

Trends in Europe: Logistics Networking

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1. Introduction

The 'German Logistics Congress' is certainly one of the most important logistics events every year. With more than 1,600 logistics experts it covers the whole logistical spectrum in Central Europe. Germany has the strongest economy in Europe and the logistics of German companies are key for their success on the Global markets. For many years the German logistics congress organised by the 'German Institute of Logistics' sets trends of future logistical developments. The theme of the German logistics congress in 1998 was 'European Networking'. With the implementation of the new currency 'Euro', the European integration will lead to new dimensions. 'Pan-European Logistics Networks' are the nerve-systems of the European integration.

This working paper aims to provide an overview of the many different aspects of European networking presented and discussed on the German logistics congress 1998. The objective is to summarise the many contributions logistics experts from very different logistical fields made and to highlight the main important issues in short abstracts of each individual subject.

2. Bundesvereinigung Logistik (BVL)

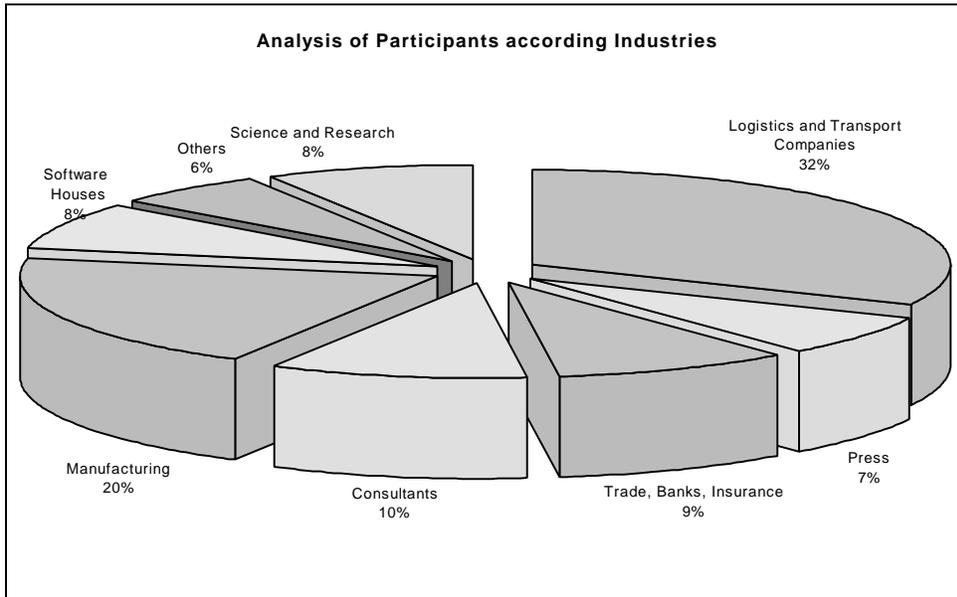
(German Institute of Logistics)

In 1978 the German Institute of Logistics (BVL) was founded in Bremen. At the end of 1978 the German Institute of Logistics counted 202 members. Since then the German Institute of Logistics developed continuously and has today more than 3,300 members from different industries such as manufacturing, freight forwarding, transport and logistics companies, logistics consultants and software houses. The 'BVL' is organised in 24 regional groups with more than one hundred event every year. On the other hand the 'BVL' supports the knowledge transfer between the 50 German universities and polytechnics with logistics faculties and the German industry. Furthermore the 'BVL' science group has recently developed a research platform as a guideline for future and praxis oriented logistics research topics. In 1994 the 'BVL' in collaboration with the 'DAV' (German Foreign Trade and Transport Academy) founded the German Logistics Academy in Bremen which offers continuous education for logistics practitioners. The German Institute of Logistics describes itself as an institute of integration; the knowledge transfer between academia and industry; between different industries on Regional, European, and Global level in order to strengthen the European position.

3. The 15th German Logistics Congress 1998

The German Logistics Congress in Berlin has become the major logistics congress in Europe with more than 1,600 participants and 102 speakers. The German logistics congress has been developing to an European or even a Global logistics congress; about 200 participants came from other European countries as well as 40 speakers travelled from abroad to Berlin. The importance of this

logistics congress was underlined by the 39% CEO/board members attending the congress. Furthermore the participants came from the whole logistics spectrum:



The key theme of the logistics congress 1998 was 'European Networking'; the Pan-European integration of different logistics processes across Europe with respect to globalisation and the effects on the European economy. From the 21st October to the 23rd October 98 the BVL organised 15 sessions, 3 workshops and 4 key speeches.

4. Opening Session

4.1. *Dr. Hanspeter Stabenau*

President of the Bundesvereinigung Logistik e.V., Bremen; and CEO of the German Foreign Trade and Transport Academy (DAV), Bremen.

Dr. Stabenau stressed that we are at the beginning of a new area. People criticising the new currency 'EURO' should remember that about 200 years ago Germany was split in many small states with 27 different currencies. The autonomy of the individual states and the many different currencies were the main reason that the German economy did not develop as positive as the national states like the UK and France. The economy and monetary European unity will have positive effects on the European economy development. This development will lead that within the next 15 years the exchange of goods between regions of the European Union will be more than double. Therefore the growth of the European economy will be mainly influenced by the more intensive division of labour between the industrial centres in Europe. Europesation of all economic transactions will come before Globalisation. Every logistics expert is clear that such an intense growth of the transport volume can only be handle by optimising all logistics processes. To increase the value adding processes of supply, production and distribution network the logistics has to develop their own network structure for many different services, transport systems, and information and communication systems. Additionally an integrated international logistics management will be necessary. It is obviously that we need besides the infrasture, political frameworks, and the common currency, logistics networks which are supposed to connect the 300 million consumers in Europe in order to shorten the ways, to speed up the processes and to reduce the transaction costs. We have to emphasis on the importance, that additionally production potentials can only be realised by value adding logistics services in the future. This is important for

vertical, co-operative process chains, but also for the development of individual modules of logistics systems and in particular in the area of information and communication systems.

‘European Networking’ is the task of logistics in the future. Therefore the 15th German Logistics Congress aims to deal with the different aspects of this development.

4.2. Eberhard Diepgen

Mayor of Berlin.

Mr. Diepgen welcomed the German Logistics Congress to Berlin. In his speech he said that logistics is very important for the federal state of Berlin. Not only the largest logistics faculty in Europe is at the Technische Hochschule Berlin, but logistics is very important for the development of the city. For example, by employing a intelligent logistics concept for the largest construction site in Europe, the ‘Potsdamer Platz’. This construction site is just located in the middle of the city. By using the rail and water transport systems to supply this construction site, Berlin saves every day about 35,000 miles road transport which would otherwise have been congesting Berlin’s road traffic system for years. On the other hand logistics is important for the economical development of the city, Diepgen said, that a future regional global economy needs logistical networking to link the economical global regions.

4.3. Prof. Dr.-Ing. Gottfried Beyreuther

President of the European Logistic Association (ELA), Monchy St. Eloi/Rantigny, France.

Today Europe has 15 states and 11 languishes, tomorrow 25 states and 19 languishes and the day after a tower of Babylon. Europe should not become a tower of Babylon. Therefore the European Logistic Association has been founded. The ELA represents 33 logistics institutes across Europe with 30,000

individual members and 28,000 companies. The ELA works on a common logistics terminology, the Eurologterms – similar to the Incoterms. The ELA fights against the syndrome of the tower of Babylon; the German, French and English languish have to move together. Also the European definitions of logistics jobs and the associated curricula for the qualification of logistics managers has to be defined on European level. The European Certification Board for Logistics has the task to define logistics qualifications based on job experiences. Apart from the school and university systems there should be following qualification on European level:

- Junior Logistics Manager
- Master Logistics Manager
- Senior Logistics Manager

Such common job qualifications will improve the understanding and co-operation within Europe. Some people even propose the idea of an European Logistics Academy.

The ELA is also a meeting point for all logistics managers from different logistics fields in Europe. Therefore the ELA organises an European Forum in November in Brussels every year, as well as a yearly doctoral school in June in France. Furthermore the ELA has several working groups which publishes the results on a regularly basis.

5. Key Speeches

5.1. Future Co-operations need new Forms of Services

Dr. Klaus Mangold, CEO of Daimler-Benz InterService (debis) AG, Berlin.

The present major trends are globalisation, service orientation (more outsourcing), shorter product life cycles and the knowledge society. In order to stay competitive in a growing networking global economy as well as the fast spreading use of 'Electronic Commerce', efficient logistics networks are becoming key success factors. The foundation of virtual corporation will be necessary. Such virtual corporations develop tailor made logistics concepts for individual customers or industries. This does only work, if suitable information technology supports the co-operation of all partners in that logistics network. Debis would take over all IT-services in such co-operations, which means that the other partners are able to concentrate on their own core competencies. Dr. Mangold sees a new service company, the 'Broker'. His duty is to manage virtual logistics networks. The advantage to implement a 'Broker' is that a 'Broker' is able to bring fast the best companies together for a certain project and if the project has become obsolete the virtual logistics network disbands. In that way the 'Broker' creates always the 'Best-of-Situation Solution' for each customer order. The trend to combine the logistics of goods with the logistics of information and knowledge will become increasingly important in the future. The competition will increase as there are already new competitors from other industries (electricity companies, telecommunication companies, etc.) on the logistics market. Therefore logistics service providers have to continue to build up their networks.

5.2. Logistics in Global Competition

Dr. Edward G. Krubasik, Board Member of Siemens AG.

Siemens is one of the major global electronic groups with a turnover of more than 30 billion Pounds. The company operates in nearly 190 countries and has outside of Germany 471 factories in 49 countries. Siemens employs 404,000 employees, whereby 209,000 employees work outside Germany. All those globally dispersed units makes only sense if it is organised in a perfect global network. A network that uses the global potentials in a way that the efficiency is higher than the sum of the individual units. Besides ‘best-of class management’, innovation, customer orientation and global knowledge management; logistics has become one of the major key success factors. The catch word ‘Supply Chain’ is helpful to understand what Siemens means by term logistics: Logistics begins with the order of the customer who starts the process in which Siemens has to manage all individual sub-processes – supply chain management. The chain ends again at the customer, when the delivery arrives at the final point of destination. The supply chain includes inbound logistics, production logistics as well as the distribution logistics. It is important to control each single step, to manage the whole process while at the same time to focus on the logistical needs of the customers. To optimise the logistical processes in an technological integrated network is the challenge of the logistics in a global economy.

5.3. Aldi – The Success Story. Also a way for others?

Dipl.-Kfm. Dieter Brandes, previous member of the supervisory board of ALDI-NORD.

‘Simplicity needs courage’, Brandes says, ‘that is easier if one can trust others. It is easy, if we can work without anguish. If it is allowed to make mistakes. In order to be simple, one need passion for success – and not for the way to it’.

The concept of simplicity counts also for Aldi's data processing. Aldi works only with a few statistics such as subsidiary and time benchmarking, but without any yearly budgets. Aldi formulates the strategic question regarding customer orientation as follow: what is good for the customer and how can that best be realised? Products of high quality and low prices are the simple and honest offer of the company for its customers. Additionally, satisfied customers motivate each individual Aldi employee. Another major success factor of Aldi is decentralisation. First, the group is divided in North and South between the two brothers Karl and Theo. Second, the company has 65 subsidiaries. Each subsidiary is absolutely independent. The following points are key for the success of Aldi:

- Clear defined targets.
- Radical customer orientation.
- Delegation and decentralisation.
- Only a few statistics.
- No budgets.
- Small central head office.
- Try and error.
- To do every thing as simple as possible.

5.4. Be honest – become rich

Erich J. Lejeune, CEO of ce Consumer Electronic AG.

For the broker Lejeune his business is more than logistics, it is also about honesty. His trade is based on trust. He acquires orders from customers and places orders based on direct delivery with his suppliers. As money transfer takes some time, it is important that the suppliers trust him and send the cargo prior payment. Lejeune says, if a broker breaks the rules of trust, he will never have a second chance in this business. That is because the about 6,000 chip-brokers in the world are connected by a special Intranet which makes this business transparent for everybody. However, Lejeune says, besides honesty; courage,

motivation, positive thinking, risk taking and clear defined targets are decisive success factors.

6. Sessions

For each of the following 15 sessions a short abstract is provided. Each session was managed by a host and about 4 to 5 speakers presenting best practice examples.

6.1. Logistics Strategies in North America

Host: James S. Keebler, University of Tennessee, Dept. Of Marketing, Logistics & Transport, Knoxville, USA.

Since the 1980, North American firms have found that total cost trade-offs are maximised when:

- Logistics activities are treated as a key business process.
- They are measured, redesigned, and managed centrally.
- They focus on reducing cycle times and costs.
- They provide improved quality and flexibility.

The session covered the drivers and barriers experienced by North American Companies, as well as their approaches to convert their functionally-organised structure into efficient, collaborative structures supporting supply chain management.

Some specific industry initiatives were reviewed. Progress of the current Council of Logistics Management research into logistics performance measurement in the supply chain was presented.

6.2. Modern Production

Host: Prof. Dr. Dr.-Ing. Prof. E.h. Eberhard Gottschalk, Chairman of the German Logistics Academy (DLA) Advisory Board.

This session aimed to introduce the present trends and experiences of logistical production concepts. Roberto Eggeling, head logistics VW Argentina reported about the experience they made regarding modular and lean production as well as the outsourcing process of operative logistics. Ernesto Fernandes, Director of Instituto Technologio de Buenos Aires, presented an overview of the present developments and chances of logistics in South America. An example of outsourcing IT-services and the practical experiences regarding the possibilities, effects and limits of this innovative process was presented by Christian Ocking. An European production network and the successful application of supply chain management was presented by Thomas Petrick. The KARAMAG Group has many factories in Europe and the consequent use of the information network makes it possible to use alternative production capacities within the group.

6.3. Quality and Ecology Management of Logistics Processes

Host: Prof. Dr. Ulrich Steger, Chairman of the Institute of Ecology and Management at the European Business School (EBS), Oestrich-Winkel; Alcan Chair for Environmental Management, IMD, Lausanne.

Quality and ecology management of logistics process chains is a new innovative conception for the design of logistical process chains. This new concept focuses on Total Quality Management as well as on the ecological design of logistical processes. Several examples of this new approach were given. Prof. Dr. Steger and Prof. Dr. Joachim Zentes presented a research project on this topic. Empirical studies have shown, that the integration of quality and ecology management in cross company logistics chains is economical beneficial for the participating companies.

6.4. Global Supply Systems

Host: Prof. Dr. Helmut Merkel, CEO of Deichmann International Holding GmbH, Essen.

The German economy is one of the leading countries regarding the import and export of goods. In 1997 the trade surplus of Germany was about 140 billion DM. The main trading partners are EU countries (41%), Asia (25%), America (18%) and East Europe (5%). Despite the shrinking incomes in Germany some wholesalers are still growing. It is obviously that successful wholesalers have changed their purchase strategies, they react fast to changing market trends. The internet is the ideal vehicle for the design of cross company process chains from the suppliers to the wholesalers.

The internet is also a key success factor for the competition of logistics service providers. Companies who offer the logistics services via internet have high growing rates. In the past physical services like consolidation, transport, warehousing and the involved costs were predominant; today the system quality to manage the global supply logistics processes has become the key decision criteria for customers. The internet revolutionises the supply side.

6.5. Logistics Strategies in Asia

Host: Volker Klein, General Secretary of the German – Japanese Centre Berlin.

Since 1989 **Ameco** is a joint venture between Air China and Lufthansa located in Beijing. The Aircraft Maintenance and Engineering Corporation takes care of air crafts of about 180 airline in China. From the beginning Ameco has been operating with low inventories and today spare parts arrive normally 2 days after they have been ordered. The company benefited from their approach to offer their logistics services to Chinese manufacturers. Ameco operates in China as an air craft maintenance and logistics service provider company.

Wilfried Krokowski and Jürgen Oesterreich reported about the approach of medium sized companies to compete with large company on new markets by forming strategic alliances. By using the synergetic benefits of such partnerships medium sized company are able to do global sourcing, but also to maintain global sales and service facilities. The co-operation partners know that on the one hand they can learn from each other and have strong partners to face international competition, but also to join their procurement and sales functions.

The pragmatic and flexible procurement logistics of the Siemens International Procurement Office in Singapore minimises the costs, guarantees the in time delivery to customers and use the full potential of the global procurement market. By using the so-called 'kitting' the parts of the many different suppliers in Asia are consolidated and then ship to the global production locations.

6.6. European Parcel Service Market – Strategies for the Future

Host: Chief Editor Deutsche Verkehrs-Zeitung (DVZ), Hamburg.

The main strategic trends in the European parcel service industry can be summarised:

- International expansion and globalisation by forming international co-operations (German Parcel Service).
- Using the internet for 'OnlineCourier' services – digital distribution of documents (UPS).
- Value added-services, online tracking, payment services (UPS/TNT).
- E-commerce / Internet shopping malls, co-operation and deliveries.
- UPS offers their customers help from leading Internet-Software-Companies, in which the UPS logistics solutions are already integrated.

6.7. Logistical Disposal Management in Europe

Host: Prof. Dr.-Ing. habil. Michael Schenk, Institute Leader Fraunhofer Institute of Factory Management and Automation, Magdeburg.

This session dealt with the subject of re-distribution and recycling of products and materials. Not only the increasingly demanding environment protection legislation in Europe motivates companies to take old products back and to recycle them, but also companies have discovered that the recycling business can be economically attractive. For example, Xerox is one of the leading companies of taking their old products back. After the materials have been recycled they are used for the production of new products. Due to the economical success of the recycling of their own products, Xerox has built up a separate recycling business unit. The re-distribution of Xerox products is a logistical challenge, not only for Xerox.

6.8. The Use of Information Technology in Medium Sized Companies

Host: Rainer Hoppe, MD Transport CSC Ploenzke AG, Wiesbaden

How can sophisticated information technology help medium sized companies to achieve their business targets? The speakers dealt with following questions:

- How can a long term business success be secured by using new technologies, such as the internet?
- How to integrate information data processing and business processes along the logistical chain?
- Which contribution can the information management make to optimise the use of resources?
- How can IT-island solutions through the use of information standards be minimised?

6.9. Logistics Strategies in East Europe

Host: Friedrich Macher, CEO of Kühne und Nagel GmbH, Wien

To do business in Eastern Europe is a challenge. A functioning logistics is a key success factor for a successful market entry in Eastern Europe. Despite the economical and political crises there is a positive trend. The steadily increasing exports and imports underline this development. The main problems the logistics faces in Eastern Europe are as follows:

- Infrastructure.
- Local authorities.
- Social environment.
- The operational challenge for the logistics.

6.10. International Logistics Networks

Host: Dr.-Ing. Hans-Robert Greim, Head of Logistics Planning and Development, BMW AG, München

Today for companies to produce a superior product is not a success guarantee anymore. At least as important as that, is to be able to deliver in time. World wide customers expect that the products are fast and reliable delivered as promised. Even when companies follow the markets and build new production facilities in new potential markets, the global network remains a challenge for the logistics. For manufacturers this means a new approach to logistical networks between suppliers, their own manufacturing locations and the distribution destinations. This becomes even more important through the steadily increasing product diversification. The focus of logistical networks are customer orientation; the logistics is the strategic, tactical and operative factor to realise the consequent process orientation in order to deliver an effective and efficient customer process.

An additional central focus is the increasingly importance of cross-company operation and responsibility partnership networks.

6.11. Module Suppliers – Global Strategies as a Challenge

Host: Dr.Ing. Frank Straube, CEO of the Centre of Logistics and Company Planing GmbH, Berlin/Sao Paulo.

For module suppliers the continuing globalisation of markets means an increasingly competition caused by the steadily increasing number and frequencies of technical innovations. This development is a chance as well as a challenge for module suppliers. The modularization of products and the changing sourcing strategies lead to a global structural change between manufacturers and suppliers. The extend to which the supplier is integrated in the innovation and production process is defined by the production architecture and the system borders of the manufacturer. It will come to a strong technology battle and not only the innovation competence and product quality will decide about success or failure, it will be very important to be flexible and to have the ability to integrate itself in the global production networks of the manufacturers. Therefore module suppliers have to perform transfer and co-ordination services. So far the manufacturer has co-ordinated the network of its suppliers. Due to the global production and supply networks the relation complexity has grown dramatically, so that the manufacturer can not play this role anymore. The manufacturer will have not all necessary information and competencies to manage all suppliers. A decisive success factor for the development of strategies for long term and economical use of global production and logistics networks is the optimisation of process chains across the borders of internal and external organisational units. The ‘Supply Chain Management’ deals with this topic. Manufacturers want a production on call (‘made to order’) of complex modules. This requires a wide

reaching integration of module suppliers and their sub-suppliers as well as a cross company navigation of the production processes in order to design an efficient network. The supply chain management strategies do not only reduce costs and improve transparency and reaction ability; but also it will be a necessary element of global successful company strategies in the future. The best market chances have module suppliers which can offer innovation, integration and co-ordination competencies at competitive prices.

6.12. European Distribution of Trade Companies

Host: Dr.-Ing. Kristian Schleede, CEO Danzas Holding GmbH, Schwalbach.

The Europe wide distribution will become more important due to the increasingly international integration of the European economies. In 1990, 37 % of the purchase power in products were identical in Europe; in the year 2005 it will be 60 %. At the same time the demand for product variances and reaction time will increase. This does not only open new opportunities for trade and distribution, but also it will change the production and warehousing capacities of manufacturers. The pre-conditions for a successful logistical chain are the decisions about the right warehouse locations. The growing product and service diversification and the increasing customer needs on the Pan-European level demand a modification of the present business processes in order stay competitive. The change from the 'Push' to the 'Pull' system requires a substantial adjustment of work practices and the use of sophisticated information technology. Today, modern logistics service providers are able to develop and to implement tailor made logistics solutions. The basis for that is an efficient location network as well as IT competencies in order execution; the transparent control of the physical material flow.

6.13. Trends and Strategies in Logistics – Superiority of Networks

Host: Prof. Dr.-Ing. Helmut Baumgarten, Director of the Institute of Technology and Management – Logistics, Technical University Berlin.

An international network management makes an efficient and flexible design of internal and external business processes possible. The superiority of networks lies in the design of new forms of co-operation between companies. The co-operation improves the flexibility, because networks can be fast formed and changed. More and more companies realise the advantages in company networks and virtual corporations. Due to the management of networks, the ‘Global Supply Chain Management’; the logistics becomes a vital strategic role. The logistics has the function of stabilising and co-ordinating such steadily changing supply and distribution networks. The logistics of a company does not only control their own flow of materials and information, but also it optimises in close co-operation with other companies the whole value chain. For company networks it is important that all individual companies benefit from the co-operation. The management of logistics networks requires a high co-ordination effort of the participating companies. Efficient information and communication tools avoid that the co-ordination costs are higher than the benefits of the co-operation. Internet and e-commerce are new challenges for the logistics. The formation of flexible logistics networks provide also new chances for small and medium sized businesses to compete on global markets with jointly developed and manufactured products and services. The combination of specific core competencies of the participating companies creates an efficient value adding process. Therefore networks can be more effective and efficient than today’s large companies. They are in the position to react fast and flexible to changing market conditions. The integration of new partners with successful core competencies are not problematical.

6.14. European Transport Market – Rail and Inland Water Transport Companies as Logistics Partners

Host: Dipl.-Volkswirt Michael Lippoldt, Head of the Department Traffic and Telecommunication at the Bundesverband der Deutschen Industrie (BDI) e.V., Köln.

Rail and inland water transport are on a good way to new market successes. Apart from the classical bulk cargo transport the inland water shipping companies compete for the container transports from sea port to inland destinations. Their market share is increasing. Additionally, inland water shipping companies operating as logistics partners on Middle and East European markets have advantages to offer. The low transport costs of inland water transport are certainly one of the main advantages. The strategic focus has to be the creation of cost efficient and high quality transport and logistics chains. By the aggregation of the individual system advantages through the co-operation of rail companies, freight forwarders, trucking companies, and inland water shipping companies, new customers can be won. The integration of both, rail and inland water transport in multi-modal organised logistical transport chains can only be realised by the integration of the individual system advantages. The logistical integration of Europe needs the performance of rail and inland water transport. Both modes of transport are changing. New logistical concepts are supposed to change the modal split. Fantasy and performance are decisive. It is important that rail and inland shipping companies develop a new process chain understanding. They have to provide their customers problem-oriented logistics solutions. This would automatically transform them from pure transport companies to a logistical partners of the industry.

6.15. Innovative Information Systems

Host: Bruce Richardson, Vice President Strategy Advance Manufacturing Research, Boston.

The supply chain management, from the customer of the customer to the supplier of the supplier which the logistics includes, will become even more important in the future as a system to support the decision making process. The results of complex decisions will be calculable; the uncertainty of decisions will be reduced. Existing 'Enterprise-Resource-Planning-Systems' (such as SAP R/3 or Baan IV) do not comply with such demands. Solutions for intelligent planning systems (APS – Advanced Planning and Scheduling) are offered especially by US-American software houses, i.e. i2 Technologies or Manugistics; but also SAP is developing an APS-solution. Today, the fourth wave of SCM software is characterised by the complete and simultaneous integration of all planning systems as well as by the use of e-business. Nick Seiersen of KPMG developed the vision of a total transparent supply chain, the so called 'Supply Chain Control Room'. SAP, the leading company-software player announced the release of SCOPE (Supply Chain Optimization and Execution) for the end of 1998. The SAP-SCOPE system will include four main modules; a business information warehouse, the Advance Planner and Optimizer APO, a sales force automatisation to support the whole sales process as well as the business-to-business electronic commerce module.

7. Workshops

7.1. Logistics Benchmarking – Successful Tool for Logistics Leaders

Host: Rudolf Verges, Director of the Central Logistics Department of Mannesmann VDO AG, Babenhausen.

Cost pressure, high service ability and flexibility of customer deliveries are the main demands on logistics. The logistical performance of the development and design of efficient logistical chains has become a decisive competitive factor. It is therefore the task of the logistics to design integrated logistics systems and to improve them dynamically regarding the continuously changing demands. Already today, one can see that logistics chains will evolve to a dynamic logistical network. The traditional logistics chains: supplier – company – customer, will be open for strategic alliances and the involvement of external service companies. Therefore it is necessary to find and to implement successful tools in order to improve significantly the functions and processes of the own organisation. Furthermore the necessary willingness and ability to co-operate opens new dimensions for the logistics to growth on the global market. A successful tool to evaluate the own performance and to find ‘best practice’ is benchmarking. To learn from the best leads systematically and consequently to a excellent logistics performance. An efficient logistics control system is the basis for a transparent documentation of logistics performance, quality and costs of the individual cost unit as well as on the individual process levels. The first step is internal benchmarking, the second step is benchmarking within the industry and the third step is benchmarking with companies from different industries.

7.2. Future Potential of the European Logistics Research

Host: Dr. Wilhelmus A. G. Blonk, Director for Transportation Policy, Research and Development, European Commission, Directorate General VII Transport, Brussels.

The importance and potential of logistics research is documented by following figures: 11 % of the total costs in manufacturing are logistics costs and 21 % in trade. To reduce the logistics cost by only one percent is as much as to increase the turnover of a company by 10 %. Logistics is the flow of material and information, logistics management is information process management. Today the field of logistics includes information and communication systems, production management as well as quality management. Dr. Blonk mentioned that today the main problem of logistics is that shippers demands a certain mode of transport (in most cases road transport), instead of demanding a certain logistics service. This leads to inefficiency. At the moment the EU is working on the 5. European Research Framework. The major five topic of it will be:

- From single modal transport to intermodal transport.
- The implications of e-commerce on supply chains.
- The implication of information transmission on the supply chain.
- The possibility to move the decision of the mode of transport as close as possible to the production process.
- The need for new political initiatives to improve the process of supply chains.

(more information: **Fehler! Textmarke nicht definiert.**)

The 5. European Research Framework will be discussed with the industry and research institutions in Jan./Feb. 1999.

Prof. Baumgarten introduced the research platform of the German Institute of Logistics. First, the BVL intends to collect basis data about trends and strategies of the logistics which are basis for the following research topics.:

- Customer orientation of the manufacturing industry.

- The value adding partner = the suppliers.
- Innovation processes.
- Co-operation processes in trade and manufacturing.
- Service strategies and transport.
- Information and communication.
- Transfer of instruments, the transfer of logistics knowledge to other, similar research areas.

Prof. Pollmann of Daimler –Benz AG, Stuttgart, said that the logistics becomes more and more important, that there is even the tendency that logistics becomes more important than manufacturing. On the one hand the logistics costs are increasing, but on the other hand that means also, that there is an increasing potential to save costs. He emphasised three main research areas; the implications for logistics and production systems caused by the growing transport and traffic volume; the ecological evaluation of supply chain management; and the re-distribution processes – recycling.

7.3. Junior Logistics Managers

On this workshop 5 logistics student presented their dissertations as well as the winner of the German Logistics Research Award presented his work:

- Project Supply Chain Management, Björn Egil Asbjørnslett, University of Science and Technology, Trondheim, Norway.
- Process Optimisation of the Production Supply of a German Motorcycle Manufacturer, Suzana Smolkovic, Technische Universität Berlin.
- Alternative Forms of E-Commerce and their Implications on Logistics, Markus Schmidt, Universität Mannheim.

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German Logistics Research Award:

Improvement of the production logistics through the harmonisation of production lots – a theoretical approach, Dr.-Ing. Markus Greiling, Universität Karlsruhe.

8. The German Logistics Award 1998

Volkswagen Sachsen GMBH

The in 1990 established Volkswagen Sachsen GmbH at Mosel (South-East Germany) represents an ideal example of new trends in the car manufacturing industry.

- Production in Partnership

The new trend of the division of work with external partners is demonstrated by the supply of the assembling line at the factory of Mosel. About one third of the assembling time of produced cars at Mosel are manufactured by external companies. The magic word is ‘module strategy’. 30 pre-assembled modules are delivered by external suppliers. This approach reduced the work of the finished car in the factory from 46 % to about 20 %. The module suppliers are located around the VW factory and they are treated as partners in an integrated production process. Their responsibility is to order the parts needed to pre-assemble the modules and to deliver the modules just in time to the assemble line. Interface problems have been replaced by total process responsibilities.

- New Service Provider Strategy

The module strategy reduced the supply of about 5,000 single parts to 30 modules. The remaining 3,500 parts are handled by an external service provider. The external service provider is responsible for the whole supply of those parts and the involved processes, such as the supply to the warehouse, warehousing, commissioning, pre-assembling, and the just in time delivery to the assembling line.

- Logistics Network

The binding element of the production network Mosel is logistics. For each car which enters the production process, at 15 JIT factories around Mosel the production of the modules starts exactly for the specified car. The modules are delivered time controlled to the assembly line. The factor time is crucial for the logistics processes and forces of actors to keep to the processes and disciplines. The 400 truck deliveries every day are scheduled on the minute, no disruptions, no interface problems and no waiting time for the trucks occurs. Logistics networking needs a sophisticated information and communication technology which monitors the production and logistics processes in real time. The concept of the transparent factory is key for the production in partnership.

- Regional Re-Vitalisation through Logistics Competence

Not only VW has benefited from this new concept, but also it has re-vitalised the whole region. By avoiding a central industrial estate at Mosel it was possible to decentralise the suppliers all over the region which supports the development of the whole region. Modern transport and communication infrastructure has not been concentrated at one point, the target was to make this region also attractive for investments of other industries.

9. Conclusion

With the implementation of the 'Euro' on the 1st of January 1999 the European integration process will accelerate. Europesation comes before Globalisation. The European integration and the globalisation of markets will lead to a new approach to organise businesses; the cross country and company networking approach. Logistics is the art of managing the flow of material and information. Logistics is networking. The German logistics congress has clearly demonstrated that logistics is more than the physical transportation of goods, information management and supply chain management. Logistics is the integration of processes across traditional borders to link each individual function. Cross country and company networking will make logistics in future even more important than today. Some experts, especially from large multi-national groups, predicted that logistics will become even more important than manufacturing.

References

Information material provided by the German Logistics Congress 1998 for participant and press representatives.

