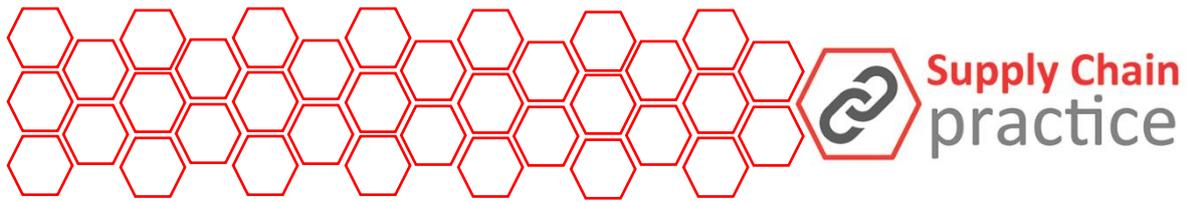


think
**supply
chain**
think SAPICS

The next industrial
revolution 4.0 and the
digital supply chain – are
you ready for it?

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SAPICS
your supply chain community



The purpose of the document is to share insights into the changing world of the supply chain stepping through systems from ERP to automation, looking at the importance of getting your processes right and then the leadership and skills required in the new world.

Take-outs and considerations:

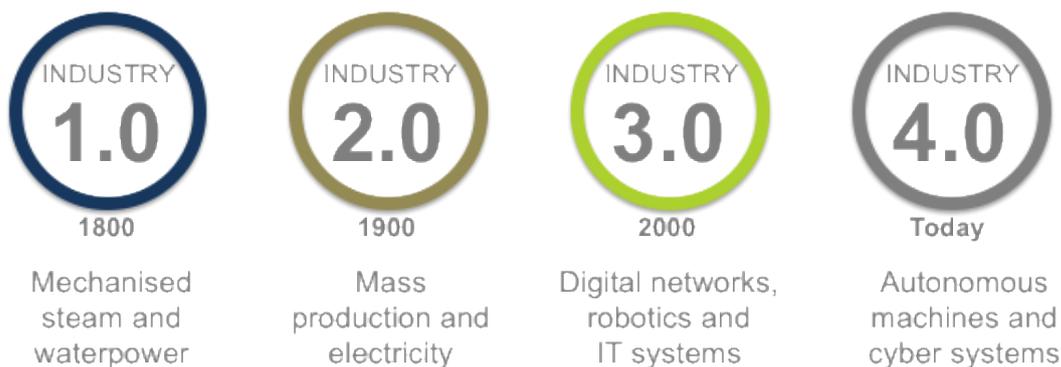
- The importance of robust processes
- New leadership mindset required
- Considerations for the right solution

1. The Changing World

The world has changed and continues to evolve at a faster pace than ever, with the majority of business leaders and supply chain executives still practicing and applying traditional methods to set strategies. The effect of companies not evolving is reflected on the stock markets; looking at the NYSE from 50 years ago, the majority of top 10 companies from then are no longer in business. The top 5 companies on the NYSE now are all technology based.

The way we communicate and interact has step changed over the past 3 years with emails and telephone calls reducing significantly while the use of instant messaging and live calls grows exponentially.

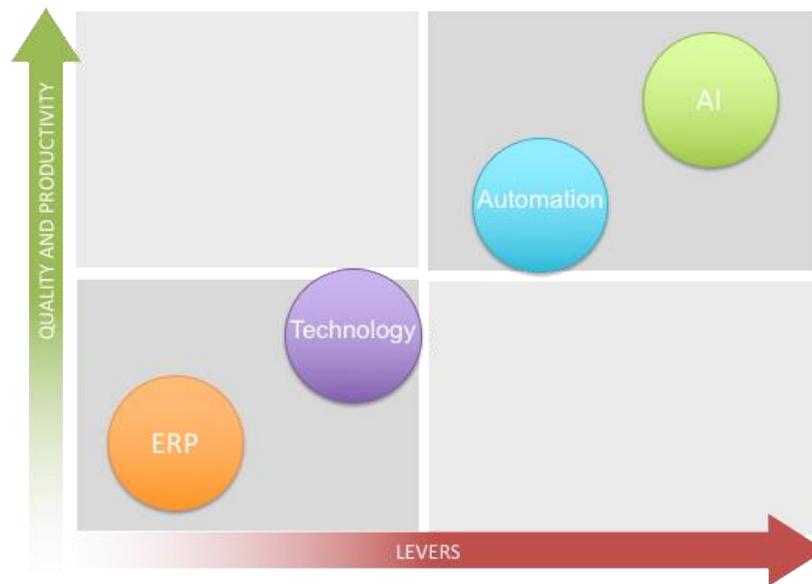
Therefore, we have now entered the fourth industrial revolution:



There is a recognition by supply chain leaders that operating models and delivery methods will significantly change over the next five years, yet many of them are unsure on how to set strategies and what investments are needed for the future.

2. Systems Evolution

Disruptive technology has been leading the industrial revolution and leaving a wake of confusion over what is required to run an effective operation. This often leads to pursuing ineffective solutions.



ERP: Enterprise Resource Planning (ERP) is a business process software tool that allows organisations to manage the business and automate many back-office functions. Modern ERP systems began to develop in the 90s, coupled with the threat of Y2K, which accelerated implementation. As operational frameworks and processes lagged behind system architecture, the default was to rely on out-of-the-box solutions. These misaligned solutions involved multiple work-arounds and have not delivered the business benefits required.

Technology: big data has been around since 2005, with 90% of the data being created in the past two years. It comprises:

- parallel-processing databases
- search-based applications
- data mining
- distributed file systems
- distributed databases
- cloud technology
- applications
- storage

These are used to capture the huge volume of information and data that is becoming available. With traditional data-processing application software being inadequate to deal with the quantity and complexity of information, businesses are investing in new technology to capture information. However, most businesses are struggling to analyse, visualise and make use of the information effectively.

Automation: traditional automation has been around for over ten years, however automation technology has evolved rapidly during the last few years. The automation is able to perform the repetitive task of data collection, entry, analysis and alerts with increased speed, efficiency and accuracy. Optimising automation requires rigid process workflows setup, for the technology to

follow the rules defined. Automation is able to identify exceptions however unable to make decisions on these exceptions without further input.

AI: Artificial Intelligence (AI) is the next stage in the evolution of automation because put simply, AI is able to make decisions on exceptions. The key questions are: where and how do you want to apply this technology?

Here are some examples of AI we are already using in everyday life:

- Virtual personal assistants in iOS and Android devices
- Video games
- Smart cars
- Purchase predictions from retailers like Amazon
- Fraud detection
- Security surveillance
- Smart home devices

3. The Digital Impact

Companies embracing and investing in supply chain technology are gaining a competitive advantage. Where this technology has been implemented for some time, there is a question over where the business should prioritise its resource: is it to leverage benefits against existing technology or to pursue new and emerging technologies?

The list below is a starting point for consideration in developing your digital roadmap against digital planning, supply, manufacturing and logistics

Still struggling to implement:

- Lights out operations
- Available to promise
- MRP
- No touch forecasting
- Production optimiser
- Control towers
- Big data & analytics
- Demand sensing

New / emerging technologies:

- Using the cloud for collaboration
- 3D printing
- Autonomous vehicles
- Deployment & allocations
- Blockchain
- Omni channel
- Sensors & geolocation
- Automation technology
- Artificial Intelligence

4. New Mindset New Results

The expectation of the supply chain is to take the lead into the new world in creating more value due to digital technology, tools and analytics residing in the supply chain. In Reality it's more than just tools and technologies, it's about a whole new way of working that demands a different set of skills and leadership.

Some of the traditional skills are still required to form functional expertise, however the new and future skills are rapidly required to change the way we work and embrace technology

Required skills:

- Functionally strong & focused
- Functional cost driven
- Eliminates complexity
- Strives for SC excellence
- Drives SC improvements
- Internally focused

New & future skills:

- Business facilitators
- Growth & revenue driven
- Accepts complexity & eliminates complication
- Strives for business excellence
- Drives business improvements
- Outside in view

5. Considering Appropriate Solutions

When evaluating and taking stock of your current digital maturity and defining where to start, what to address and why, the following key considerations should be taken into account:

1. How to improve and create robust process for systems to operate and deliver business benefits without manual work arounds
2. How to establish new leadership mind-set and capabilities to support future requirements and technologies
3. How to identify the business drives and the right solutions
4. How to build a business case that everyone buys into
5. How to overcome resistance to change, inertia, scalability and sustainability

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Jeremy Basckin is a Senior Executive with almost three decades of end-to-end supply chain experience in Unilever, Johnson and Johnson and Coca-Cola. Has an extensive record of setting strategic objectives, delivering results in complex matrix environment, building operational models and leading transformations. He has setup multiple factories and distribution networks, build and deployed planning and S&OP standards with ways of working across 140 countries, driven eight SAP APO configurations and roll outs, delivered change in organisations, people, process and technology to improve operational performance and delight customers. Jeremy is an Electronic Engineer with a Business Degree and APICS certified. He has held positions in Engineering, Manufacturing, Logistics, Customer Service & Collaboration, Demand & Supply Planning, Sales & Operations Planning and Business Transformations across geographies in Africa, Europe and Americas. With experience from shop floor to board in driving performance at a local business unit level to leading change programmes across functions, regions and globally spanning a range of turnovers from £20m to £8b.