

# Key supply chain trends set to transform businesses



By [MJ Schoemaker](#)

11 Jan 2024

Supply chain management in 2024 may be the toughest it has ever been. Change has been the only constant in supply chains for some time now, and the volatility is set to continue this year. Geopolitical tensions, climate crises, economic instability and unpredictable consumer behaviour will keep supply chain managers on their toes.



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Supply chain leaders who have recognised the need for a focus shift will survive and even thrive in the current turbulent times. They will be more strategic, innovative and customer-centric. They will embrace collaboration and leverage technology to optimise supply chains and help them anticipate and manage disruption.

While South African supply chain managers will have to contend with additional challenges like loadshedding, water outages and failing infrastructure, the overall supply chain outlook in South Africa is no different to the rest of the world.

The following trends will shape supply chains in 2024:

## Digitisation

The future of supply chain is innovative and real-time through digitisation. Supply chain digitisation aims to leverage digital technologies - like the internet of things, artificial intelligence, blockchain, smart contracts and cloud-based solutions - to build supply chains that are dynamic, responsive, interconnected ecosystems rather than linear processes.

Digitised supply chains enable unprecedented visibility across the network. Digital technologies can alleviate the uncertainty and help supply chain professionals to predict, plan for and protect their businesses against disruptions.

Digitisation has been topping the supply chain agenda for some years. In 2024, supply chain leaders will accelerate their investment in applications that support artificial intelligence and advanced analytics capabilities.

## **Artificial intelligence**

AI is already proving an extremely useful tool for supply chain managers. It is being used successfully in a range of practical applications in the supply chain. These include demand forecasting, risk, inventory and quality management, and transport and distribution optimisation.

It can focus demand based on many inputs. It is enabling better informed pricing decisions, and shaping how organisations respond to their competitors in the marketplace.

Using AI to make near real-time decisions, supply chain managers can optimise supply chains, ensuring better product availability, lower costs and lower inventory.

AI applications like computer vision models are being used in transport and logistics to manage and improve driver behaviour in real-time to make roads safer.

In a project in the Western Cape, AI successfully reduced road traffic fatalities by 30% when it was used to predict where accidents were going to happen. Autonomous, intelligent robots are improving picking accuracy in warehouses and distribution centres.

AI is advancing at an unprecedented rate and we will see it used in many more supply chain applications in 2024.

## **Big data and analytics**

Data is vital to optimise supply chains. It is more important than ever in the current uncertain and disruption-fraught business environment. Through supply chain big data and analytics, organisations can identify inefficiencies more easily. They can reduce costs, improve customer service and strengthen resilience and agility to cope with frequent disruption.

The old adage that data is king is certainly true in supply chain management. However, simply collecting the data is not enough. It may be king, but businesses that do not focus on the right data and fail to share data-driven insights across their supply chain will not lead for long.

To maximise the potential of big data and analytics, supply chain professionals must prioritise data exchange and information sharing.

The integration of data, data analytics and key metrics across the supply chain will enable the early identification of both potential disruptions and opportunities.

## Skills development

Supply chain management is a constantly evolving and changing profession. We are seeing the rapid introduction of new technologies, and businesses are struggling to find people with the required skill sets. For example, undertaking a digital transformation journey without the right capabilities is a recipe for failure.

Educating and upskilling supply chain professionals is key to ensuring that all investments in innovation have a return on investment. Areas like planning, risk management, sustainability and the basics of supply chain, especially in the health sector, are crucial. These will be prioritised by supply chain leaders in 2024.

## Risk management

Risk management and supply chain resilience will top the agendas of successful organisations in 2024. The diversification of suppliers, production capabilities and transportation processes will be some of their key strategies.

Organisations will also explore alternative materials and non-traditional partnerships, while many supply chains will become more compact and localised. A resilient supply chain design will be critical to mitigating disruptive events faster than the competition, providing excellent customer service, and generating value and market share.

In South Africa, the electricity crisis will likely create a water crisis. Decaying infrastructure will exacerbate supply chain challenges and uncertainty. South African businesses will become increasingly self-sufficient when it comes to electricity, with most organisations investing in alternative energy sources like solar and also implementing water backup solutions. The cost of managing this is high and will roll over to the consumer at some point.

## Environmental, Social and Governance (ESG)

In 2024, supply chains will be more human-centric and sustainable. ESG (Environmental, Social, and Governance) considerations have become integral to supply chain management.

Organisations are increasingly recognising the importance of minimising their environmental impact, fostering social responsibility, and upholding strong governance standards throughout their supply chains. This entails assessing and improving environmental practices, ensuring fair labour conditions, and promoting ethical business conduct.

Embracing ESG principles in supply chain management not only aligns companies with global sustainability goals but also mitigates risks, enhances brand reputation, and fosters long-term resilience in an ever-evolving business landscape. As stakeholders demand greater transparency and accountability, integrating ESG factors into supply chain strategies has become imperative for companies seeking to thrive in a socially conscious marketplace.

## ABOUT MJ SCHOEMAKER

MJ Schoemaker is the president of Sapics (The Professional Body for Supply Chain Management), a non-profit organisation founded in 1966 to elevate, educate and empower the community of supply chain professionals across Africa.

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