Technology Can’t Replace Good Planning

Automakers are increasingly offering customers a chance to modify their new vehicles’ equipment — even shortly before the delivery date. With tens of thousands of individual parts involved, the logistics chain must be optimally organized. Are other industries facing the same challenge?

Absolutely. And more will follow. For example, I’m sitting on an office chair that’s theoretically available in millions of variations. The chair was custom-produced to my specifications and could still be delivered in just a few days. Especially industries that are switching from catalogue retailing to selling custom-configured products will have to rethink their operations and reorganize.

What impact is this having on companies?

Since short delivery times allow hardly any leeway, a company must operate under conditions that require working around the clock this week and taking next week off. Global competition demands flexible working hours. But what’s perhaps more important is that each company must adapt its organization, strategies and processes to the new demands. That is, it must clearly define its goals, decide how extensive it wants its product range to be, and determine what delivery times it can manage with what degree of vertical integration. After that, the company can choose its hardware and software from the bottom up.

In practice, though, the picture is often different...

Yes, unfortunately. Many companies rely on complex technology that is often incorrectly configured. Then, when things go wrong, the system is blamed, although it was management that failed to first define its goals and processes. With an integrated organizational concept and a uniform problem-solving approach, the latest technology isn’t always absolutely necessary to deliver the information flow needed for a good logistics chain.

Interview by Ulrike Zechbauer

LOGISTICS INTERVIEWS WITH EXPERTS

Since 1997, Dr. Inga-Lena Darkow, 32, a business consultant and university lecturer, has been analyzing logistics at the Institute of Technology and Management at the Technical University of Berlin, Germany.

IT Networking Is the Key

Many logistics chains — such as those in the automotive industry — appear remarkably optimized. Can they be further improved?

Every stage in the value-creation chain has achieved a high degree of optimization, but the interfaces are a major problem. Companies that skillfully network their systems, and manage to motivate their employees at the same time, create an enormous competitive advantage for themselves because they are faster, more flexible and less expensive than their competitors.

What’s your view on congested communications? Are they the bottleneck in the logistics chain?

A chain is only as strong as its weakest link. Congested communications produce backlogs, waste resources and result in higher transport costs — for companies and for the economy. In many logistics chains, though, there are still buffers that can compensate for the delays created by backlogs, which as a rule can be measured in hours. In chains where time is a critical factor, however, such as in the delivery of fresh food products or spare parts or in high-speed e-commerce, hours can make or break a company’s ability to compete. This factor — and also the debate on the introduction of a truck toll system on German highways — is why companies are becoming increasingly sensitized to the transportation issue, even though transportation costs represent only a few percent of total costs on average.

Will the logistics chain be fully automated in 50 years?

No, because even 50 years from now we still will not have perfect networking of IT systems. And when different systems communicate, translation errors sometimes occur. In responding to these instances, human input simply has to play a role. Human beings will always be indispensable.

Interview by Sebastian Moser

Professor Wilhelm Dangelmaier, 53, is Professor of Business Computing at the Heinz Nixdorf Institute at the University of Paderborn, Germany. He also heads the Fraunhofer Application Center for Logistics-Oriented Business Administration in Paderborn.