND HAVE NOTS WITH RESPECT TO THE REQUIRED FLOW OF CRITICAL GOODS AND SERVICES.

"THE MOVEMENT OF GOODS AND SERVICES THROUGH THE ECOSYSTEM OF PHYSICAL, DATA, FINANCIALS, REGULATORY AND PEOPLE DIMENSIONS FROM DESIGN AND CUSTOMER DELIVERY LIFE CYCLE"

Definition of supply chain by Professor Nick Vyas, of the University of Southern California Marshall School of Supply Chain Management

ne of the most heart-wrenching examples was that of Gireesh Kumar Suri. Arriving from India in 1978, he worked a myriad of jobs to support and establish his family in Queens, New York, only to die of the disease in a nursing home, unable to be tested due to a shortage of nasal swabs. His son Himanshu's comment to the media was, "Why do I have to grieve with the notion of a supply chain?" It is a challenge the world's supply chains should not take lightly.

Professor Nick Vyas, of the University of Southern California Marshall School of Supply Chain Management, defines supply chain as 'the movement of goods and services through the ecosystem of physical,

data, financials, regulatory and people dimensions from design to customer delivery life cycle'. What was once a one-to-one transaction between two parties is now a complex, orchestrated process involving, in many cases, hundreds of actors.

Take the case of the Apple iPhone 11; parts from 200 suppliers go into just the production of each iPhone. Layer on the processes and actors required to get the parts to the enormous Shenzen, China production facility, and

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then layer on the processes and actors required to get that iPhone into your hand, and the number of actors in the supply chain tops 500.

The days of mass production are behind us; today's supply chain is all about mass customisation and flows. The move from mass production to mass customisation has brought significant advantages, lower costs and higher levels of innovation, as entire companies or (in China) entire cities specialise in producing a single component of a product. Specialisation is the name of the game.

In the case of Apple, their consistently successful orchestration of the flow of materials, labour and processes for 500 players for a single product is arguably a function of two things; design and digitisation. In terms of design, Apple believes that supply chain design is as critical to the overall design of a product as colour or utility or shape. It is a defining feature of their product design process. In terms of digitisation, the company has long invested in the tools of digitisation (AI, IoT, machine learning) required to effectively manage the level of complexity in their supply chain. But Apple is an outlier. While the complexity of managing
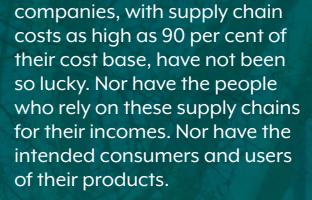
a supply chain has increased exponentially in recent years, the systems, processes and skills required to effectively manage this complexity lags far behind for most supply chains. The amount of data required to manage a global supply chain is staggering and, not insignificantly, 80 per cent of it resides outside of the enterprise itself.

> "TAKE THE CASE OF THE APPLE IPHONE 11; PARTS FROM 200 SUPPLIERS GO INTO JUST THE PRODUCTION OF EACH IPHONE"

Supply chains have seen this day coming, performing a high wire act consisting of continuous balancing and rebalancing to ensure they deliver on both their cost and output remits. In recent years, supply chains have struggled to manage through the politicization of supply chains that has occurred as a result of tariffs and trade wars, but, in the end, most supply chains have been able to maintain their footing. However, in the case of Covid-19,

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companies, with supply chain costs as high as 90 per cent of their cost base, have not been so lucky. Nor have the people who rely on these supply chains for their incomes. Nor have the intended consumers and users of their products.

While many supply chains across many industries have moved to this network of complex flows and specialisation to reduce cost and drive innovation, it's a relative few that have harnessed the power of digitisation to manage it. And therein lies the issue. When you have a supply chain built around the complexity that comes with flows and customisation, even relatively minor shifts in production capacity, demand or cash flow for a node in the supply chain has a bullwhip effect that ripples up and down the value chain. For those supply chain professionals who have played the 'beer game', a type of gamification that is used to experience typical coordination problems of a supply chain process, they think of Covid-19 as the ultimate disruption. What started as a production shutdown in China and panic buying in the rest of the world, eventually turned into production coming back on line in China at the same time that the pandemic swept through

Europe and North America, and demand stagnated as consumers stayed home. The result? Stranded inventory, cancelled orders, negative cash flow, and unemployment. An estimated 450 million people around the world work in global supply chains, and it's the people working at the lowest levels of these supply chains that were hit hardest by the impact. We've seen massive unemployment of women in China (women represent 75 per cent of the factory workers in China), meat factory workers in the U.S. contracting Covid-19 and being pressured to go back to work, and farm workers in Argentina forced to watch crops die and lose their wages as supply chains struggled to get produce to market. No part of the globe has been spared.

The UN's Framework for the Immediate Socio-Economic Response to the Covid-19 Crisis distilled the issue well in stating, "The Covid-19 pandemic is far more than a health crisis: it is affecting societies and their economies at their core. While the impact of the pandemic will vary from country to country, it will most likely increase poverty and inequalities at a global scale. Without urgent socioeconomic responses, global suffering will escalate,

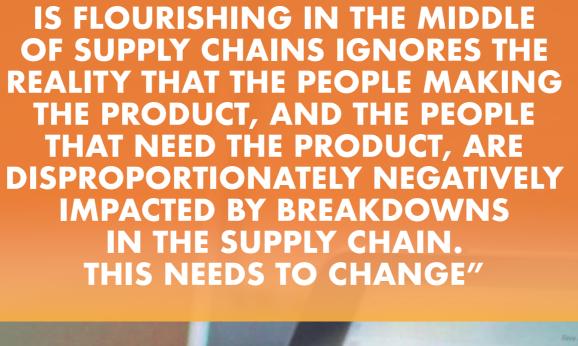jeopardising lives and livelihoods for years to come."

As one factory owner in Wuhan was quoted as saying, "If my workers are not killed by coronavirus, they will die of starvation."

Supply chains are not broken so much as they are overwhelmed. And that situation leads to a level of unpredictability in supply chains that is tricky in the best of times. They have enthusiastically adopted a strategy (specialisation and flows) that increases innovation and reduces cost, but they have consciously ignored the fact that their way of managing supply chains is outdated. HBR foretold this well in its article 'The Death of Supply Chain Management' a few years ago. The technology exists to enable companies to manage the extreme supply chain complexity they now face, but the skill sets to deliver this digital transformation are lacking. For every company with a former Chief Supply Chain Officer as CEO (see Tim Cook, Apple), there are far more that view supply chain as simply a cost centre.

The stakes have never been higher for supply chains, and

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the spotlight is on them to do better. The fact that commerce is flourishing in the middle of supply chains ignores the reality that the people making the product, and the people that need the product are disproportionately negatively impacted by breakdowns in the supply chain. This needs to change. Supply chain leaders have a responsibility, a social contract, to invest in the tools and training required to manage their new, more cost-efficient ways of managing their supply chain. Digitisation is the key.

One of my favourite thinkers is Gary Hamel from the London School of Business. In his seminal article 'Moonshots for Management', published by the Harvard Business Review in 2009, he details 25 'moonshots' (a nod to the greatest moment in history for supply chain, man's first moon landing Apollo 11) for leaders. There are many of Gary's 'moonshots' that resonate for supply chains. Two of my favourite challenges were 1) Reconstruct management's philosophical foundations, and 2) Redefine the work of leadership. I think both of these are particularly relevant for supply chain leaders to consider at this point in time.

SO, WITH A NOD TO GARY HAMEL, HERE ARE FIVE 'MOONSHOTS' THAT I WOULD SUGGEST FOR SUPPLY CHAINS IN A COVID-19/POST-COVID-19 WORLD;

1 MAKE THE PATH TO DIGITISATION CLEARER AND SIMPLER

Organisations fear the disruption, perceived cost, and change to ways of working that are part of any transformation. We need to find ways to create digitisation 'on-ramps' that fit companies of all sizes and at all stages of transformation. For many industries failing to get started on this path, this represents an existential threat. The technology part is easy; it's the leadership gap that is the issue.

2 RECONCEPTUALISE THE COST OF GOODS

Running supply chains that meet shareholder goals but ignore human rights protections, refuse to guarantee worker safety, ignore environmental protections, are unconcerned with the sustainability of their supply chains, and which reap the benefits of innovative supply chain models but fail to invest in commensurately innovative tools to manage them, are neglecting the needs of the people that make their product and the people that need it. Increased ESG focused inventing by institutions is one of the steps that would help drive this change.

3 CREATE CLOSER BONDS BETWEEN THE PEOPLE THAT MAKE DECISIONS ABOUT SUPPLY CHAINS, AND THE PEOPLE DOING THE WORK

The way we manage supply chains today sometimes feels like the way countries wage war; remote bunkers out of harm's way directing the action. We need to ensure that middle managers in America, for example, making decisions that impact workers in China, are accountable for the societal impact that the business has on its workers.

4 MAKE FUNDS AVAILABLE TO HELP UNDER-DEVELOPED COUNTRIES DIGITISE THEIR INDIGENOUS ENTERPRISES

Loans to SME's in under-developed countries serve to upskill workers and increase buying power. Companies operating in these economies need to embrace the notion of a social contract that compensates countries for use of their natural resources, most notably their people.

5 MAKE TRACEABILITY A REQUIREMENT NOT AN OPTION

In the end, if companies don't have granular, sell unit level, line of sight to the movement of their products, from the harvesting of resources to their post-consumption disposal, they are ultimately unable to take full responsibility for their products' lifecycle footprint. Increasingly across the globe, governmental regulations are being created to mandate creation of this transparency (for example, Food & Beverage, Pharma, Tobacco, Cannabis) on behalf of the people that are impacted. These, and many other industries, would be well-served to initiate this part of their transformation because it is the right thing to do, not because they are forced to by governmental regulations.

sense that the impact of inadequately managed modern supply chains was so severe and far-reaching; death, unemployment, and social unrest, in virtually every corner of the globe. To be clear, this is not a condemnation of innovative global supply chain models; it is a call to action to reinvest the savings they generate into the tools required to manage them effectively. The solutions exist; it's time to change.

Ron Volpe is Senior Vice President of International Markets for Persequor, a Danish Software Company that crafts and engineers Track and Trace software, modules and data solutions to assist in the optimisation and digitisation of supply chains across industries.