

# Sustainable Supply Chain

APRIL 2024 | iscea.org

Embedding sustainability practices in supply chain is a continued endeavor

What are the smart ways to make organizational supply chains sustainable?

Does imbibing the sustainability principles provide businesses with competitive advantages?

Organizations need to embark on a differentiating journey harnessing technology prowess.

Organizations have specific constraints related to products, processes, raw materials, suppliers, and consumers.

How can they manifest innovative approaches in their sustainability journey?

Feature: CSSCP Professional

Sustainability Principles are The Foundations of

a Resilient, Dynamic, and Inclusive Supply Chain.



**APRIL 2024** 

# CONTENTS

# **ARTICLES**



Moving from pledges to progress: the Sustainability problem

06



Clash/Collaboration Of The Titans

14



**Innovation Avenues for Sustainability** 

28



Jugaad is What The World Needs Today

36



The Role of Supply Chain Middleware in Achieving Environmental Sustainability Goals (ESGs)

18

# **ISCEA UPDATES**

4th Annual Global Sustainable Supply Chain Pledge Day

34

Featuring 25 Professionals Who Have Earned The ISCEA CSSCP Designation

40

# EDITOR'S LETTER

### A CONNECTED PURSUIT OF SUSTAINABILITY

There is no denying that global supply chains across industries are in flux. Global events have disrupted supply chains, even before the impact of the pandemic has faded. Disturbed geo-political ambience, underperforming businesses, resource shortages, consumer reservations, and inflationary pressures have necessitated more resilient, dynamic, and cohesive supply chains.

While sustainability has been the guiding principle of establishing a resilient supply chain, a pressing need for emission and environmental controls has reinforced the drive for sustainable supply chains. A recent <u>WEF study</u> unveils that decarbonizing supply chains can address ~50% of global emissions without causing significant cost pressure on end consumers. The <u>UN SDGs</u> such as SDGs 8, 9, 11, 13, 14, 15, 16, and 17 emphasize the influence of sustainable supply chains in building a better life, inclusive working culture, replenishing resources, and reducing adverse impacts on nature.

To achieve sustainability goals and purpose, organizations look beyond operations - collaborations across borders, resource reusability, supplier diversities, defining and socializing norms, and ensuring adherence to regulations. With their operations spread across borders, organizations collaborate with governing bodies of multiple geographies. Businesses across the globe declare their sustainability progress across supply chains.

Despite the promising efforts, concerns arise about the hurdles to progress. The unavailability of measuring and monitoring instruments across multi-tier suppliers, limited trust amongst multiple parties in a supply chain, lack of transparency and awareness of the long-term economic benefit of a sustainable supply chain, and varied compliances across geographies, make it challenging to establish supply chain sustainability. Along with transformation in business approach, digital technologies have crucial roles to play here. However, technologies expose vulnerabilities as well.

How can organizations navigate sustainability needs for their supply chains while thriving ongoing disruptions and business targets?

How can organizations step further from promises to deliveries?

What are the levers that will break silos and help supply chain entities join their hands together?

Talented individuals and pioneer organizations have established impactful levers - processes and solutions. We believe more meaningful and wider connections will nurture the greater potential of these levers. In the maiden edition of the magazine, we spotlight ambitious individuals driven by the purpose of building sustainable supply chains.

Insights from circular economy experts and consultants provide a comprehensive view of challenges in supply chain sustainability and elaborate the strategies organizations could explore – inducing cultural shifts, capturing appropriate data, and maintaining a competitive edge while collaborating across ecosystems.

Corporate practitioners from global technology leaders share approaches from their inspiring experiences. Case studies from distinguished technology solution providers manifest opportunities for platform-enabled traceability and monitoring in addressing ESG goals.

Furthermore, the magazine welcomes budding supply practitioners and wishes for their encouraging achievements. The magazine makes a concerted effort to work together to wipe out the deep-rooted challenges of supply chain sustainability.

We welcome your perspectives and stories about supply chain sustainability for the next edition.

Write to us at ushasi.sengupta@iscea.com and globaldesk@iscea.com. Enjoy the read!



# PUBLISHER'S LETTER

Welcome to the Inaugural Edition of Supply Chain Sustainability Magazine, the magazine highlighting transformation and excellence in sustainable supply chain practice. The contributors, editors, and I are very excited to present the first edition of the quarterly publication. The magazine will feature articles and events from contributors of all industries related to sustainable business. We welcome insight from those who continue to accelerate our global transformation toward a sustainable future.

Our first edition highlights recent Certified Sustainable Supply Chain Professional (CSSCP) certificate holders. These individuals will utilize their certifications by applying the knowledge gained to industry practice around the world. Within this edition, you will find contributions from various industry experts sharing their unique impact on sustainability within supply chain. In addition to insight, the magazine will highlight future events that our readers may find value in attending around the world.

I am excited to introduce this magazine to our readers from around the world and hope that each reader finds a piece within the edition that inspires, motivates, and adds value to their career. We look forward to welcoming both readers and contributors for many editions to come.

Thanks for reading!

### Madison DeSilva

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In today's world, our markets for goods and services are so interconnected that it will take global transformation to make significant progress toward sustainable practice. Fortunately, sustainability in the supply chain isn't just good for the environment—it's good for business, too.

ISCEA's CSSCP program empowers employees to develop expertise in integrating both sustainability and professional supply chain knowledge.



You can pause, repeat, take notes and interact with the instructor through the discussion forum or private messages.



Each module's slides are available in PDF format. You can download and print them at home.

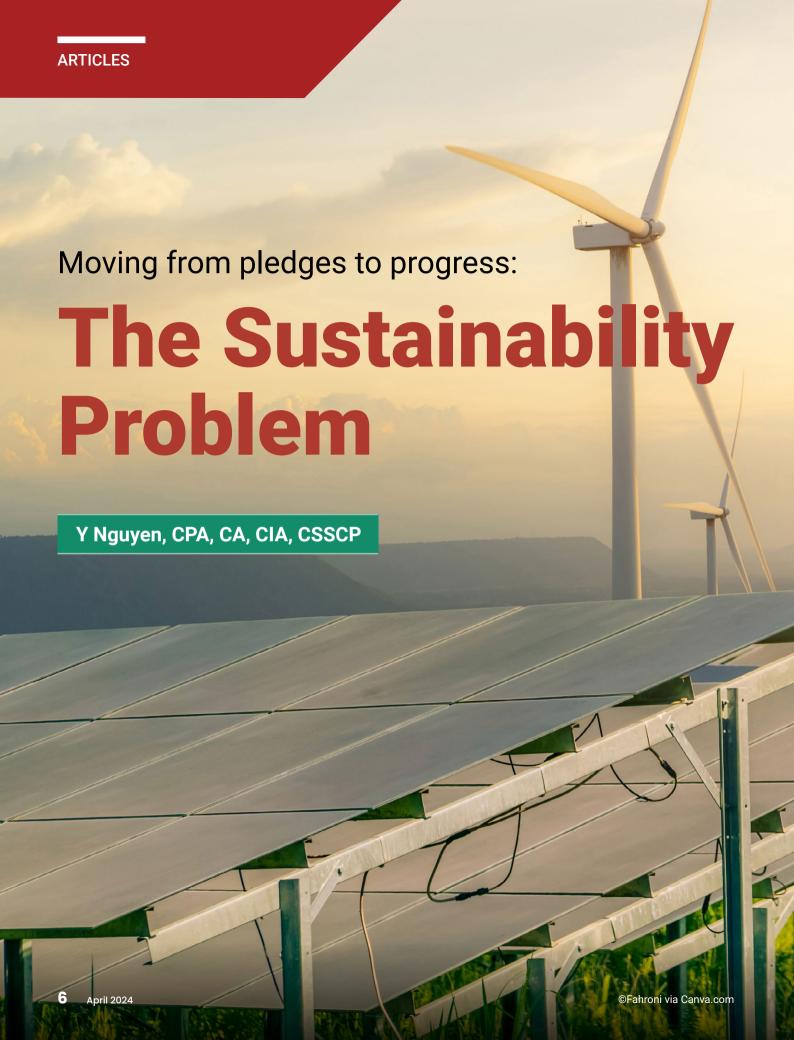


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### Intro

here has been no hotter topic than climate change over the past year. Literally. 2023 was the planet's warmest year on record by a historical milestone, according to an analysis by scientists from NOAA's National Centers for Environmental Information (NCEI)<sup>1</sup>. Last summer we saw global heatwaves, record wildfire seasons, populations displaced by natural disasters, and increasingly frequent extreme weather events. Costs for these events are increasing at an estimate of \$ 4.3 trillion according to the World Economic Forum.<sup>2</sup>

The Paris Agreement on Climate Change has been signed by 196 global parties, the Principles for Responsible Investments (unpri.org) signed by over 5300 asset managers and investment funds representing close to \$140 trillion dollars of assets under management, and the UN Compact signed by more than 6000 organizations world-wide. Despite those commitments, 2023 was 1.48 C warmer than the pre-industrial average from 1850-1900, beating out 2016's record of 1.25 C³. As we inch close to the historical 1.5 C degree increase boundary of being able to limit global warming, the question as it relates to climate changes, is how? How do we move from pledge to real progress?

To understand the how, we have first re-visit the what. Namely, what are we trying to solve for and what is the real challenge Sustainability efforts are facing? Sustainability has long been a determinant of long-term value. As I teach in the ISCEA Certified Sustainable Supply Chain Auditor (CSSCA) certification course, the first ideation and application of Environmental, Social, Governance (ESG) reporting was from the investment community - investors and capital market. They were attempting to determine whether the qualitative factors such as non-financial strategy,

the quality of Board of Directors and resources of a company would denote it as a good buy in the long-term, over and above its current profit and loss position, and historical financial statements.

However, ESG reports themselves, and all the upcoming accounting regulations developed to manage them, are only one small aspect of Sustainability. They are simply meant to be the financial reporting and disclosures used to capture and translate physical and transitional climate risks exposure in dollar amounts so investors can make holistic investment decisions.

Similar to how a financial statement doesn't represent the complete financial health of a company (for a moment, recall the financial crisis of 2008), TCFD, ISSB, CSRD and a countless number of alphabet soup reporting benchmarks does not necessarily represent the true risks a company faces regarding climate change, community, talent management, ability to withstand and adapt to increasingly volatile markets, competition, and consumer demand. In fact, with over 600 regulations, benchmarks, and standards setters globally, which would be the most accurate measure, if any? The challenge with Sustainability is that too much time is spent green highlighting (the more prevalent if not acceptable form of green-washing) our ESG achievements in glossy company reports. Meanwhile, there are still a plethora of internal and external uncertainties that make progress toward 2030 and 2050 netzero targets seemingly unachievable. And that is what we need to solve. How do we move away from the ESG brochures to true Sustainability progress and plans that execute on climate change progress, namely decarbonization?

<sup>1–2023</sup> was the world's warmest year on record, by far | National Oceanic and Atmospheric Administration (noaa.gov)

<sup>&</sup>lt;sup>2</sup>-Climate disasters: Economic costs up, but fatality rate down | World Economic Forum (weforum.org)

<sup>&</sup>lt;sup>2</sup>-Copernicus: 2020 warmest year on record for Europe; globally, 2020 ties with 2016 for warmest year recorded | Copernicus

### **ARTICIES**

# The challenge

When I talk to new clients, new audiences, and new students, I like to be very clear that I'm not here to sell them software. Their inboxes, much like mine, are full of invites to connect to discuss the newest and greatest ESG and climate reporting solutions. When we attend Sustainability thought leadership conferences, software vendors outnumber any other type of solution provider. I'm largely agnostic to the technology itself because software and its promise of a solution in a box is selling part of this Sustainability green-highlighting problem. Reports and dashboards do not necessarily address root-cause Sustainability issues.

Sustainability leaders, heads of nations and scientists globally have agreed that to limit global warming to 1.5°C, greenhouse gas emissions must peak before 2025 at the latest and decline 43% by 2030. What can be accomplished in the next six years? As CFOs, analysts, and auditors have been telling us since the collapse of financial institutions in the early 2000s, the quality of the data is the most important determinant of the quality of the analysis and far more important than the final presentation of the reporting.

However, unlike financial reporting, there is no easy button for carbon emissions and carbon equivalent reporting. There is no simple download from your ERP or financial reporting platform. The data lives in many places, from travel expense forms and HR systems to operational data in factories, to manual logging of estimates of miles and cubic storage of transportation and warehousing.

The data comes from many disparate sources including your vendors and suppliers and more



often than not, data is tracked manually through spreadsheets and collected via email. Where data is unable to be collected, organizations under pressure to meet reporting guidelines, resort to estimates. A fair and reasonable method according to regulators and benchmarking agencies since the data is universally understood to be difficult to acquire. The difficulty lies not just in the data availability and collection, it is the fundamental cultural shift in how organizations, especially manufacturers and food processors, and others in the supply chain have been operating and how they are using that information to make better decisions in the future.

For the first time, organizations are being asked to report and quantify resources such as air, water, waste, pollution, environmental impact, and



social and community impacts as resources to be accounted for. For the first time in decades, there is a shift in accounting in the ledgers because we never had to quantify these things before in our profit and loss statements. In fact, globalization and outsourcing manufacturing overseas was seen as the titan cost-effective solution. As the 2020 pandemic showed us, we never properly calculated those risk factors and now supply chain shortages and disruptions continue to pose problems. We must account for new, seemingly intangible risk factors that have to be derived or estimated. Accounting for the human toll and the conditions local and foreign workers are working in, the miles it takes to expedite shipping from factories overseas with 'Just in Time' methodology, trees and water resources used, the burning of fossil fuels, use and discard of plastics, shipping

of half load trucks, are all processes that were traditionally considered free because it was never required to be measured in dollars on a balance sheet.

With this new accounting, comes estimation and when quality of the data is derived or imprecise, it is often too poor in accuracy, completeness, transparency and auditability to enable organizations to make the informed operational and financial decisions that help them reduce their carbon emissions impact. Too much focus on the pressures of reporting (whether for compliance or public relations) that has driven organizations and even nations to use estimates that, as one widely published journalistic report calls it, seem to come from an alternate dimension to be physically true.

# How can we solve these challenges?

Even as organizations commit and make public pledges to improve, is this cultural shift going to be big enough? More importantly, will it be quick enough before we cross the threshold of irreparable damages to our planet? The simplest example I use is the less-than-full truckload to ship goods for distribution. We have seen that a small change could result in both significant cost savings and emissions impact, and with arguably minimal impact to the end customer (do we need something shipped to us on the same-day / next day in all cases?). However, even in that small use case scenario, we have seen much more nuanced calculation, of the accuracy of shipments, as trucks and ships and even planes do not fly straight as a crow flies on the map but from port to port on routes pre-determined to be cost effective, but not distance-effective. The accuracy of the same cargos sitting on boats and trucks unloading cargos at available and scheduled dock doors and ports. Sustainability is not a trade-off between profits and people /planet. In fact, the upside benefit of better, more precise data is the ability to afford insight into your processes that will highlight opportunities for efficiencies and cost savings and ultimately increase strategic competitive advantage. If you are not accessing and analyzing complete data well, then you're not understanding the true footprint of your business. Thus, approach your Sustainability reporting as a powerful to tool to unlock operational insights and supply chain value.

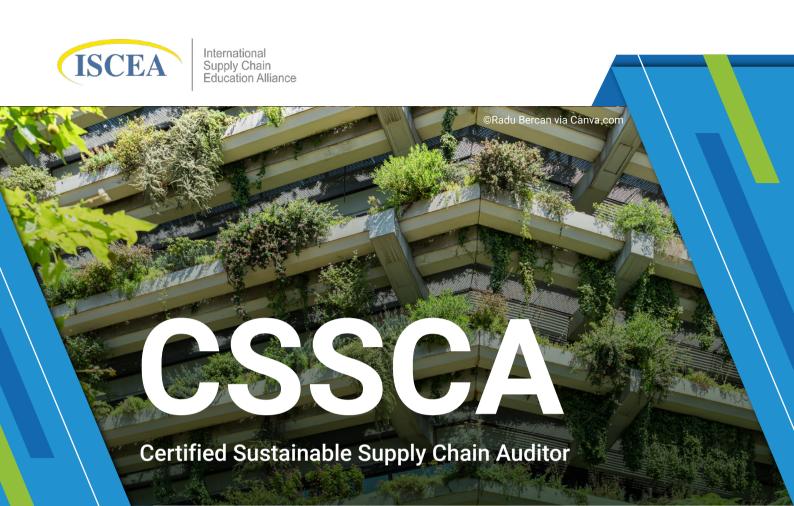
As I help clients large and small, one thing becomes apparent. No matter the size and revenue of an organization, their Sustainability journey, whether they are aspirational, or experienced and have several years of reporting under their belt, or even a transformative enterprise that are global leaders in innovation—their ability to truly track, monitor, and make operational decisions to decrease their climate emissions comes back to the availability and quality of data. Change requires a new way of thinking and information and insights are the pathways. If you have a data-first approach, you gain invaluable insights and return on your Sustainability and operational investments. To rephrase the beloved idiom, if it cannot be measured, it cannot be managed.

# Committing to driving sustainability forward

When I meet new people and describe my work, both as a consultant and an educator, I am always met with enthusiasm. The passion for Sustainability is infectious. But there is a heavy lift and commitment required for us individually, organizationally, and globally to pivot the conversation from do good/feel good. to measurable results. Solving for the lack of credible progress, requires recognizing we have a problem. Then we can truly begin to face hard discussions about transparency and accuracy of the data; identify the gaps and execute on true Sustainability progress. The how—the execution of Sustainability—is simply your long-term, tactical growth strategy. The expected outcome when done with accuracy and transparency is that consistent, measured progress in reducing your harmful environmental and social impact is simply good business. Sustainability is a good value-add investment for the company, economy, stakeholders and shareholders, and ultimately, for the planet.







The Certified Sustainable Supply Chain Auditor (CSSCA) program will enable professional auditors, consultants and practitioners to conduct audits and report on the maturity of an organization's sustainability initiatives according to the IISB26 Audit Framework.

IISB26 is grounded in four distinct pillars to maintain stringent practices and set a global standard above the current expectations in the global market: (1) Protecting People, Community and Planet, (2) Promoting Sustainable Practice, (3) Developing Safeguards for the Future, and (4) Authentication of Sustainable Reporting.



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Supply Chain Sustainability must be the buzzword of the season. However, it has been in place for many seasons and is here to stay in the long run. But why is it a critical topic and driving force in today's market? As we probe deeper, we discover that the supply chain's sheer size, complexity, diversity, and impact on people, the planet, and profits are enormous. Therefore, sustainable design is imperative for the long-term resilience of organizational supply chains. While holistically we all have a definitive role in addressing this change, the biggest influencers face the most significant hurdles and responsibilities. Will they clash with their competitors or embark on a pioneering, innovative,

and inclusive journey with their competition to steer rapid and effective changes across their supply chain?

Tackling any problem of this size begins with a comprehensive understanding of the foundational system (baseline) and material imperatives within that system. This is, of course, further to a fundamental understanding of the definition of the problem itself, i.e., that supply chain sustainability is the ability to meet present needs without compromising the share of resources of future generations to meet their needs. This initial clarity on sustainable supply chains, which mitigate environmental degradation, enhance social equity



and contribute to long-term business resilience and competitiveness, will help businesses understand the critical material issues on which they impact.

There are various imperatives to achieving a sustainable supply chain. Organizational complexity and fragmentation necessitate considerations for more transparency and costeffectiveness. However, people's perception of vulnerability to collaboration poses significant hurdles in such considerations. This collaboration means that organizations share their inner workings of business - not entirely but enough to work collaboratively with an otherwise "competitor (s)" to drive change together, collectively with high buying power within the supply chain. For instance, giant conglomerates and corporations can work together, sometimes build consortia, and position themselves as thought leaders and pioneers. In that case, they can meaningfully transform the supply chains towards reducing Environmental, Social, and Governance impacts across the supply chain.

By working together to share the responsibilities of a sustainable supply chain, organisations can derisk and build resilience strategies that trickle down across all supply chain tiers. Such engagements create direct opportunities for top-tier companies to empower and inspire change within the supply ecosystem. Further, they also position themselves as leaders and open up access to the economic opportunities (i.e. benefits) from strategic sustainable solutions.

Let us suggest some effective strategies to shed light on the specific actions that collaborators could consider. These strategies involve multistakeholder involvement, educational and capacity-building programs, new data and

# **ARTICLES**

information capture systems with transparency, and accountable advocacy for change. See the list of actions your business could consider as a game-change and pioneer for change.



# 1. Multi-Stakeholder Partnerships

Engaging with governments, nongovernmental organisations (NGOs), and industry associations facilitate cross-sectoral collaboration and knowledge exchange.



# 2. Supplier Engagement Programs

Big corporates can implement supplier development initiatives focused on capacity building, training, and incentives to improve sustainability performance.



# 3. Supply Chain Transparency

Leveraging technology solutions such as blockchain and supply chain mapping tools enhances transparency and traceability, enabling companies to identify and address sustainability risks more effectively.



### 4. Joint Innovation and R&D

Collaborating on research and development efforts fosters innovation in sustainable materials, processes, and technologies, driving continuous improvement within supply chains.



# 5. Policy Advocacy

Collective advocacy for supportive policy frameworks encourages governments to enact regulations and incentives that promote sustainable practices across industries.

However, the bitter fact that perhaps we need to admit is the biggest hurdle to building collaborative partnerships is our ego, which often gets in the way of "identifying" issues or stirring up reasons not to take a chance and do something differently through open collaboration. The ego stops us from being honest, upfront and vulnerable, as it fears the "susceptibility" (again, this is the ego talking) that we face in people's opinions and judgements. On a brighter note, building trust, fostering a shared vision, and aligning with the incentives to scale forward the positive impact could pave the way to overcoming the constraints of our ego. One doesn't have to be the first prospective collaborator to say yes to; sometimes continuing conversations and at least being open to connecting on a deeper level helps find the one(s) that connect with one's vision and build on the common ground.

Establishing trust in an otherwise cold corporate world can initially feel uncomfortable, but it all starts with one conversation at a time. It creates integrity and trust from having an open discussion that will lead to respect and understanding of each other to create a win-win situation. Once trust is established with a purpose for the greater good (for all parties), the strategically aligned framework of the collaboration can be built out with incentives for both parties along the way. Trialling this on a small scale helps with market testing and viability to improve the system and find a point to scale the framework.

To effectively summarise the process that businesses and organizations might adopt through collaborative partnerships & extensive sustainable supply chain transformation would include the following actions:

**1. Identify Common Objectives:** Creates valuealignment and purpose.

- **2. Stakeholder Engagement:** The right people, opinions and ideas in focus.
- **3. Mapping Potential Partners:** To find who is best suited to drive your agenda forward and in a win-win situation.
- **4. Initiate Dialogue:** To connect and build on the relationship primarily around a level of mutual trust.
- **5. Define Roles and Responsibilities:** To clarify who leads, manages and implements specific actions and create a sense of accountability in the system.
- **6. Agreement:** Develop a memorandum of understanding (MoU) or partnership agreement.
- **7. Joint Action Plan:** With milestones, measurables, and feedback systems for improvement and progress.
- **8. Implementation:** Implement the collaborative projects and initiatives.
- **9. Measure & Improve:** Capture date, and track and evaluate the impact.

**10. Expansion:** Sustain and expand the collaboration over time

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Collaborative action among large corporations is essential for advancing supply chain sustainability and addressing pressing environmental and social challenges. By leveraging shared resources, expertise, and influence, companies can drive meaningful impact throughout their supply chains, fostering resilience, innovation, and responsible business practices. Embracing collaboration as a strategic imperative will benefit individual companies and contribute to a more sustainable and equitable global economy for future generations.

Can we shed our egos and join hands together not only for our planet's and its people's benefit but also for fueling a circular economy in which businesses survive the rapid changes and thrive as new-age pioneering, sustainable businesses imbibing responsible supply chains?

# **Meryl Sukumar**

Meryl Sukumar is a Sustainability & Circular Economy Expert, Founder & CEO of Subcinctus Consulting (Top 15 Firms To Watch In 2021). I Co-Authored "The ABCs Of The TCFD" to simplify the core pillars of a critical financial framework that is already changing our economy. Connect with her on Linkedin: Founder @Subcinctus Consulting | 15 Australian Consulting Firms to Watch in 2021 | 20 Australian Women Making Moves



# The Role of Supply Chain Middleware in

# **Achieving Environmental Sustainability Goals** (ESGs)

# **Karl McDermott**

Invironmental, social, and Governance (ESG) issues have become central to corporate agendas. Businesses are increasingly seeking innovative solutions to reduce their ecological footprint. A PWC survey looked at this trend towards sustainability. A resounding 83% of consumers believe that companies should actively shape ESG best practices, while 91% of business leaders feel a responsibility for their companies to address ESG issues; furthermore, 86% of employees express a preference for supporting or working for companies that share their commitment to these issues. As environmental and social awareness continues to shape consumer preferences, companies are compelled to reevaluate and overhaul their supply chains to align with sustainable and ethical principles.

One crucial player in this sustainability journey is supply chain middleware. Supply chain middleware refers to software solutions or technology platforms that act as intermediaries or connectors



within a supply chain network. The primary function of supply chain middleware is to facilitate communication and integration between different software applications, systems, or components involved in the supply chain process. It serves as a bridge between various stages of the supply chain, ensuring that information flows efficiently and accurately across the entire network. Leveraging this technology can significantly contribute to improving environmental performance across various industries.



# **Streamlining Operations for Efficiency**

Efficiency is the cornerstone of a sustainable supply chain. Supply chain middleware plays a pivotal role in optimizing operations by integrating various components in the supply chain. Through the consolidation of procurement, manufacturing, and distribution processes, businesses can minimize excess inventory, decrease transportation-related emissions, and enhance overall resource utilization. Real-time data visibility and analytics provided by middleware

empower companies to make informed decisions about product flow, transportation, and sourcing, fostering a more efficient supply chain. In particular the use of supply chain middleware allows businesses to break down complex data for functional use in their own optimization practices. This improvement in efficiency in turn leads to better environmental practices but importantly, also helps improve profits.

# **Supply Chain Traceability**

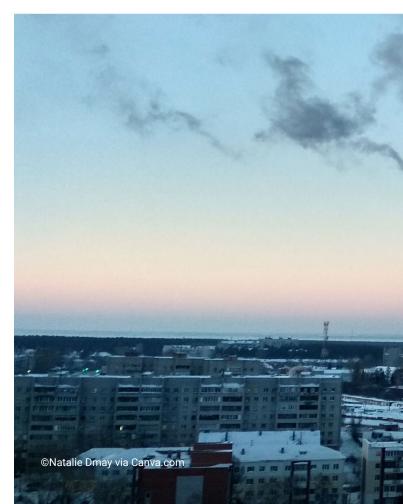
Transparency is a key driver of sustainability. Middleware enhances visibility and traceability by providing a comprehensive view of the supply chain. This capability allows businesses to monitor and track the environmental impact of each component, identifying areas with the highest ecological footprint. Armed with this data, companies can implement targeted interventions to reduce emissions, waste, and energy consumption, promoting a more responsible supply chain. This transparency is not only essential for internal purposes but also facilitates open communication with consumers, investors, and regulatory bodies.

# **Modern Slavery**

A major benefit of the increased transparency enables companies to easily identify any instances of modern slavery or forced labor within their supply chains. This includes compliance with the German Diligence Act (LkSG), USA CBP Uyghur Forced Labor Prevention Act, and the UK Modern Slavery Act (MSA). For instance, in the UK the Transparency in Supply Chains Provision within the framework of the Modern Slavery Act (MSA) mandates that commercial entities generating an annual turnover of £36 million or above must provide annual reports detailing their efforts in identifying, preventing, and addressing modern slavery within their supply chains. By enabling data sharing among stakeholders, this supply chain middleware technology facilitates collaboration and accountability, making it easier to enforce labor standards and detect irregularities that may indicate potential instances of modern slavery. Through RFID tags, barcodes, or digital records immutably stored on the blockchain, each component and product can be traced, along with associated labor inputs. For instance,

if cotton is sourced from a particular region known for labor exploitation, the technology can flag this information. Similarly, during garment manufacturing, if there are discrepancies in labor conditions or unexpected delays, the system can trigger alerts for further investigation.

This visibility allows supply chain middleware to serve as a powerful weapon in the battle against counterfeits. This heightened transparency enables businesses to validate the authenticity of products, ensuring they adhere to stringent quality standards. By leveraging middleware, companies can implement track-and-trace technologies, such as RFID tags or barcodes, to uniquely identify and monitor each product unit. Any deviation from the authorized supply chain route becomes immediately apparent, making it easier to identify and eliminate counterfeit products. In essence. supply chain middleware acts as a vigilant



guardian, leveraging advanced technologies to protect brands and consumers from the pervasive menace of counterfeit goods that are less inclined to adhere to product safety standards, worker safety standards, and environmental regulations.

# **Carbon Emission Reporting**

Regulations in line with environmental and sustainability goals are only becoming more commonplace. California recently saw the introduction of Senate Bill 253. SB 253, the Climate Corporate Data Accountability Act (CCDAA), mandates companies with over \$1 billion in annual revenue in California to disclose greenhouse gas emissions from 2026, covering scopes 1, 2, and 3. Scope 1 emissions: Direct emissions resulting from a company's activities. Scope 2 emissions: Indirect emissions released, for example, from electricity purchased and used by the company. Scope 3 emissions: Indirect emissions produced

throughout a company's entire supply chain. Violations may incur civil penalties with fines up to \$500,000 annually, emphasizing the state's push for stringent reporting. This regulation shows the way in which companies are increasingly responsible for the entirety of their supply chains.

Preparation for compliance is paramount as companies face hefty fines and reputational risks for non-compliance. Supply chain middleware offers solutions to facilitate compliance, including robust emissions tracking, data analytics for risk assessment, blockchain for data integrity, smart contracts for automated reporting, and IoT devices for real-time monitoring. Leveraging these technical capabilities can streamline compliance efforts and align companies with incoming regulatory requirements.





# **Case Study: Single Use Plastics at Federated Co-operatives Limited (FCL)**

The CPP aims to establish a circular economy for plastics, setting specific 2025 targets such as eliminating problematic plastic packaging, ensuring 100% recyclability or compostability of plastic packaging, achieving a 50% effective recycling or composting rate, and incorporating 30% recycled content across all plastic packaging.

Federated Co-operatives Limited (FCL), representing 160 local Co-ops across Western Canada, has officially joined the Canada Plastics Pact (CPP) with a commitment to reduce problematic plastics across its supply chain. FCL has partnered with Morpheus. Network to implement a sophisticated supplier management system across the supply chain. This system streamlines the collection, validation, processing, and tracking of regulatory certifications and trade documents from over 150 global suppliers, replacing a labor-intensive process.

A 2017 research paper titled "Production, Use, and Fate of All Plastics Ever Made," featured

in the journal Science Advances, showcases a staggering 8.3 billion metric tons of plastic have been manufactured since the 1950s, with half of this amount produced in the last 15 years alone. As such, plastic usage and environmental sustainability are among FCL's chief goals. Over the years, FCL has actively sought environmentally friendly alternatives, such as non-plastic, compostable straws, stir sticks, cutlery, and takeout containers. Pam Skotnitsky, Vice-President, Strategy at FCL, emphasizes the collective commitment reflected in signing the Pact. She stated:

"Signing this Pact signals our collective commitment to focus on the sustainability of our communities in our business practices and to do our part as stewards of the environment. Reducing our use of plastic packaging materials will help ensure we are doing our part to pass a healthier planet on to future generations. At the end of the day, it's the right thing to do."



Prior to collaborating with Morpheus. Network, FCL grappled with a primarily manual process. With over 150 unique suppliers, over 170 retail outlets, and tens of thousands of employees, a commitment to a sustainable plastic future entailed a complex system of measurement, data handling, and reporting requirements that would have been difficult to manage on their own.

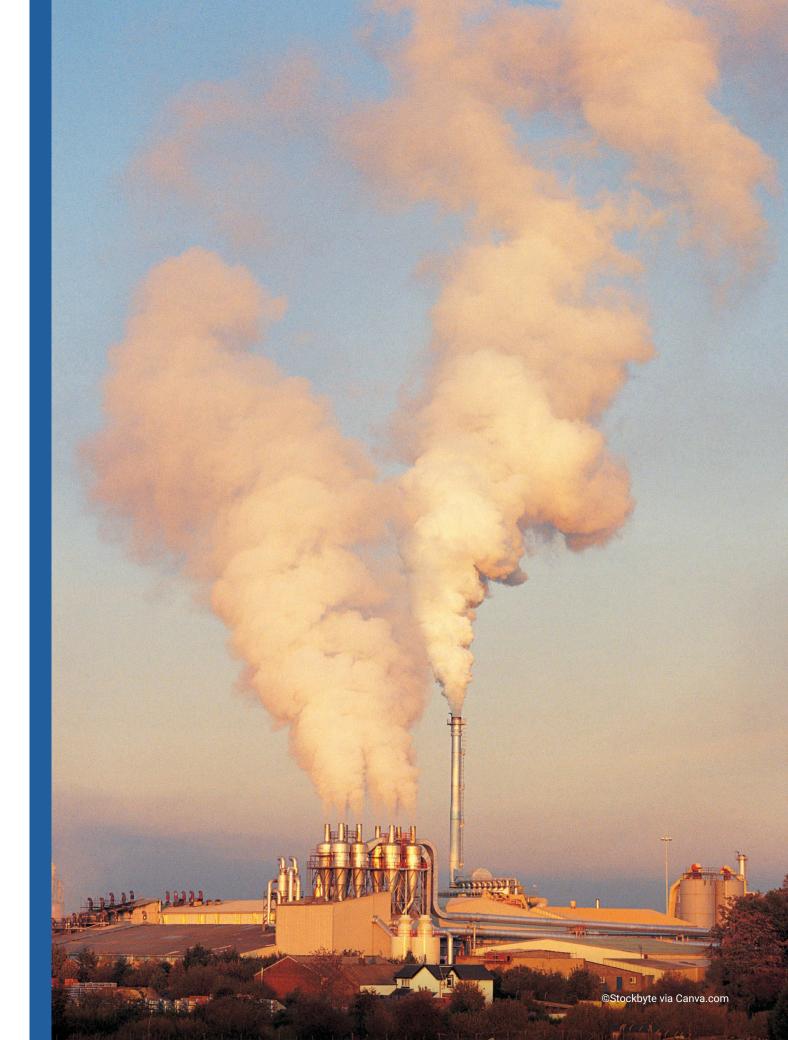
Skotnitsky expresses Co-op's enthusiasm for collaborating with diverse organizations within the Canada Plastics Pact to find sustainable solutions to the challenges of plastic pollution. She added:

> "Reducing plastic pollution is something we all must take seriously to solve this problem and we can't do it on our own. FCL is excited to partner with the diverse organizations in the Canada Plastics Pact to find real, sustainable solutions to the challenges we face,"

By joining the CPP and partnering with Morpheus. Network, FCL is actively committing to reaching

the targets set out by the legislation. At FCL, transparency and sustainability take precedence. With the integration of the cutting-edge program run by Morpheus. Network, vendors now have the capability to seamlessly fulfill FCL's annual plastic information reporting requirements using Foodcerts. By allowing better data collection through the middleware software platform, FCL has been able to take a big step towards their sustainability goals. The introduction of the 'Materials' tab empowers vendors to independently report their plastic usage, ensuring a thorough and precise account. What distinguishes Foodcerts is its capacity to simplify data management on a large scale. With just a few clicks, FCL can export a comprehensive report consolidating plastic usage data from hundreds of vendors. Co-Op vendors are now able to provide packaging materials used for each component of their packaging used per SKU. This data collected allows FCL to focus on their sustainability efforts in order to find environmentally friendly plastic alternatives. Additionally, they have worked to eliminate plastic rings from the private label canned beverages, and are providing customers with the option to use paper bags and reusable totes. Foodcerts not only meets FCL's reporting needs but also exemplifies the company's dedication to efficiency, accuracy, and environmental responsibility in all operational aspects. This application received the prestigious ISCEA Ptak Award For Supply Chain Excellence in 2021.

The partnership between FCL and Morpheus. Network is just one of many examples of the way middleware platforms can help companies reach ESG goals. These partnerships enhance transparency by providing real-time visibility into the entire supply chain, enabling companies to track and trace raw materials, optimize



resource utilization, and streamline processes. By fostering collaboration and communication among stakeholders, these platforms contribute to addressing social and ethical concerns in the supply chain. They also play a crucial role in identifying and mitigating ESG-related risks, ensuring compliance with environmental standards, and promoting ethical labor practices. Additionally, middleware platforms support performance measurement and reporting, facilitating accurate and transparent disclosure of key ESG indicators. In essence, these partnerships empower companies to align their supply chain operations with sustainable and responsible business practices, fostering a culture of continuous improvement.

# **Compliance Management and Reporting**

Meeting environmental regulations and standards is a non-negotiable aspect of sustainable business practices. Supply chain middleware aids in compliance management by automating data collection and reporting processes. This not only ensures adherence to environmental regulations but also provides valuable insights into areas that require further improvement to align with sustainability objectives. The automation of compliance-related tasks enhances efficiency, reduces errors, and ensures that businesses maintain a responsible and environmentally conscious supply chain. By ensuring adherence to environmental guidelines, businesses not only avoid legal repercussions but also demonstrate a commitment to responsible and sustainable practices.

### **Conclusion**

The ability of supply chain middleware to streamline operations forms the backbone of sustainable business practices. By optimizing processes, minimizing waste, leveraging transparency, and promoting resource efficiency, companies can actively reduce their ecological footprint. This operational efficiency not only enhances the economic viability of businesses but aligns seamlessly with the imperative to foster a more sustainable planet.

As businesses increasingly prioritize sustainability in response to global environmental challenges, the role of supply chain middleware becomes pivotal. Its comprehensive influence, from operational efficiency to collaborative innovation, aligns seamlessly with the collective responsibility of achieving a harmonious balance between economic growth and ecological preservation. In essence, supply chain middleware stands as a linchpin for ushering in an era where businesses can thrive not only economically but also as responsible stewards of the environment across diverse industries

# **Karl McDermott**

Karl McDermott is a Dynamic and entrepreneurial 35-year career founding and leading supply chain, technology and service organizations. A big strategic innovation thinker, with outstanding application of methodologies, technologies and change management practices to improve strategic positioning and execution.3 x Founder. 5 x CXO. Board Member and Mentor. SAP.iO > Plug&Play > EWCTop10 > ISCEA Advisor and Event Speaker skilled in Building Market Share and Cash Flow Throughout International Business Markets. Connect with him on Linkedin: Chief Revenue Officer at Morpheus. Network > SAP.iO > Plug&Play > EWCTop10 > ISCEA Advisor

# Do these supply chain management issues sound familiar to you?



Here is how Morpheus. Network's middleware solution can help

# Your Problem

# Our Solution

### Supply Chain Visibility:

The absence of supply chain visibility can result in inefficiencies, delays, increased costs, inconsistent product quality, customer dissatisfaction, higher return rates, and heightened risks of counterfeit goods.

- · Our platform enables end-to-end traceability, recording each supply chain step securely
- · Complete transparency enabling tracking of product origin and journey, meeting ethical, environmental, and regulatory standards.
- · Morpheus.Network offers real-time insights, identifying vulnerabilities & anticipating risks enabling proactive risk management and enhancing supply chain resilience.

### Silo Data:

Silos hinder supply chain leader's access to real-time insights, while manual data processes raise error risks, emphasizing the complexity and resource demands of integrating systems across platforms and sources.

- · Enable real-time data exchange between different systems of records and stakeholders in the supply chain through smart contracts and APIs.
- · Enables standardization of processes and workflows across the supply chain, ensuring consistency and compliance with industry standards & best practices.
- · Takes a no-code approach with flexible integration options, allowing seamless connectivity with existing systems and technologies to ensure interoperability with various systems and data sources.

### **Document Management:**

Traditional document management, involving manual paper handling, leads to inefficiencies, errors, delays, and compliance risks, hampering supply chain scalability and efficiency, potentially resulting in costly penalties for regulatory non-compliance.

- · Digitization of paper-based documents, making them easier to manage, search, and share electronically across the supply chain.
- · Automation of document workflows through our platform, simplifies processes such as creation, approval, and distribution, thus reducing manual effort and enhancing efficiency.
- Utilization of blockchain technology to securely store documents in an immutable ledger, ensuring integrity and providing a reliable, auditable record of compliance-related information.

### Sustainability & ESG Goals:

Managing Sustainability objectives can prove to be challenging especially staying in compliance with evolving ESG regulations compounded by the challenge of collecting reliable ESG data due to diverse supplier reporting capabilities.

- · Provides real-time tracking and monitoring of goods and transactions, covering raw material sourcing, production processes, transportation, and distribution.
- · Offers trusted carbon emission reporting (as per SEC/EU/California) by shipment, enabling supply chain leaders to track environmental impact.
- · Automates compliance checks & validations against relevant regulations & standards.
- · Features automated audit trails and reporting, aiding in demonstrating compliance









# Inspiration

We have developed an unique immersive and high-energy approach fostering innovation at speed and scale

# Method

..bringing the uniqueTCS PACE Innovation Architecture, pushing creative thinking and problem-solving leveraging customized sprints, 600+digital accelerators, and 50+Digital workboxes

# Acceleration

..addressing the need of Sustainability led transformation, to enable companies gaining and driving competitive advantages

# Context

...through the Innovation Architecture that is bringing together everything needed to produce accelerated, successful sustainability 'Impacts' aligned to your 'Purpose'.

# **Innovation Avenues** for Sustainability **Thorsten Mebs**

ustainability is an imperative to organizational sustenance. Shifting consumer demands towards sustainable products and services, generational preference to engage with purpose-driven organizations, and global compliance necessitate organizations take measures towards achieving sustainability targets.

Ensuring sustainability practices in supply chain plays a vital role here. Supply chain not only contributes to environmental sustainability but it has implications on human rights, labor practices, and diversity.

Building sustainable supply chain is not indeed an upheaval task. However, the long-term yield of a sustainable supply chain is enormous, leading to organizational elevation – financially and good-will perspective across stakeholders such as investors, suppliers, customers, and employees.

There are a set of key aspects business broadly focus on while addressing supply chain sustainability needs:

- **Sustainable Procurement**
- **Encouraging adoption of environment** friendly technologies and practices
- **Supplier diversity**
- **Ensuring human rights**
- **Practicing business ethics**
- **Defining goals and monitoring progress**

It is important to note that while business steer different measures and practices, leadership is responsible for setting sustainability vision and sanctioning necessary investments. Nevertheless, CEOs of today are more that before convinced that sustainability is elemental, more than a license to operate.

Topline and bottom-line metrices could be influenced by sustainability practices.

	Good Sustainability Performance	Poor Sustainability Performance
Revenue Growth	Attract more customers with green product	Environment conscious consumers switch to green products
Cost Reductions	Reduce cost of energy management	Higher cost on waste management
Regulatory and Legal Support	Subsidies and support from Government	Penalties and compliance challenges
Profitability	Premium pricing higher margin	Low cost and low margin



Along with CEO, CXOs such as Chief Supply chain officers, Chief Sustainability Officers, Chief Procurement Officers, Chief Operating Officers, Chief Human resources Officers and Chief Financial Officers join their hand together, establishing the fact that supply chain sustainability is not a siloed approach.

Let us understand how organizations are approaching sustainability in business processes, which can further be extended to their supply chain.

Based on our interactions with industry leaders we broadly categorized organizations in three clusters based on their approach towards establishing sustainability practices. The three clusters are - Eco-Efficient, Eco-Differentiator, and Eco-

**Eco-Efficient:** This approach aims to reduce the environmental impacts and resource consumptions of products and services, while

Disruptor.

maintaining or increasing the functionality and quality - to reduce their carbon footprint and leaving positive impact on ESG aspects. Companies try to achieve it through efficiency improvement initiatives, which reduce cost and help in building business case for investments. Companies keep their core portfolio of products and services in place to ensure profitability, competitive advantages, and seamless supply chain performance.



Figure 1: Eco-efficient approach for sustainability



product and service development and delivery with a Zero-emission ambition.

This approach does not lead companies to shift from their core competencies but instead innovating on product composition, consumption, and design to reduce negative sustainability impact while targeting similar applications and customers.

Companies often engage in this paradigm with an objective to create premium and differentiated products, which have renewable ingredients or are circular in nature. Premium positioning leads to higher margins and builds the business case.

Eco-Disruptor: Eco-disruptor strategy enables companies to take bold approach and build new capabilities and ecosystem in their favor. Such companies could foresee threats to their products and services and proactively develop a competitive advantage for themselves. Such strategies radically transform their product portfolio and look for long-term opportunity creation. As a result, companies explore newer revenue streams, which were not part of their business-as-usual practices.



Figure 2: Eco-Differentiator approach for sustainability



Figure 3: Eco-Disruptor approach for sustainability



# Where to play?

While organizations share purpose-led visions of sustainability in processes and supply chains the ways of getting there are contextual and organization specific. Organizations have their specific constraints related to product, process, raw-materials, suppliers, and consumers.

Companies need to carefully evaluate their constraints while crafting their sustainability journey. Our study evaluates constraints into three categories:

- ▶ New and Emerging products and services
  leaving behind no significant sustainability
  impacts will have fewer regulatory constraints
  and pushbacks from customers. For
  instance, technology and software servicebased organizations have comparatively
  less regulatory constraints than that of
  manufacturing organizations. Often these
  markets are growing and help organizations
  capitalize on emerging product demand as well
  as create a positive sustainability impact.
- Products notoriously infamous for negative impact on sustainability and under regulatory radar can experience decline market and negative sentiments from different stakeholders such as investors, consumers, employees, or regulators. Becoming part of tomorrow's world in the most challenging ambition organizations experience with such products. Such product owners need to deliberate and re-evaluate their core competency. Further it is necessary to identify new partners who could help the organizations address unmet needs of their consumers and address sustainability targets.



Products which are experiencing growing demands in the foreseeable future but presently their lifecycle is not sustainable could be addressed from their process perspectives. The markets for these products and services are in place. However, they experience stakeholders' pressure to be sustainable. In such cases, companies noneed to go away from the existing portfolio and need to innovate around them to become sustainable.

Innovation is a crucial lever in contextualizing sustainability approaches for organizations across their product portfolio leading to both speed and scale. Along with technological innovation, organizations need business model reimagination, social innovation, and even at policy and regulatory level. Appropriate innovation strategy will enable organizations to garner competitive advantages from sustainability through transformed business model, digital adoption, and ecosystem collaboration. Eliminating resource extortion streams and giving birth to resource regeneration cycles will rejuvenate our distressed planet and every entity that lives on it.



Figure 4: Mapping of sustainability constraints to product approach

# Thorsten Mebs

Thorsten is a seasoned professional in Logistics & Supply Chain and presently serves as a director of supply chain sustainability, at TCS Pace Circular. He is a passionate advocate of sustainability. He holds significant expertise in Supply Chain Advisory, Digital Transformation, and Organization and Change Management. Thorsten is also a supply chain coach and is closely associated with ISCEA. Connect with him on Linkedin: https://www.linkedin.com/in/thorstenmebs-3316777/

# 4th Annual Global

# Sustainable Supply Chain Pledge Day

# The Annual Sustainable Supply Chain Pledge Day!

Mark your calendars! Each year on April 24 we come together to celebrate and promote sustainable practices in supply chain management. This event will be held online allowing participants from all over the world to connect and learn from industry leaders.

At the Annual Sustainable Supply Chain Pledge Day, you'll have the opportunity to gain insights, network with like-minded professionals, and discover innovative strategies to make your supply chain more sustainable. Our lineup of esteemed speakers will share their expertise and success stories, inspiring you to take action.

Whether you're a supply chain manager, sustainability enthusiast, or simply curious about the topic, this event is for you. Engage in lively discussions, participate in interactive workshops, and explore cutting-edge solutions to reduce environmental impact and create a more socially responsible supply chain.

Don't miss out on this incredible opportunity to be part of a global movement towards a greener future.



Watch more on:

How Al mitigates ESG Risk - Sustainable **Supply Chain Management** 



# Jugaad is What The World **Needs Today** Sandeep Chatterjee

e are living at a very dangerous tipping point. Earth needs resources to survive and so does human being. The concerning point is not the resource depletion but the rate of resource depletion. We are using 1.8 Earths to support 1 Earth. Earth Overshoot Day marks the date when humanity's demand for

ecological resources (fish and forests for instance) and services in a given year exceeds what Earth can regenerate in that year. We maintain this deficit by liquidating stocks of resources and accumulating waste, primarily carbon dioxide in the atmosphere. For the year 2024, the Earth Offshoot Day is July 25.



So, the billion-dollar question is how do we navigate these times? All said and done, unless it hits our home, we will never take it seriously. It is time to take a pause and introspect how do we grow. Companies need to grow but responsibly. And for that reason, the metric of evaluating companies need to change. If we are still using GDP as a measure of growth, all this is just talk and no action. No CEO will forego profit at the expense of sustainability unless there is a regulation or a compelling need to do so.

The next question is why do we need to care for sustainability? MacAskill calls it longtermism: "the idea that positively influencing the long-term future is a key moral priority of our time." Caring about future generations is important for several reasons. Firstly, it reflects a sense of responsibility and empathy towards those who will inherit the world we leave behind. By considering the impact of our actions on future generations, we can make more sustainable and ethical choices that benefit society as a whole. Additionally, caring about future generations fosters a long-term perspective, encouraging us to address issues such as climate change, resource depletion, and social justice in a way that ensures a better world for those who come after us. Ultimately, caring about future generations is a fundamental aspect of building a more equitable and sustainable future for humanity.

We have done well in terms of material needs. According to Edward George, We live longer than our forefathers but we suffer more from a thousand anxieties and cares. They fatigue only the muscles, we exhaust the finer strength of the nerves. The top 1% of the world's population owns about 43% of the world's wealth. We have food for 10 billion people yet so many people go hungry. It is time to reflect and look at a different perspective where we can do more with less. Lot of companies argue that sustainability is expensive but there are cases where it has led to increased profitability if we forget regulations or morality for the time being.

Jugaad (or jugaar) is a colloquial word in Indo-Aryan languages, which refers to a nonconventional, frugal innovation, often termed a "hack". It could also refer to an innovative fix or a simple work-around, a solution that bends the rules, or a resource that can be used in such a way. It is also often used to signify creativity: to make existing things work, or to create new things with meagre resources. It can be compared to the French term bricolage, although the two concepts do not precisely correspond. Unfortunately, it is equated with a make-shift arrangement or an inferior quality product.

Jugaad is increasingly accepted as a management technique and is recognized all over the world as a form of frugal engineering. Companies in Southeast Asia are adopting jugaad as a practice to reduce research and development costs. Jugaad also applies to any kind of creative and out-of-the-box thinking or life hacks that maximize resources for a company and its stakeholders.

According to author and professor Jaideep Prabhu, jugaad is an "important way out of the current economic crisis in developed economies and also holds important lessons for emerging economies".

Take the case of Tata Motors, the Indian automobile giant. Primarily tagged as a truck manufacturer, Tata Motors forayed into the small car segment with its 'Indica' car in 1998. The car may not have been a great success but it changed the landscape of small cars in India. Before Indica, Maruti, Ambassador and Fiat were the only cars

# **ARTICLES**

available which had a price point of more than INR 3 lakhs. Tata Motors offered it at a little more than INR 2.5 lakhs. Did Tata Motors lose money as they reduced the price. No, it controlled the costs. The assembly line was a second-hand refurbished line bought from Nissan Australia. This was a classic case of circular economy. Today India makes cars for the entire world.

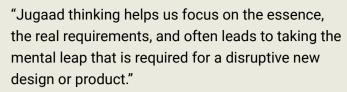
The way the Generation X grew up, there was a mindset to recycle, reuse as resources were scarce and expensive. As we had more and more well-todo people, the mindset changed to use and throw. This was a huge opportunity for companies to grow but it left the world in a very bad shape. It is time to rethink as earth will continue to exist, but humanity may not.

The next case in point is cement companies. The key raw material of cement is limestone which has to be mined. According to Globaldata, the metals and mining industry accounts for approximately 4% to 7% of worldwide greenhouse gas emissions. What if we change the perspective a bit? Is there way where we can use alternate materials to reduce consumption of limestone. Cement companies have actually done that which is known as green cement. There is a huge generation of fly ash from Power companies which pollute the environment. Also, slag from steel companies is a waste. The cement companies started using these materials with limestone. This reduces the input cost and also reuse some of the waste materials. Today, the cement companies are one of the most profitable ones.

The third example is from the Poultry industry. Suguna Poultry, one of the pioneers in this field has a frozen chicken factory in Coimbatore, India. The entire operations is run like an assembly line where the chicken goes through multiple stages



# **ARTICLES**



But isn't jugaad just another iteration of the various agile methodologies already doing the rounds? No, says Menhardt: "Agile or lean are process frameworks, whereas jugaad is void of process," he argues. "Jugaad is a culture, an attitude, an outcome of circumstance, but definitely not something planned. The challenge is to tap into it and channel it."

According to Prabhu, lean and agile are internally or supply-side focused; they pursue cost efficiencies or responsiveness as an end goal. "Jugaad, in contrast, is primarily externally or demand-side focused. It uses cost efficiency as a means to achieve a larger goal of delivering higher value to customers," he says. "Jugaad innovators strive to create products and services that score high on three attributes increasingly valued by customers: Affordability, quality, and sustainability."



of stunning, cleaning and processing. There is only one manual intervention for the halal cut (to respect the religious sentiments). The feet of the chicken which is not eaten in India is exported to Dubai. The feathers and other visceral organs which are removed during processing are powdered and fed back to the growing chick as feed. Some of these also make it to fisheries. This is a classic example of a zero-waste company. While the margins are low, the company has made hygienic chicken available across the country.

In the West, with the global economy set for a long period of austerity, jugaad is a welcome item on boardroom agendas. "Jugaad is a clever, unconventional, quick way to solve a problem," says Wido Menhardt, CEO of the Philips Innovation Center in Bangalore. "It is always out-of-the-box, and it is typically very focused. These are exactly the kinds of innovations Philips needs to develop products for emerging markets, but ultimately also for increasingly competitive developed markets."

"There is sometimes a tendency for Western companies to over-engineer products - to make them perfect, account for all possible use cases, and make them last forever," he continues.

# **Sandeep Chatterjee**

Sandeep is a passionate Supply Chain and Sustainability Leader with IBM Consulting. He has been steering engagements in supply chain and sustainability, leveraging technology. He is the CEO and Chairman of The International Supply Chain Education Alliance (ISCEA) in India.

Sandeep was acknowledged as one of the 'Global 200 Inspirational Leaders 2023' and 'Economic Times Inspiring Leader Award', 2022. He is also a Member of the Board of Governors, IIM Kozhikode and a few Startups and Investment Banks. Connect with him on Linkedin: https://www.linkedin.com/in/sandeepchatteriee-4302271/



# **Featuring 25 Professionals**

Who Have Earned The ISCEA Certified Sustainable Supply Chain Professional (CSSCP) Designation

# Rajesh Amirthalingam, CSSCP

Consulting Partner, Sustainability, Corporate CTO

**Tata Consultancy Services** India

# Prabhdeep Singh Anand, CSSCP

General Manager - Procurement WNS Global Services Pvt. Ltd. India

# Olatunde Bedford-Egunjobi, CSSCP

Senior EY

Nigeria

# **Bok Hooi Chew, CSSCP**

Manager - Supply Chain Supply Planning

B. Braun Medical Industries Sdn. Bhd Malaysia

# Giulia Cinquetti, CSSCP

**Operations Manager** Glencore international ag Switzerland

# **Emmanuel Delplangue, CSSCP**

Founder

DownunderED

France

# Ian Dyason, CSSCP

CEO

Supply Chain and Logistics Academy

Singapore

# Erika Fatma, CSSCP

Lecturer

Politeknik APP Jakarta

Indonesia

# Joy Foo, CSSCP

**Logistics Officer** 

**United Nations** 

Canada

# Spandan Ghosh, CSSCP

Student

University of Pittsburgh

**United States** 

# **Agnes Guignes, CSSCP**

Regional Supply Chain Analyst

ALCON

Singapore

# Suleiman Halilagic, CSSCP

Logistics Officer

**United Nations** 

**United States** 

# Georgia Koutrafouri, CSSCP

Medical Logistics Planning Officer

**United Nations** 

**United States** 

# Joseph Mkose, CSSCP

**Procurement Officer** 

**United Nations** 

**United States** 

# **Aayush Modl, CSSCP**

Student/Associate at KPMG

Arizona State University/KPMG

**United States** 

# Prasetvo Muhardadi, CSSCP

Upstreams Oil and Gas Shipping and

Maritime Sr. Analysts

SKK Migas

Indonesia

# **Dimitris Pesmatzoglou, CSSCP**

Manager at Climate Change and

Sustainability Services

FΥ

Greece

# Makayla Presgrave, CSSCP

Dairy Supply Manager

Icelandic Provisions

**United States** 

# **Boy Cahyo Prihanto, CSSCP**

Vice President Port Management

PT Petrokimia Gresik

Indonesia

### Nadia Talitha Rizal, CSSCP

Planning, Logistic + Customer

Manager

The Coca-Cola Company

Indonesia

# **Denzil Rodrigues, CSSCP**

Operations Manager NZ

Westcon Group NZ Limited

New Zealand

# Skylar Rotter, CSSCP

Student

University of Wisconsin-Madison

**United States** 

# Ismaila Savadogo, CSSCP

LOGISTICIEN

**EXPERTISE FRANCE** 

**IVORY COAST** 

# Sven Jorma Straub, CSSCP

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SAP SE

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# Pramod Venkata Vissa, CSSCP

Supply Chain Business Unit Lead

**Tata Consultancy Services** 

India



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