

Illustration: AF-studio

Disruptions and fluctuations in the supply chain require intelligent digitization

BY JENS DREMO AND MATS NILSSON

Digitization has been in focus for a long time and continues to be in focus, because it is still extremely important for companies to be efficient, to develop and to be able to use all available business information in the best way.

The potential is great. New technologies are constantly emerging that can be used to take further steps in the development of efficient supply chains, and there is more and more talk about AI and ML as technologies to take further steps. It is not only the technology that affects the change in supply chains the entire surrounding environment affects and means that we have to adapt and change our processes. But to be successful, available information/data and new technologies need to be utilized.



From the left Jens Dremo and Mats Nilsson.

Two perspectives

How digitization is used and affects the supply chains can be seen from two perspectives. Either the technology is used to make an existing process more efficient, without the process itself being changed, or new processes are adapted and created with the help of new technology becoming available and changes the possibilities. In many cases, technology creates completely new ways of thinking and working.

The world around us is constantly changing. Digitization and the development of new technologies are getting faster and faster – those who want to be successful in their supply of goods must be agile, have good tools and exchange information with customers and suppliers. Suzuki Garphyttan and their group IT manager Anders Jonsson work continuously with their digitization:

"Suzuki Garphyttan has a history that stretches back more than 100 years and our ambition is to be around for just as long. Since the start of our company, we have invested in being innovative and leading in spring wire handling. But in step with new challenges in the market, where a large part of our products are used in combustion engines, we have had to constantly adapt to remain competitive. We are therefore working to make the company more effective and efficient and adapt to new customer segments."

The customer decides

For whom is an efficient supply of goods really important? Is it the end customer, a manufacturing plant, a hub or is it your industry that rules? Strictly speaking, it is the demands and wishes of the end customer that govern which type of supply chain will be decisive and successful. The end customer decides on price/ performance and makes his choice. To be competitive and in demand, the supply chain must be optimized, cost-effective and deliver customer value.

Rigid and agile

A good supply chain process is both rigid and agile. That is, rigid in the sense that it is standardized in terms of getting the products needed for the end user to be satisfied, agile in the sense of always looking for alternatives in good time so that the logistics process is secured. What can then happen that requires change and adaptation? Yes, the situation in the world such as war, pandemic, shipping routes, weather disasters, politics, recessions and booms in different parts of the world or a wrongly parked freighter in the Suez Canal. If you are to succeed in handling this type of external events, you must have good support by software and regularly exchange digital information so that you and your customers and suppliers can handle fluctuations and disruptions.

With so many possible scenarios that constantly change and create new conditions, it becomes an impossible task for humans to handle.

"One of our most important improvement projects is to digitize the business. We have invested in a new common ERP system for the group, which we call OneShare. The system will be the platform to connect us closer to our customers and suppliers. To help us with this connection, we have enlisted the help of PipeChain SCM, who deliver this as a service to us. Our goal is to have one ERP system and one integration partner that handles the entire digital flow for us," says Anders Jonsson at Suzuki Garphyttan.

"Constant development"

Optimizing and balancing your finished stock has always been an important area, as companies' delivery capabilities are absolutely crucial. In certain industries, an inability to deliver is completely unthinkable. A typical example of this is the automotive industry. From the latter part of the 1980s, being a reliable supplier to vehicle manufacturers has required process thinking and close collaboration. A mutual exchange of digital information created a delivery process that largely still alive today - with a delivery plan, notification and invoice, in some cases even a purchase order. Just because the process still is similar, the demand for efficiency has not slowed down, but rather has been sharpened and become even clearer. If you are passive in these matters, you end up falling behind with lower profitability and over time dissatisfied customers, which in the long run leads to lost customers. It is therefore important to constantly continue to develop further, emphasizes Anders Jonsson:

"Global trade entails several challenges and in the next step we will review our transport within the group and, in cases where the products are bought/sold outside the EU, also effective customs handling. With the help of Pipe-Chain SCM, we have created an ability that we can further develop over time to make these two parts more efficient."

No chain is stronger than its weakest link, therefore there will also be several parallel chains for the same mission in the future. Each link can be involved with several other parallel links both before and after the process. The big difference that looms on the horizon is that the decisions made today regarding which path is chosen are largely a human decision. Letting go of control or power is, at first thought and sight, a very big and demanding thing – bordering on impossible – but let's think about what it could mean.

Machine learning and AI

With so many possible scenarios that constantly change and create new conditions, it becomes an impossible task for humans to handle. Here we will see a rapidly growing need for machine learning and AI to handle the complexity and challenges. The more one thinks about this, a mental image comes to mind from the Terminator movies; is AI dangerous or not? Here, everyone can search for the answer in the context in which they operate, but we believe that the streak of light that we see on the horizon will grow larger, change shape and increase over time. If we are to optimize and balance our supply chain process and deliver what our customer wants, the winds are blowing towards having to exchange digital information at the right time and apply data in smart software that help you and your business partners to make wise decisions, or even get the decisions made by the systems.

Openness and collaboration

To reach all the way, openness, collaboration and sometimes new business models are required. Only then will the smart and efficient supply chains of the future be achieved, which will increase the competitiveness of both the entire chain and the individual companies, and lead to the customer choosing your product. Among other things, PipeChain has chosen AI as an effective tool for digitization. To find the practical way forward, we work together with the market and listen to needs, wishes and visions. Digitization continues to make strong progress and AI is part of this process.

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Jens Dremo is CEO at PipeChain SCM

Mats Nilsson is Business Development Manager at PipeChain SCM