



Are You Ready?

The speed at which our world is changing has reached an unprecedented level. Every hour seems to bring new innovations and with it the launching of new technologies. There's just so much to do to keep up with it all. These changes are also pushing value chain development forward. So, what will be coming our way next? We interviewed experts and asked them what companies should be preparing for and how a competitive advantage can be found in spite of value chains that are less than secure.



Siegfried Zwing

As Managing Director of redPILOT GmbH, Siegfried Zwing has been working in close collaboration with logistics companies for many years and knows their challenges and needs. His years of experience in both logistics and software engineering has taught him how to best support logistics companies in continuously optimizing their resources and becoming fit for the future.



Bernd Stöger

Bernd Stöger, Executive Product Manager, is responsible in Product Management for the areas value chain solutions, software and IT at KNAPP AG. His in-depth understanding of the market and customer needs gained in 15 years of experience help him to create an innovative solution portfolio which fully exploits the technological possibilities and focuses on customer benefits.



Dietmar Dahmen

As a top speaker booked worldwide, king of transformation, motivator, innovator and lover of change Dietmar Dahmen stands for the creative and unapologetic handling of disruption and digitalization.

Which trends will be having the greatest impact on logistics in the coming years?

Zwing: Within the well-known areas of digitalization, climate crisis, work-life balance, urbanization and globalization, you can say with certainty that the key mega trends are a completely connected *Digital world*, *the competition for resources* and the *energy transition*.

Stöger: Exactly, you could also say: *urban, fast and green*. Consumer behavior is changing, with increasing expectations for the level of service. As consumers, we want to choose when, where and how we purchase and receive goods so online retail needs to be seamlessly integrated with brick and mortar retail. Price also plays an important role. The ecological footprint and

social considerations such as the working conditions at manufacturers and retailers are also noticeably influencing consumer purchasing.

Zwing: At the same time, companies in industrial countries are also facing shortages of workers. This, along with increasing power requirements and the energy transition, is ramping up the competition for resources.

In your view, what specific innovations will influence the value chain of the future?

Dietmar Dahmen: Our rapidly changing world is making it harder and harder to make realistic predictions about what will be needed in the future. Data gathered is always historical and models become rapidly outdated. The new world plays by

different rules. It is like arriving at the beach with a vehicle only to discover that the idea *wheels are where it's at* suddenly no longer holds true. What this means is: Experience can get you into trouble! Being open to new ideas is the only solution. So out with the old and in with the new! After all, ships don't have wheels. We have to focus on the long-term trends such as automation, urbanization, the aging population and sustainability. The next wave will come and go but the long-term goals will remain.

What will the value chains of the future look like?

Stöger: Current trends are forcing supply chains to become more transparent, reactive and resilient, for example, making deliveries on the same day or even within the same

“He who invents a locomotive needs rails. The car needs roads. In the same sense technologies have been invented such as autonomous electric vehicles, fiberglass, precision farming, green energy, 6G networks and so on, but they need to mature and obtain the necessary infrastructure. However, this requires even more effort and a shared approach. Have we got this?”

*Prof. Dr. Gunter Dueck
mathematician, innovator and best-selling author*

hour. The only way to fulfill these rapid delivery times is to process the order in a store or logistics center in close proximity to the customer. In addition to the changed logistics for the last mile, production and distribution networks in the background need to be adapted. To convert these challenges into opportunities, using smart technology for digitalization and automation in processes is key.

Stöger: The interaction within value creation becomes the competitive factor between software systems. Since digital ecosystems offer a new type of competitive advantage, they isolate themselves from other systems. Here, integration and compatibility are not the goals, instead, it's about exclusivity. This is a risk for the value chain, because if compatibility is missing, the necessary integration may no longer be possible.

What areas should companies keep a close eye on?

Zwing: The complexity in logistics will continue to increase. We need software that focuses on the essentials and makes processes more transparent and easily manageable. Decision-makers must be able to understand ongoing changes and to deal early on with opportunities and possible consequences on all levels. What we've learned from our customers is not to look back and regret costs, but to look ahead and plan where you want your investments to take you.

The pandemic has revealed the limits of international value chains. How can companies make their own supply chains stronger?

Stöger: The new priority must be on the risk management within the supply chain to achieve more redundant, leaner and shorter supply chains which can respond in a faster and more flexible way to unplanned changes. However, adapting established processes is not always easy. Therefore, it is all the more important to create responsiveness and flexibility with the existing conditions and to optimally use the

available resources within a company every day.

Zwing: Flexibility can be created by building versatile activities and competences and by having access to a large pool of resources. This cannot be introduced on short notice, but needs to be planned well ahead of time. In general, job satisfaction and employee sovereignty in the sociotechnical system of a company increase at the same time.

But how can the access to a large pool of resources be balanced with the competition for resources?

Zwing: You also have to rethink how the employee structure is organized and involve the employees actively in the planning process. This is what the redPILOT PLANNER with its teamAPP is able to do: Employees are automatically and optimally assigned based on the labor needed, their competences, available hours and costs, carpools and dynamic shift models. At the same time, flexible employees can communicate

their preferred availabilities which are then taken into account by the system during the planning process, which would be unimaginable in a non-digital work environment using manual planning. This makes much more resources accessible in an environment that is also much more exciting for employees.

How does the value chain become a competitive advantage?

Zwing: Companies need to be venturesome and open for new things. They should systematically search for hidden potential and find the technologies they need to fully tap into them. Digital solutions such as redPILOT consolidate and provide meaningful data that helps managers to quickly make the right decisions. This means companies can respond more rapidly to changes, making them both more flexible and more resilient.

Stöger: *From supply chain to value chain* has become our motto because we want to leverage untapped potential in all areas, and we look at

everything from demand to production to the handover to the consumers. KNAPP is the technology partner for the perfect (re-)design of value chains and our portfolio is constantly evolving to reflect this. With smart solutions such as redPILOT, our customers can make immediate improvements in resource utilization for positive impact over the long run.



More about redPILOT