Is the digital supply chain a lottery ticket?

- What is a digital supply chain?
- > What are the drivers?
- Is it worth it?
- > Qualification of a digital supply chain how?
- Back to review of initial strategy why?

What is a digital supply chain?

- When a company decides to digitalize its current analogue processes with its supplier network and/or customer base.
- When a company decides to explore potential new ways of cooperating with its supply and customer base, exploiting digital methods.
- Typical areas are:
 - $\circ\;$ Sharing data: forecasting, sales, inventory
 - o Order management, incl. logistics and invoicing
 - o Transport management
 - Product master data basic and enrichment
 - Collaborative engineering for new products

Is it worth it?

Potentially...there is a range of drivers:

- Can the digitalization be anchored in the company's business strategy?
- Is there a good business case for the company and its supply chain?
- Is the industry mature in digitalization?
- Are there external forces, f. ex. customer or vendor requirements or even regulatory impacts, which force the company to digitalize its supply chain?

Often there are more than one driver pushing for the digitalization activities. However, the company must be aware of its role: do they act as

a) **leaders**, or are they

b) reactive

in the supply chain network they operate in.

For **leaders**, the availability of resources and knowledge must be in place, but the option for gains of competitive advantage is also significant as they here set the yardstick. The options are cost savings, more flexibility and market responsiveness, and attraction of star employees for advanced projects.

For **reactive** companies it is often a choice, they are forced to take, or may have discussed for a long time, but year after year digital supply chain projects have been pushed aside for other projects.

The vertical industry models for the actual business and the technical and operational standards for data management is important to review when evaluating the **resources needed** for making a successful digitalization project.

For companies, who already have some digitalized processes in their supply chain, the choice is often based on an incremental calculation - to assess how much can be saved, or further **simplified** and **automated** in operations.

For companies which are starters or some, who enter into new areas of digitalization f. ex. from order management to sharing of master data or collaborative forecast, the pilot approach is recommended.

Qualification of the digital supply chain

Whether the company is a starter or experienced player testing new grounds, there are some circumstances for success which must be reviewed profoundly.

Digitalization is not just putting electricity to data in documents from ERP or PLM and sending them to suppliers or customers...

First, the company must be **in good control** of its own policies, processes and data to manage its operational processes in sales, production, inventory, purchasing, product engineering.

Good working practices in Demand Management, S&OP, Capacity Management, Order Management and Material Master Data updating will pave the way to being in control of the coming external digitalization.

scat3 article · April 2024

 t_3

Is the digital supply chain a lottery ticket?

Further there must exist a **proven Change Management capability** to alter **policies** and **processes** to get them aligned with the requirements of the concurrent business development, i.e. regarding new customers, suppliers, products, organizational units, regulatory impacts, internal systems integration etc

A key fit factor for digital supply chain success is the **internal compliance level** for the execution of sales, production, sourcing, compared to the plan data the company produces in these areas.

Often a **deep analysis** will find that the management methods and quality of processes and data is uneven across categories of products, suppliers, customers, and operating sites. **The analysis results** disclose the first and second priorities of digital supply chain activities.

- Elements which are typically difficult to manage are:
 - product variance creation
 - new products introduction
 - different product ID synchronization
 - make to order products
 - modularized BOM structures
 - update of parameters in inventory system
 - logistics tracking
 - automated invoicing.

If the company is characterized by many manually operated reschedules in its internal supply chain between sales/production/inventory/purchasing (resulting in compliance to plan data is low), the probability of success in digitizing supply chain is low, and vice versa.

When the compliance is high and change capability is in place, and the high performing categories, suppliers, customers are identified, then the company is ready to meet the external part of the supply chain with the robustness of accepting that there will unfold a variety of ways the suppliers and customers want to digitalize their part of the cooperation.

This analysis in the preparation phase is key to delivering good results and getting the expected gains from digitalization.

Back to review of initial strategy: "supply chain conditioning"

When the company has been through its **internal review** of conditions for digitalization of its supply chain it will return with a clearer picture about where it is possible to expect a success.

Further, external systematic analysis and mapping of key suppliers and customers are also elements, which must be assessed in advance: their plans and strategies, systems, data quality and formats, and general digital supply chain maturity and experience.

Now the bigger picture evolves:

The initial drivers (who said we should go for a digital supply chain?) must be assessed with the capabilities inside the company plus the external mapping - and options and gaps will open up. Some processes are possible to implement for certain products, suppliers, customers... but are these the ones, where we started to guess or believe we should start up?. Maybe not...or maybe some of them?

Were we forced as reactive player or did we want to be an industry leader in digitalization of supply chain - and are we capable ourselves, and are our business partners?

Now you should be ready for the prioritization of an action plan. Shall we take low hanging fruits just for tech learning or invest in internal gaps to get bigger strategic gains at higher costs - or a mix?

Define clearly the "What, How, When, Who."

How much to invest and how do we eat the elephant in small bites to learn from the process, when we go forward. The **digital supply chain conditioning** is going on.

The company will see implementation now becomes **scheduled** and **aligned with stakeholders**:

- inside the company, and
- outside with business partners.

The whole process will clarify where the payoff comes in, and what is not paying off.

Outside the company not everything can be foreseen...but the company has now done its internal homework and is ready to move forward.

scat3 article · April 2024

Is the digital supply chain a lottery ticket?

scat3

scat3 can deliver the analysis, consulting, preparations and implementation based on the following services (the homework):

- The current way of handling orders for suppliers and customers, sharing of sales, forecast, inventory, transport management, and new product introduction.
- The existence of rules, polices and systems to support the processes.
- The quality of master data management in the ERP and other systems, ie PIM, PLM, WMS
- The compliance of main processes S&OP, production/inventory planning, sourcing, order fulfillment to customers and forecast quality to suppliers.
- The technology available for digital supply chains projects (ERP and IT infrastructure)
- Assessment of business partners matureness and preparation for digital supply chain
- Option and gap identification of internal capabilities and performance compared with business partners matureness and capability.
- Options for implementation digital supply chain categories, markets, suppliers and customers. Establishing a business case and roadmap.
- Enablers for closing gaps of internal performance and collaborative data management with suppliers and customers, to enhance a further scaled supply chain digitalization.
- Implementation services, and project management

scat3

scat3 solutions are always developed based on a supply chain strategy and process understanding at the customer, and the solutions are developed through a dialogue.

The toolbox of digital products is used when the solution is in place and the technical solution consist typically of integration between existing internal systems, provided by an integration platform, eventually new applications, and the customers business partners systems, i.e., transport, ecommerce, 3rd party logistics, warehouse may be included in the solutions.

scat3 article · April 2024

www.scat3.com