Innovation more important for growth than globalisation

□→ Forecast BVL forecasts turnover in Germany of 230 billion euros for the German logistics sector in the current year, which would be around two billion euros more than the record set in 2012. At the 30th International Supply Chain Conference, BVL Board Chairman Prof. Raimund Klinkner in his opening speech called this a "stable side-step". BVL predicts a further increase in turnover of between one and three percent for next year. Klinkner also presented the findings of a member survey on the conference theme of "Innovation". The survey showed that around 80 percent of logistics experts see innovation as being important, and that roughly 60 percent predict that spending on research

and development will increase in the next five years. Just as many respondents said the level of innovative drive was currently at a low ebb, while around two in three believe logistics is not sufficiently innovative or not innovative at all. Respondents see a particular need for innovation in the coordination of processes and IT solutions. "Innovation is more important for sustainable growth than globalisation", Klinkner stressed. He said the most important trend was digitalisation and the resulting networking of the production process. "The boundaries of production and supply chain management are becoming increasingly fluid."



Prof. Raimund Klinkner during the opening of the 30th International Supply Chain Conference

30 years of the International Supply Chain Conference

► A Journey in Time The International Supply Chain Conference has been a "future forum" from the beginning. At the first event in 1984, logistics was in the process of establishing itself as a cross-functional activity spanning operations from procurement and production through to the sale of goods to the end customer. The central objectives that BVL set itself were and are to create an awareness and understanding of logistics in industry, academia and among the public at large, to systematically document logistical problems, to develop methods and processes to solve these problems in an interdisciplinary and sector-focused way, and to promote and continuously optimise the application of these methods.

The International Supply Chain Conference became the key instrument to realise these objectives. For 30 years now, the event has been a part of the rapid development of logistics, providing an annual forum for interdisciplinary exchange between experts. The optimisation of cross-functional processes was followed in the 1990s by the creation and optimisation of process chains and then of value added chains. With the new millennium came the realisation that the industry must think and act in a global context – in response to megatrends such as the individualisation of customer preferences, the sustainability of economic activity and the digitalisation of the processes involved in this activity.

EDITORIAL

The 30th International Supply Chain Conference staged by BVL International came to an end in Berlin on Friday, October 25 after three lively days of presentations and discussions. This special issue of the international Log.Letter focuses on some of the highlights of the multifaceted event. Around 3,200 participants from all over the world came together at the annual sector event for experts from logistics and supply chain management - which this year took place under the motto "Inspiration, Ideas, Innovation". Among the attendees BVL International was pleased to welcome to the conference were three foreign delegations – from Mongolia, India and China – who had organised a full programme for their visit to Germany.

During the three Conference days, around 100 speakers held presentations, talked to participants and provided valuable information, important stimuli and food for thought. The stands of the some 200 exhibitors and the lounges were also focal points of in-depth communication. The highlights of the conference included the presentation of the German Award for SCM to Lekkerland, the award ceremony for Mexican scientist Dr.-Ing. Mayolo Lopez Castellanos, who won this year's Science Award for SCM, a discussion on the outlook for the world economy in 2025, the reports by Professors Robert Handfield and Frank Straube on the major study entitled ""Trends and Strategies in Logistics and Supply Chain Management" or the presentations by top managers like Continental CEO Dr. Elmar Degenhart and the founder and Managing Director of Alnatura, Prof. Götz E. Rehn. In tune with the innovation focus of the conference, the final presentation was held by Prof. Henning Kagermann, President of acatech, the German Academy of Science and Engineering. The 31st International Supply Chain Conference will take place in Berlin from October 22 to 24, 2014.



Impressions of the 30th International Supply Chain Conference



1 - Discussing the global economy 2025 | 2) Science Award for Supply Chain Management | 3 - German Award for Supply Chain Management
4 - Meeting of the Indian delegation in Berlin | 5 - Discussion with Chapter Chairpersons and Representatives | 6 - The Mongolian delegation in Berlin
7 - The BVL Conference-team says "See you again in 2014!"

Outlook for the global economy

→ Panel Discussion A.T. Kearney has outlined four scenarios for the global economy up to the year 2025 and beyond, and experts discussed these scenarios on day one of the conference. The scenarios bear mythological names: Pegasus, Phoenix, Sphinx and Hydra. Based on the optimistic "Pegasus" model, the economies in the USA and Europe will grow once again, and developing countries in regions like Africa will also experience a positive trend. "Phoenix" is less optimistic: the world economy will initially weaken in the period up to 2018, after which it will begin to grow again at a rate of 4 percent. During this period, the imbalance between industrial and developing countries will decrease. "The companies must keep an eye on wage costs in Asia and adapt accordingly", said BASF Manager Saori Dubourg. She added that this calls for long-term planning horizons in which returns on investment may sometimes not be forthcoming for ten years. Terex manager Steve Filipov sees flexibility as the key, and said that fact that the USA almost went bankrupt indicated the high volatility of the world economy. In contrast, he sees no risk of deterioration in Europe. The scenario depicts massive changes in the flows of capital and finance, and countries who are unprepared will suffer from major foreign exchange fluctuations. "Zeit" publisher-editor Josef Joffe believes that, of all the countries in the world, the USA is the one that is best placed to make the necessary adjustments required by this vision. He says the decisive factor is that, up to 2025, the USA will be the country with the youngest population - younger than that of China or Europe. The most pessimistic scenario is "Hydra", according to which the situation in the Near and Middle East will escalate, with huge shock waves affecting the global economy. But this is a scenario that none of the experts considers likely.

Award for analytical study on complexity in the supply chain

► Science The winner of the 2013 Science Award for SCM is Mexican scientist Dr.-Ing. Mayolo Lopez Castellanos. The jury chaired by Prof. Michael Schenk was duly impressed by his presentation during the 30th International Supply Chain Conference in Berlin and chose him over two other candidates in the final round of voting. His thesis was entitled "Agent Based Simulation Approach to Assess Supply Chain Complexity and its Impact on Performance". It was written at the Institute for Logistics and Corporate Management at Hamburg University of Technology (TUHH) and supervised by Prof. Wolfgang Kersten. The background to the thesis is that not only have products become far more complex and the range of product variants far greater in recent years and decades; this period has also seen the increasing complexity of value added chains with their many partners and transport routes. A further issue of key relevance is the way in which many companies are focusing more and more on their core fields of expertise, a trend that has resulted in the outsourcing of value-adding activities

to partner companies in the supply chain. Then there is the increasing globalisation of value added chains on both the supply and demand sides of the market with the aim of achieving cost benefits and ensuring an effective market presence. All the above factors have resulted in ever more complex supply chain structures. The challenge faced by companies is how to master and manage this complexity and to ascertain how it impacts the performance capability of the value added chain.

In his thesis, the award winner addresses this question with regard to logistics and develops a novel approach to analyse the complexity in the supply chain. In order to render this approach suitable for use in a more detailed analytical setting, he also created an agent-based simulation model. In the view of the jury, this approach and the methodological concept for the assessment of complexity represent a significant advance in scientific knowledge – and are backed up by real-world applicability. ... more



LEKKER LOGISTICS One stop deliveries to shops

German Award for SCM The 2013 German Award for SCM was won by Lekkerland. BVL conferred the award on the company for its multi-temperature logistics concept geared towards bundled deliveries to the customer. The range of products sold in many filling stations, kiosks or shops is extremely varied. Before the concept was implemented, Lekkerland used to supply deep-frozen goods, uncooled food products, tobacco goods and other consumer goods to these outlets in separate delivery runs. The company now supplies a far broader range of products in a single delivery. The new strategy was launched simultaneously for 61,400 delivery locations. Lekkerland has put 160 multi-temperature multi-chamber trucks into operation. Dividing wall panels that can be moved laterally and lengthwise permit adaptation of the interior space to daily changing volumes of the three product ranges (uncooled, fresh, deep-frozen). The trucks have to be loaded in the correct sequence to allow removal of the goods during one stop without having to partially unload the shipment. Lekkerland has also expanded its four central warehouses for deep-frozen products in Berlin, Hamburg, Munich and Oberhausen by 6,300 square metres. According to Lekkerland Logistics Director Kai Schiebur, the bundled delivery concept reduces the number of stops per year by 260,000 - with increased delivery volume and lower annual mileage.

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Logistics performance suffers from complexity

➡ Trends and Strategies Handling growing complexity creates huge challenges for logistics managers all over the world. This is one of the central findings of the BVL study "Trends and Strategies in Supply Chain Management and Logistics" headed by Prof. Robert Handfield from North Carolina State University. Meeting high customer expectations despite these challenges is seen as the key objective, says Handfield. "The constantly increasing pressure of costs doesn't exactly make this easier." Around one in three of the over 1,700 respondents in the study cannot even name the volume of logistics costs in their company, added Frank Straube, Logistics Professor at Technische Universität Berlin. He went on the say that the willingness to exchange information along the supply chains is only around half as pronounced as it was eight or nine years ago – and that the

Every minute is part of a precision-timed schedule

► Automotive Production Around 70 percent of all Porsches ever built are still on the road today. It was with this statistic that Oliver Blume, Board member for Production and Logistics at the sports car builder since the beginning of 2013, began his presentation at the International Supply Chain Conference. The company can take account of customer preferences up to eight days prior to the start of production. The assembly sequence is defined in line with the "pearl-chain principle" three hours before production begins. At its plants in Stuttgart-Zuffenhausen and Leipzig, Porsche today still uses the production system it developed in the 1990s based on the Japanese model. A precise time and process schedule in which all suppliers are integrated ensures delivery of parts to the line in high frequencies shortly before they are used. According to Blume, the goal is to "not accept any mistakes, not to make any mistakes and not to pass on any mistakes!".

Vehicle networking on the horizon

► Innovation In his presentation in Berlin, Conti CEO Elmar Degenhart outlined the three strategic pillars of the auto maker: innovation, productivity and growth. On the innovation front, the company is working at high pressure on the networking of the automobile with its environment. "By 2025, cars will be able to travel automatically over long distances", said Degenhart, adding that "the automobile will become an integral part of the Internet." This development will also affect logistics in the form of intelligent transport systems. "We will integrate infrastructure, goods, vehicles and vehicle users." Conti intends to boost productivity in the supply chain by increasing the precision of requirements planning. The goal is to improve the working capital KPIs. "We have achieved improvements of between 2 and 7 percent a year in this area during the last three years." Degenhart sees potential for growth above all in the BRIC countries, as the volumes in the established markets of North America, Europe and Japan are stagnating or even on the decline.

exchange of information is the very precondition for companies who want to reach the next efficiency level. "Logistics performance has declined during the past four years – across nearly all sectors and above all in Germany", Straube continued. Possible reasons for this trend include market fluctuation, higher risks or the greater distances in the global market.

The study is available for download.

Efficiency saves lives

→ Humanitarian Logistics Food vouchers do not solve any of the problems encountered in crisis regions – what is decisive is the de facto availability of aid supplies on the ground. However, the transport costs for food, clothing or medication to the locations where they are needed eats up 50 to 80 percent of received donations. It was against this backdrop that BVL set up the "Humanitarian Logistics" working group in 2010. The aim is to develop more efficient processes to ensure that more people can be helped with the resources that are available. One of the ideas that has been implemented is a Web platform to facilitate coordination of the aid measures of different organisations. A concept was also drawn up for sea ports in crisis regions so that the logistics locations are prepared and equipped to transship large quantities of aid supplies. The working group is headed by Prof. Hellingrath from the Department of Business Informatics and Logistics at the University of Münster and comprises around 20 logistics specialists from aid organisations, industry, trade, the service sector and the academic world.

Humans must grow to appreciate machines

► Robots Interaction between humans and machines needs to be greatly improved in order to effectively meet future requirements for industrial production processes. This was the view put forward by Manfred Gundel, Managing Director of robot manufacturer Kuka, at the International Supply Chain Conference in Berlin. "Adaptable factories in the environment of "Industry 4.0" call for new, flexible production concepts that go beyond full automation", said Gundel. Before true collaboration between humans and robots can be achieved, however, Gundel said it is first necessary to find industry-compatible solutions to the issues of safety and user interaction. He added that, to achieve this goal, humans must one day interact with robots as assistant systems in the same way as they would interact with their human colleagues.

Using big data to identify interrelationships

► Data Analysis "Big Data" is not just for big companies. This was the message of Dr. Till Kreiler from Google Deutschland in the sequence "Using Knowledge Effectively". Kreiler said that companies have access to large volumes of data that can be used to create major value, adding that any company that has begun to make use of "big data analysis" will identify more and more questions and evaluation options that can generate value added. "Information systems are more than just collections of data", Beate Eilermann, Head of IT at Volkswagen, emphasised. The idea at the automotive giant is to make big data tools directly available to employees in specific positions. The glut of data can be distilled into reports, statistics and forecasts, and the key benefit is that this enables companies to recognise interrelationships between different corporate levels or the individual stages in a process - from the ordering to the delivery of a car, for example, and hence for the entire customer order process. VW hopes that big data applications can provide support across all stages of this process, for example in the areas of production and logistics. The goal is to achieve improvements in the core areas of the company's operations. These include delivery reliability, delivery time, delivery capability and change flexibility.

Fast adaptation of production operations

➡ Electrical Engineering A worldwide market presence, short product life cycles and high product diversity: these are the typical logistics challenges faced by the electrical engineering industry and were the focal point of one of yesterday's special-topic sequences. Four presentations provided hands-on information from the Fujitsu, Sick, Infineon and Silicon Expert Technologies companies. Japanese IT giant Fujitsu operates a global supply chain management system, for example, covering around 8,000 model variants that can be produced at different locations. It was this system that enabled the company to maintain its delivery capability even after the reactor catastrophe in Fukushima. "Instead of a label 'Made in Japan', the servers were simply labelled 'Made in Germany', for example", said Hans Erbe from Fujitsu Technology Solutions. The participants in this and three further sequences were able to take part in the discussions at this year's conference using so-called "Event Pads".

Clients expect experience

→ Contract Logistics The experts in the BVL "Contract Logistics" working group have drawn up a guideline document focusing on the crucial issues in the tender process, and this document was presented in Berlin. Whether a service provider is awarded a contract depends on four different criteria. The project must be a good fit for the service provider. "It's beneficial if the provider already possesses experience in the field in which his new customer is active", said Eurocopter logistics manager Pierre Lutz. The provider should also have a good reputation. "We do our research in the market to avoid unpleasant surprises." The EADS subsidiary also attaches importance to ensuring that the contactor is a big, financially healthy company with international operations, but the criterion of size alone should not be overvalued, as emphasised by Logistics Professor Stephan Freichel from Cologne University of Applied Sciences. "Regional expertise and local performance also count." He added that service providers need the kind of strategic expertise that paves the way for longer-term commitment and said that SMEs should therefore always be taken into consideration. According to Freichel, effective positioning in the market and a long-term sales strategy are also key success factors for service providers. "Having a market reputation for stability is one of the most important strengths of any provider."

A hospital in boxes

► Outdoor The logistics centre of the German Red Cross (DRK) at Schönefeld Airport in Berlin is ready for emergencies. Modules worth 4.5 million euros for emergency assistance in disaster areas, including a mobile hospital packaged almost exclusively in wooden crates, are stored at the airport in around 1,500 pallet slots and in a further vehicle hall. If it is needed, the hospital is flown to the crisis region on two to three chartered freight aircraft, said DRK Disaster Manager Clemens Pott at the outdoor sequence during the 30th International Supply Chain Conference. He described how the hospital could be in place in as little as three to five days after a disaster occurs. It comprises a basic clinical set-up containing 80 percent of the required materials; the remaining material is procured locally. A total of 11 logistics centres spread over the northern hemisphere and belonging to the alliance of 187 national Red Cross and Red Crescent organisations specialise in providing complex mobile aid systems like hospitals, water treatment plants and tent camps.

IMPRINT

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