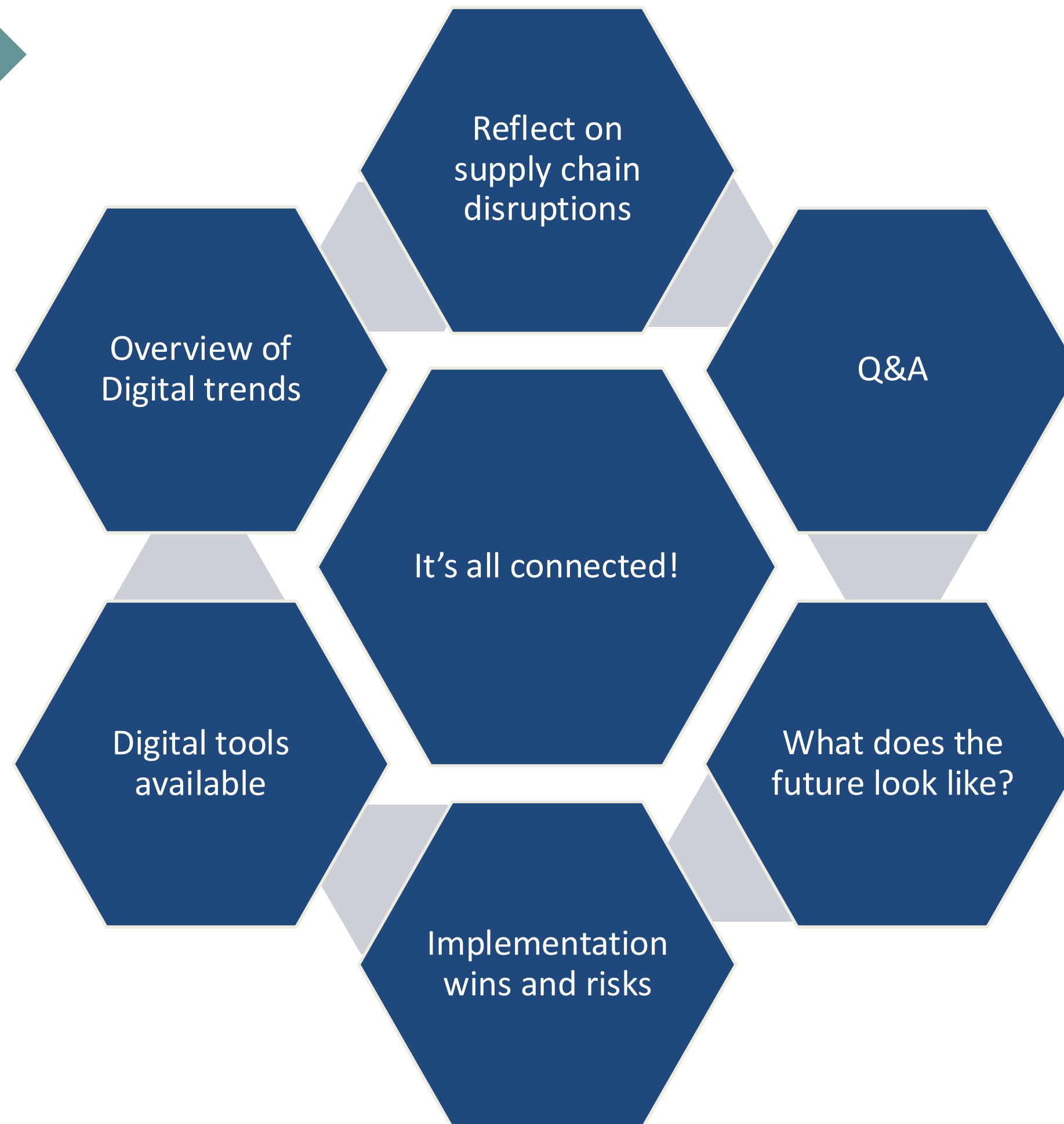




**Making the unseen seen – Leveraging digital tools
to uncover supply chain transformation**

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AGENDA



Supply chain disruptions



Source: <https://youtu.be/LJ29BW9jyA?t=23>

Overview of Digital trends

The power of simulation!

A Supply Chain Digital Twin is a detailed simulation model of a company's actual supply chain which uses real-time data to forecast supply chain dynamics

Digital twins paint a clear picture of an optimal end-to-end supply chain process.



A study by the Digital Supply Chain initiative, which polled 24 top executives, found that supply chain digitization can lead to a **20%** reduction in procurement costs & a **50%** reduction in supply chain costs. Many companies deploy digital twins for inventory positioning, forecasting, to manage the flow of goods and to aid in production planning

Organizations don't need to start with large-scale investments to benefit from digital twins! An important step is to standardize data quality. Digital twins thrive on accurate, timely information, therefore businesses should evaluate how well their data is organized and integrated

Source: [How Digital Twins Unlock Supply Chain Resilience](#) ; [Using digital twins to unlock supply chain growth | McKinsey](#)

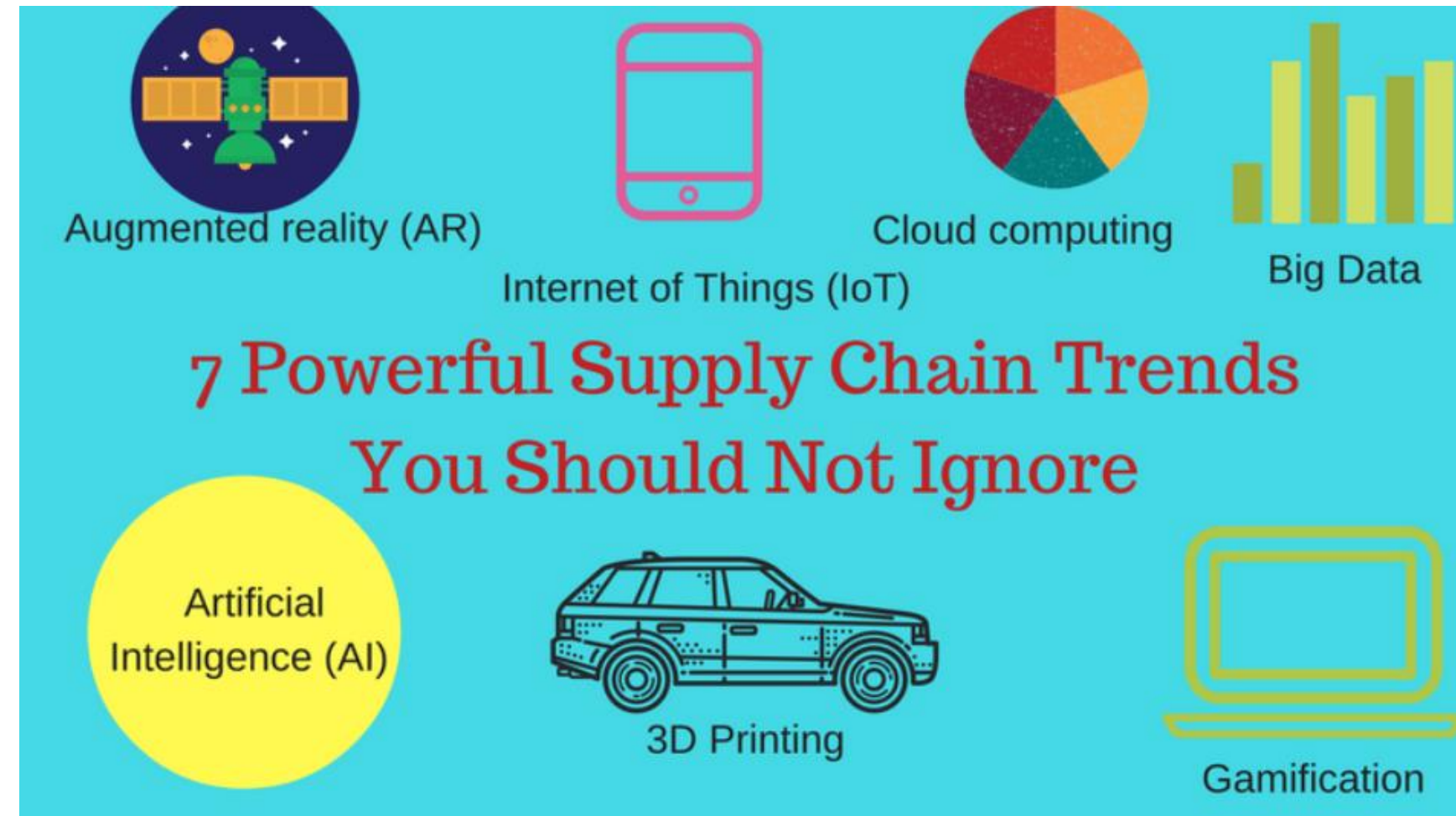
Overview of Digital trends

Use of Artificial Intelligence (AI) and machine learning is changing the game of supply chain

What if you could leverage your ERP system to automate mundane tasks?

What if your MRP could run over night & send a PO to the supplier based on a parameters & key configurations.

Imagine your ERP system notifies teams across departments about what stock item is “trending”, if there is enough stock to run a special, what competitors are offering



As much as we think it's the rise of the machines...people are still an integral part Supply chain & will remain so for some time to come...

Gamification is an expansion of metrics and KPIs to measure the performance of human capital. The idea of gamification is to provide employees with a range of tasks which have a positive impact on performance

Source: [7 Powerful Supply Chain Trends You Should Not Ignore](#)

Digital tools available



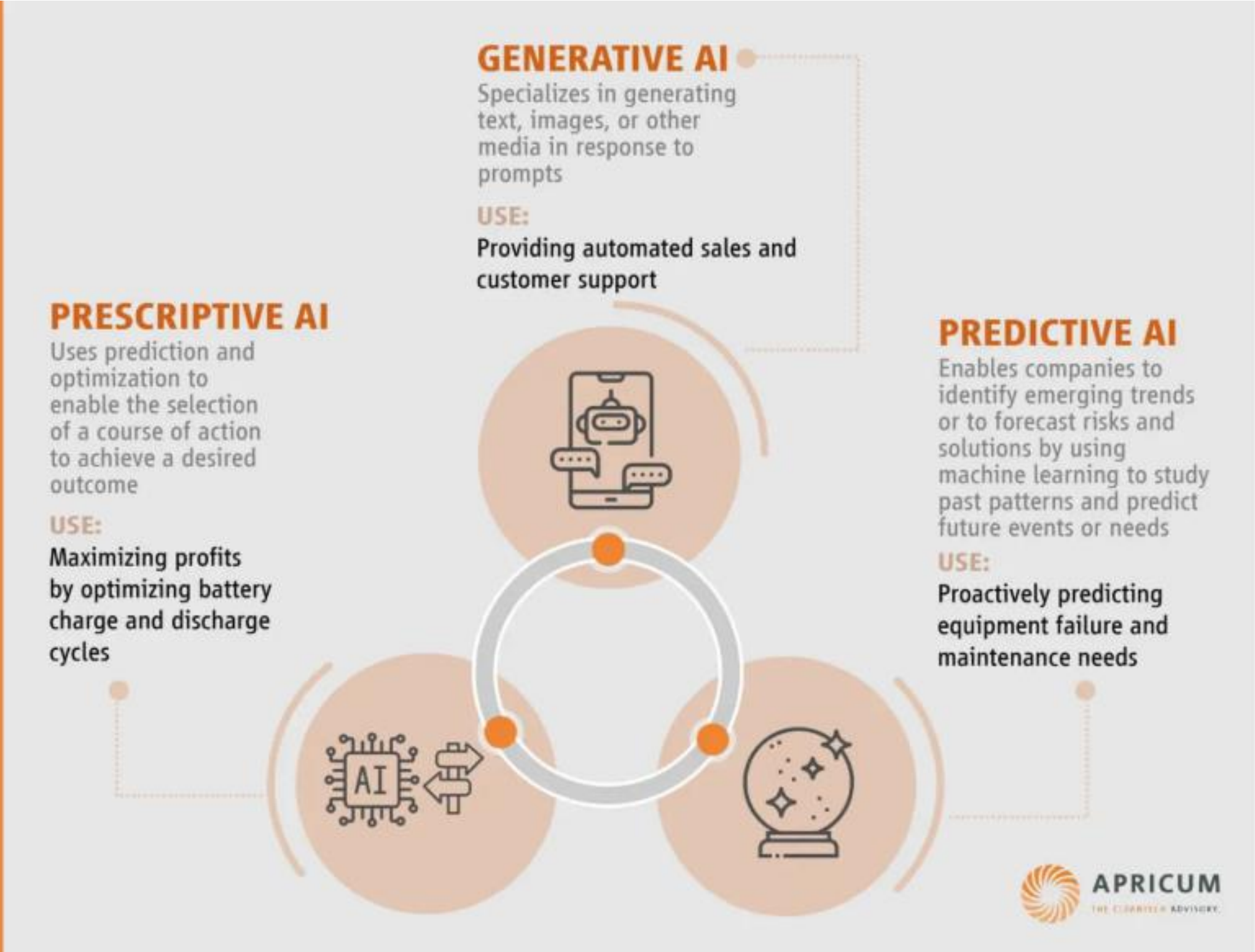

Power BI Desktop

- Connect to data (Power query, SQL servers, Excel files, txt etc.)
- Transform and clean data to create a data model
- Create visuals, such as charts or graphs that provide visual representations of the data.
- Create reports that are collections of visuals on one or more report pages.



[What is Power BI Desktop? - Power BI | Microsoft Learn](#)

KEY ARTIFICIAL INTELLIGENCE TECHNOLOGIES



[Breaking down the AI boom: what renewable energy companies need to know - Apricum - The Cleantech Advisory](#)

Implementation wins

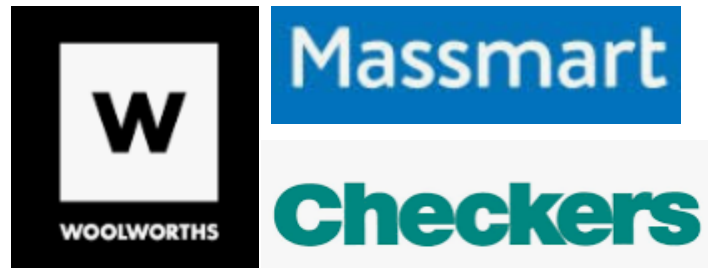
Agricultural & Automotive parts manufacturer

Challenge:

- Replenishing dealers' inventory weekly
- using direct shipment and cross-docking operations from various warehouses
- operation was proving too costly and too slow,

Solution:

- A supply chain network-redesign program, resulting in the commissioning of intermediate "merge centers"
- Use of third-party logistics providers and effectively created a network that could be optimized tactically at any given point in time
- Delivery of what is needed, where its needed, when its needed



Retail giants like Woolworths, Checkers, and Massmart are at the forefront, deploying AI for omnichannel stock management, RFID-enabled inventory tracking, and predictive replenishment systems.

[South Africa's Supply Chain Digital Revolution: The Leaders Driving](#)

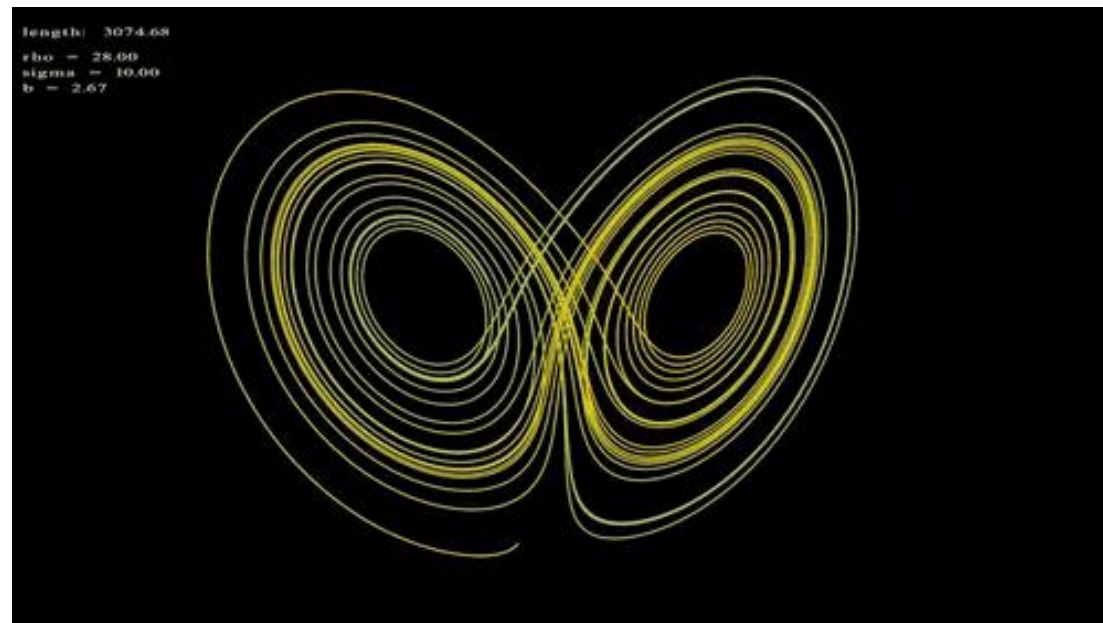
[7 Successful Supply Chain Management Case Studies](#)

Risks

The Butterfly Effect...

A flood in one area can disrupt supply chain and therefore impact multiple other areas due to interconnectedness and the dependence on global networks. This actually happened back in 2022 when floods in China disrupted supply into Europe & other locations

This illustrates how a local event can have widespread consequences, can be unpredictable and forces us to pivot quickly



2 years



10 years



Risk categories | Economic | Environmental | Geopolitical | Societal | Technological

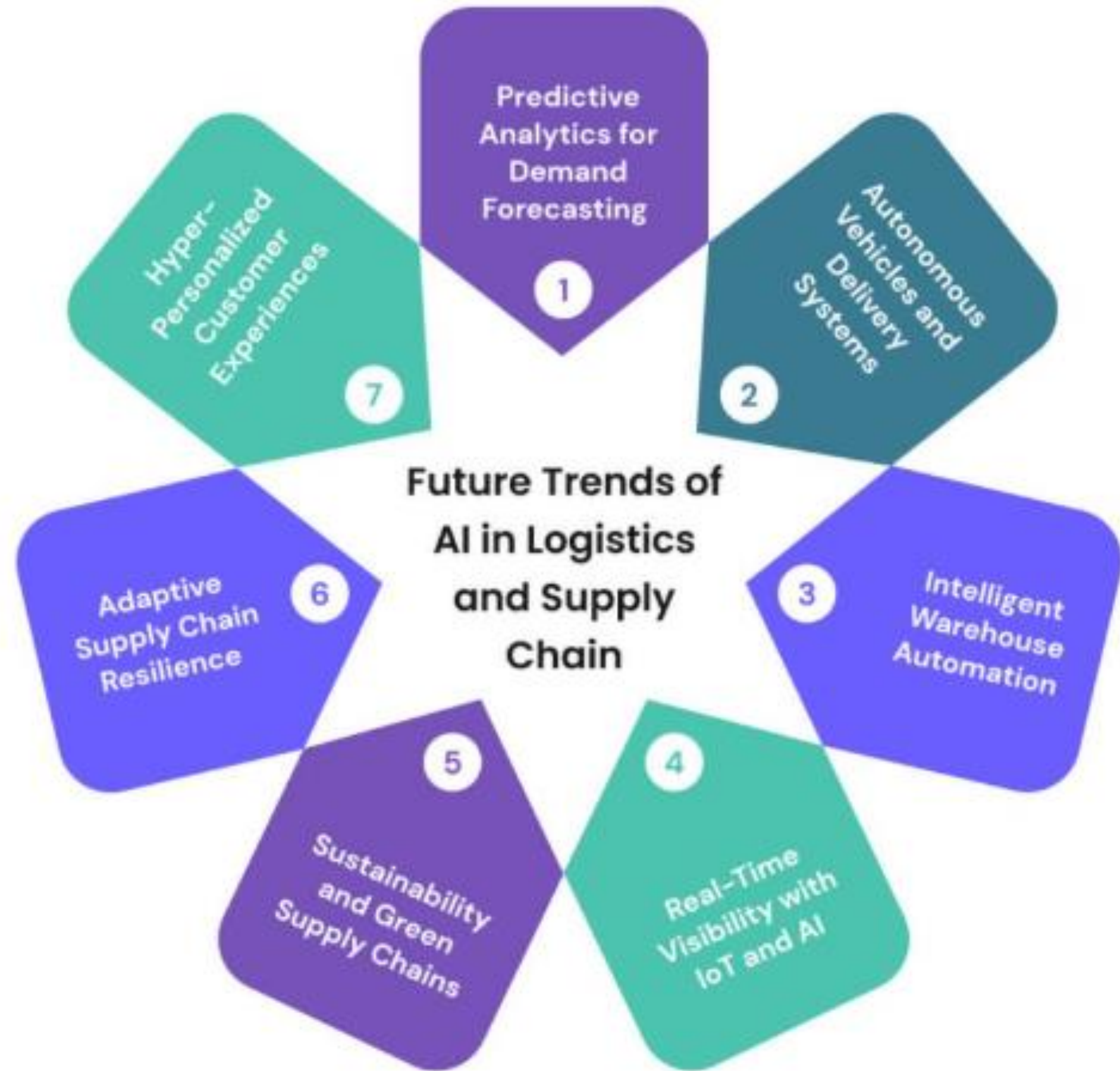
Source: World Economic Forum Global Risks Perception Survey 2023-2024.

[Leveraging digital tools in the supply chain disruption era | World Economic Forum](https://e360.yale.edu/features/how-climate-change-is-disrupting-the-global-supply-chain)
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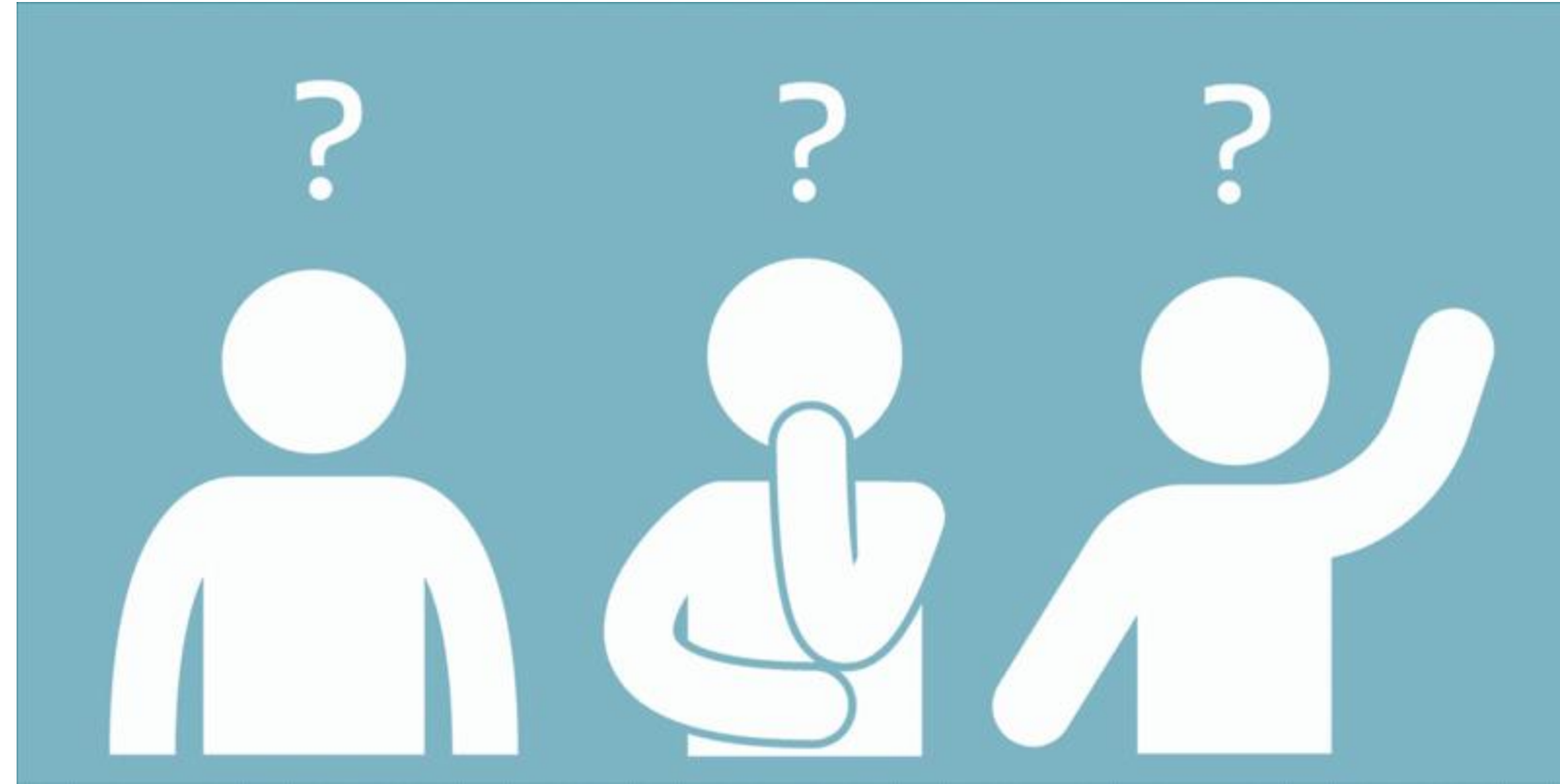
The Future



Illustration by Joanne Imperio / The Atlantic. Source: Getty.



[AI in Logistics and Supply Chain- Benefits, and Use Cases](#)



Thank you for your time and I look forward to engaging with you further



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