

## WEB SOLUTIONS FOR SUPPLY CHAIN 4.0



### Revolution for your supply chain

How companies increase  
the quality of the supply chain  
and reduce costs

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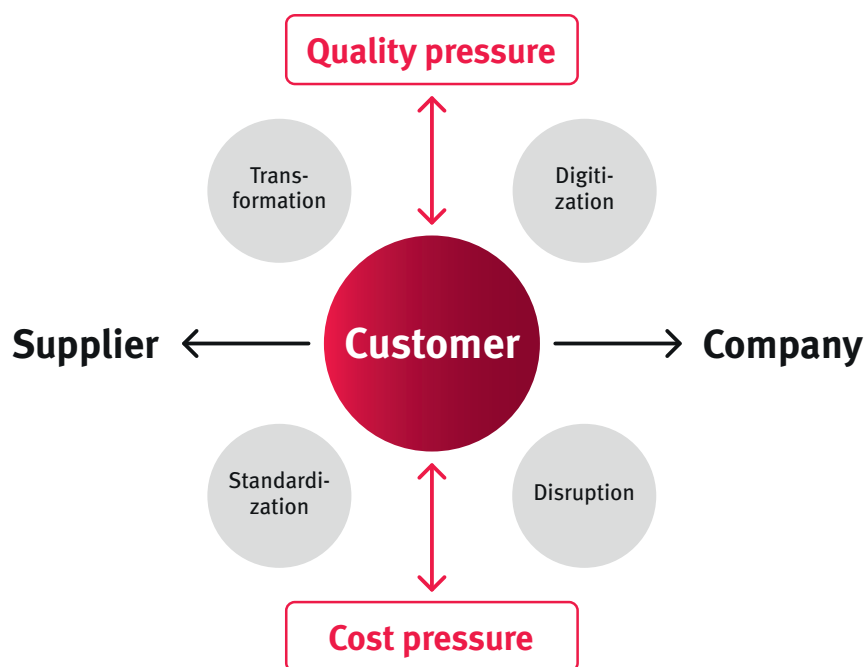
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# The current change in the automotive industry

# 1

Digitization, which is becoming increasingly widespread, is currently felt more clearly by companies than ever before – and this across all sectors and processes. However, it is the automotive industry in particular that is facing the greatest transformation to date. This is not a crisis in the classic sense, but a change in mobility that requires a complete rethink – from consumers to car manufacturers to suppliers.

Due to the ever shorter development times that this change entails, companies in the automotive industry are faced with the task of reducing production processes and costs to a minimum – whilst maintaining high quality. This affects not only the car manufacturers themselves, but above all the part suppliers. This makes quality assurance even more important than it already is – the industry hardly accepts a supplier without a failure rate close to zero.



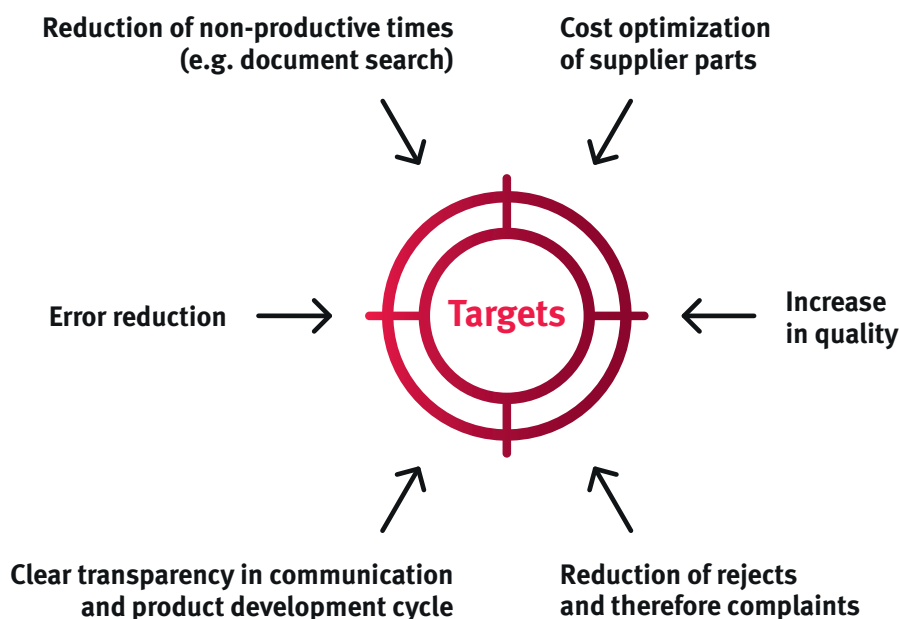
# The current change in the automotive industry

# 1

However, companies in the automotive sector are often both supplier and customer: Many suppliers themselves source hundreds, if not thousands of parts from suppliers. The challenge to remain competitive while providing high quality, reducing costs and keeping pace with the transformation of the major car manufacturers is accompanied by the pressure to adapt to the changing mobility markets.

To master the digital change, it is important to address potential sources of error in the supply chain and to reduce both costs and development times!

**Companies must pursue the following goals in the medium term in order to keep up when implementing digitization:**



Digitization not only creates hurdles or stumbling blocks, but also important milestones: Optimizing the supply chain by connecting to the Internet opens up opportunities for companies to save costs and reduce development times!

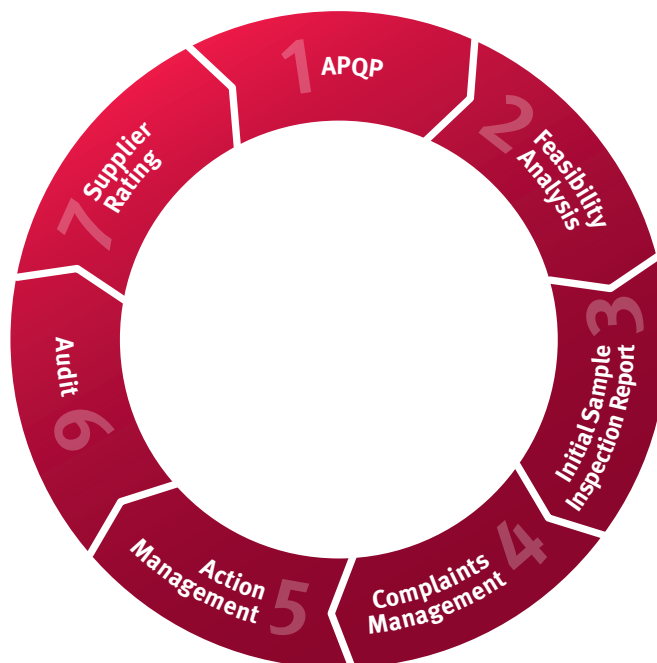
# The supply chain as a quality indicator

# 2

If the development towards Industry 4.0 was previously limited to the digitization of individual quality processes, the extent of digital change is now also evident in the supply chain. With the further development of the digital supply chain, it becomes apparent that the changes in today's markets extend to the supplier – and that all processes in the supply chain have to be adapted to the current information landscape in order to ensure a successful quality control loop.

Smart factories with their intelligent machinery that share information as well as communicate with each other using specialized software, seem to be the highlight in the digital transformation. But without the digitization of the supply chain, a lot of potential for savings is lost around the common production process due to lack of networking and intelligent communication.

Quality management in the supply chain consists of the following steps, which should form a closed quality control loop.





# The supply chain as a quality indicator

# 2

## The dilemma of the current supply chain

For every single step in the supply chain, it pays off to make cuts, because all processes offer enormous optimization potential:

### › APQP / QUALITY PRE-PLANNING

In most cases, Excel is no longer sufficient for quality planning – large amounts of data and their changes often lead to an unclear versioning, where the parties involved seldom work with the same version.

### › INITIAL SAMPLE INSPECTION REPORT AND FEASIBILITY ANALYSIS

Initial sample inspections are often lengthy and stretch across several recursion loops. To accelerate communication with the supplier, it must be clear and concise.

### › AUDIT AND ACTION MANAGEMENT

Audit results and resulting actions from an audit are not centrally stored for the customer and supplier for processing and feedback. This increases the time invested when conducting an audit as all parties involved have to search through the many complex documents to locate those required for verification.

### › SUPPLIER RATING

Business partners have insufficient information on current supplier rating. Since no common information is available to both parties, the preparation for supplier interviews is complex.

### › COMPLAINTS MANAGEMENT

Complaints are often exchanged via email and Word documents, and processing is time-consuming. In the event of queries, communication partners must relate to the convoluted email exchange in order to create the same basis for discussion.



The digitization of the supply chain enables you to use modern tools to recognize a suitable change process and swiftly achieve positive process improvements that reliably contribute to your goals.

# The supply chain as a quality indicator

## 2

### Importance of customer-supplier relationship in the supply chain

The relationship between customer and supplier in the automotive sector requires particularly close interaction between the partners in the supply chain. In order to meet this challenge and manage the necessary change process, not only the processes have to be revolutionized, but above all the communication between customer and supplier. In the associated general rule, the objective assessment of the purchased parts with regard to availability, reliability and quality plays an important role.

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#### THE GENERAL RULE IS:

**The lower the degree of added value of the companies concerned, the more important the value of the relationship between manufacturing companies and their suppliers.**

However, previous software solutions in companies are often no longer sufficient for implementation, since they are often used as stand-alone solutions – the use of different software manufacturers and systems means that valuable synergy effects are not exploited. The processes currently in place do not allow a closed quality control loop and are exhausting for both supplier and customer.



In order to cope with the necessary change process, not only the processes, but also the communication between customer and supplier must be revolutionized.

# The supply chain as a quality indicator

## 2

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### The following problems have to be resolved:

- › System discontinuity
- › Lack of transparency due to a lack of real-time communication
- › High potential for errors
- › Identifying bottlenecks too late
- › Failure to meet time and budget targets
- › Inconsistent supplier documents
- › Missing parts release and initial sampling
- › Many recursion loops
- › No common basis between customer and supplier – no bidirectional communication
- › Versioning is laborious to trace/view by calling up and comparing the existing documents
- › Optimization and development status only available on request
- › No central administration of all documents/agreements

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The transformation to Industry 4.0 can only be successful in your own company if the digital change starts with the supply chain. In addition to total compliance to the aforementioned process steps, this includes, above all, their digitization and integration.



# The supply chain as a quality indicator

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With continuous digitization of your supply chain you can achieve optimized supplier communication through:

- › Transparency & efficiency
  - › Timely information
  - › More stable supply chains
  - › Standardized and structured data
  - › High process reliability through standardized processes with a lower failure rate
  - › Data security
  - › Operational relief
  - › Central data flow without change of format
- 



Based on the digitization of production and the term Industry 4.0, the digitization of the supply chain is referred to as Supply Chain 4.0. Consistent transparency for customers and suppliers forms the basis for development in the digital transformation.

**REVOLUTIONIZE YOUR SUPPLY CHAIN – A SUPPLY CHAIN WHOSE QUALITY YOU AND YOUR CUSTOMER CAN RELY ON!**

# Supply Chain 4.0 – digitization resulting in a profitable supply chain

# 3

Frequently recurring operational processes in cooperation with suppliers in quality management tie up resources and cause high process costs.

A web-based solution that is tailored to the need for cooperation between customer and supplier enables you to access tools with which you can optimize and save resources and process costs when working with your business partners.



The digitization of the supply chain enables you to reduce costs, increase quality and significantly accelerate the processes in the supply chain. You save valuable resources such as personnel and time.

Based on the individual process steps of the supply chain, you receive valuable support for the entire quality control loop via web-based communication:



# Supply Chain 4.0 – digitization resulting in a profitable supply chain

# 3

## How do data exchange and communication with your business partner via a web solution work?

### 1 **FILLING WITH COPIES INCLUDING DOCUMENTS**

In the first step, the customer uses the APQP, the initial sampling or complaints management, for example. After creating the target report, project plan or complaint, the respective copies including the attached documents, such as drawings and photos, are exported from the PeakAvenue QMS software and sent to the web solution via authentication.

### 2 **QUALITY REQUIREMENTS FOR SUPPLIERS**

A cyclical process on the web server determines the newly arrived data package and prepares the drawing, the project plan or the complaint for processing on the Internet. As soon as the data is available in the web solution, your business partner (e.g. your supplier) is informed by email.

### 3 **SUPPLIER PROCESSING A PROCESS STEP**

The supplier now completes their part of the project plan and processes the corresponding data by entering their actual values into the ISIR version via the web solution, for example, or by completing the complaint with the information from their error analysis and adding their documents, photos etc. for the respective applications. As soon as the business partner has finished processing, the processing status is changed and the data record is sent back to the customer.

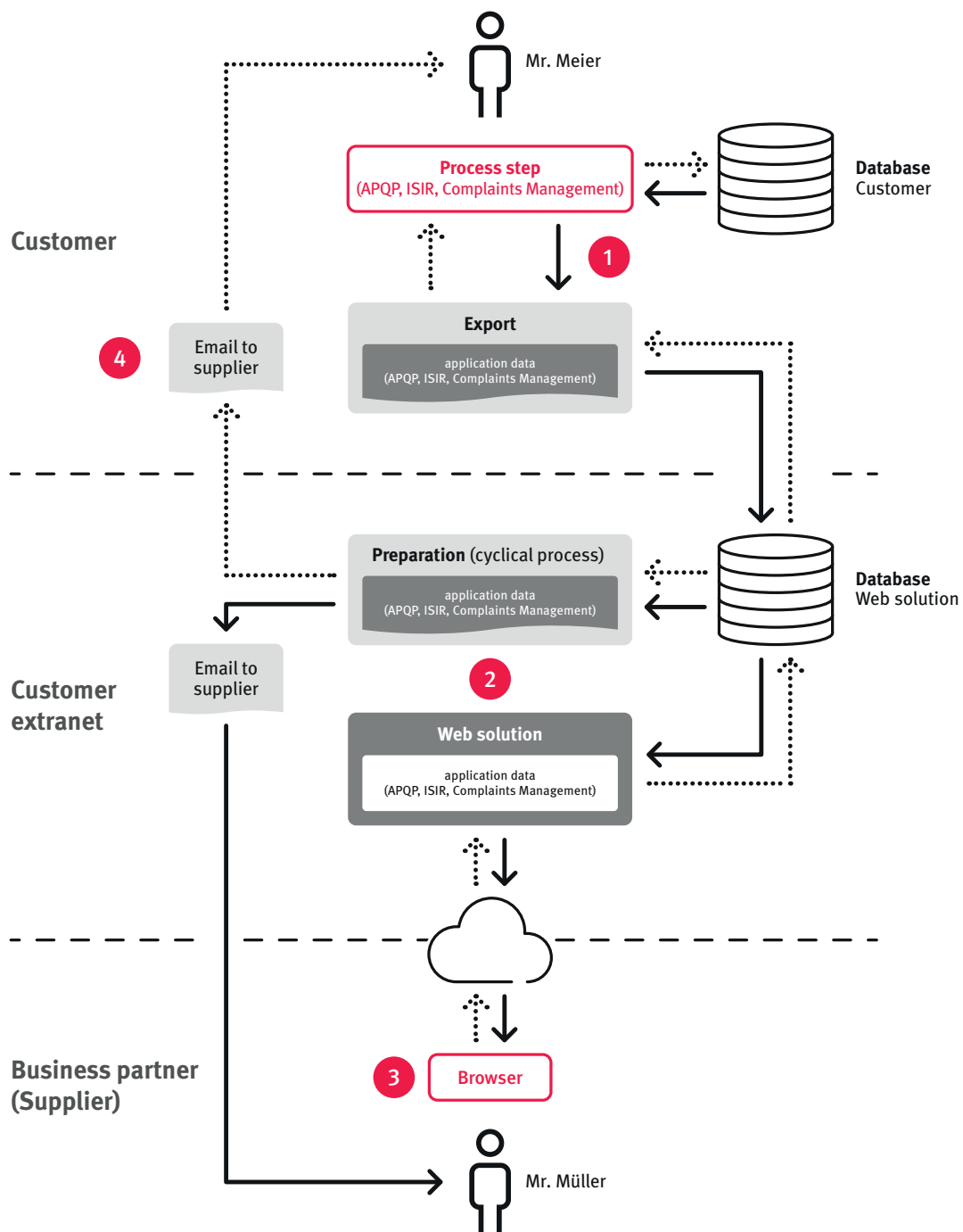
### 4 **FEEDBACK OF PROCESS STEP TO THE CUSTOMER**

The cyclical process on the web server determines the APQP, ISIR or complaints copies completed by the supplier, creates a data record from it and adds it to the database. The customer subsequently receives a message that the supplier has made a corresponding copy available and that the supplier's data can be checked in the PeakAvenue QMS software.

# Supply Chain 4.0 – digitization resulting in a profitable supply chain

# 3

## Example



# Supply Chain 4.0 – digitization resulting in a profitable supply chain

# 3

## The benefits of a web-based solution

A system-based approach provides the opportunity to improve performance in the digital supply chain. With a web-based solution, you can synchronize the quality processes of your company with your suppliers.



The automation of your processes reduces the work involved in day-to-day business as you transfer your suppliers' data from the web solution to your system. There is no need to enter data twice – this saves time and avoids unnecessary input errors.

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## Revolutionize your supply chain to Supply Chain 4.0 and benefit from the following advantages:

- › Harmonization of processes between business partners in the supply chain
- › Interlinking quality and business processes
- › Quality as an integral part of rating and qualification of suppliers
- › Early detection of problems before they become costly quality incidents
- › Reducing quality-related financial risks and improving the efficiency of the supply chain
- › Ensure that supply chain partners understand problems and requirements
- › Cross-functional solution of customer problems
- › Increasing the satisfaction of intermediate and end customers
- › Use of opportunities from upstream and downstream links

# Intelligent solutions for Supply Chain 4.0

# 4

As soon as you have to transfer data across different media – think of Excel and Word – there are system discontinuities and transmission errors.

The PeakAvenue Supply Chain Quality Center (QC – Supply Chain) intermeshes the quality processes of customer and supplier. The resulting synergy effects enable a significant increase in efficiency: effort is minimized, costs are reduced, planning is more reliable, production is accelerated and the failure rate significantly reduced.

Choosing a web-based solution from PeakAvenue allows you to take an important step towards preventive quality management. All actions from your QMS process can be exchanged, processed and monitored online with business partners.



The PeakAvenue Supply Chain Quality Center works web-based. As a web solution, it has the tremendous advantage that the use of the software is available directly and without time delay. Your suppliers can start without much training. As a rule, there is no need to set up new infrastructure and no investment required for the installation.



# Intelligent solutions for Supply Chain 4.0

# 4

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## Profit from the enormous advantages of a digital supply chain using the PeakAvenue Supply Chain Quality Center:

- › Accelerate handling of all quality processes between customer and supplier as well their control loops
- › New suppliers can be rapidly connected to the web solution via the PeakAvenue master data
- › Master data in the PeakAvenue QMS software can be used without limits in the Supply Chain Quality Center
- › The quality processes are clearly linked to the respective business partner
- › High transparency and efficiency – everyone involved has access to identical and current data of all processing statuses of the processes
- › Real-time communication speeds up coordination between quality assurance, purchasing and supplier
- › Supplier requires no additional software and can still use all functions of the web solution
- › Central data flow without system discontinuity – transmission errors are avoided
- › Eliminate manual processing steps as you integrate the supplier's statements directly to your system, for instance
- › Complete versioning of all documents

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## Example ISIR

Create operational relief and tolerances with a universal solution, e.g. by specifying the target report for initial sampling. The time-consuming comparison of drawing characteristics or positions and measurement specifications between you and the supplier is eliminated, since they can access your data. All suppliers use a specified list of characteristics in the sampling process.

# Intelligent solutions for Supply Chain 4.0

# 4

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Based on the example for initial sampling, PeakAvenue Supply Chain Quality Center offers maximum benefits:

- › Significant shortening of the lead times of ISIRs results in a higher protection of the SOPs
- › Significant increase in the quality of sample reports through the standardized process
- › The entire process can be defined by the customer and specified for the supplier
- › Paperless, standardized sampling with positioned drawing in the web browser
- › Complete documentation of the entire sampling process – ideal basis for audits
- › Display of identical drawing status with interactive navigation on the drawing in the web browser
- › Data consistency: customer and supplier work with identical data and therefore have the same view of the quality status



Increase your transparency and efficiency! The clear documentation for the supplier will help you. Intricate and time-consuming conference calls to clarify details, e.g. regarding sampling, are omitted!

**FROM NOW ON, YOU ARE PERFECTLY PREPARED FOR EVERY SUPPLIER INTERVIEW!**

# Your path to supply chain 4.0

# 5

As an experienced partner of QMS software, PeakAvenue supports companies in the implementation of digitization and Industry 4.0 strategies in the supply chain. To increase your competitiveness, we offer you specialized standard software to expand your supply chain to Supply Chain 4.0.

We support you in making the quality processes of your entire supply chain efficient, error-free, on schedule, flexible and highly profitable. Through continuous development, we ensure close interaction with users from the industry and their requirements.

With digital change to Supply Chain 4.0 you will achieve a return on investment from day one! Use the valuable data e.g. from your initial sampling and action management, in order to see optimization potential or the ratings of your suppliers at the push of a button – transparent, consistent and accessible worldwide.



Have a look at the intuitive operation of our software solution and transform potential for optimization into your personal competitive advantage!

## Do you know how efficient your supply chain is?

We would be happy to advise you on your personal path into the age of Industry 4.0. To arrange your personal and free online presentation, use this QR code or follow [the link!](#)



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