



PURCHINEERING

Effective positioning of purchasing in the product development process,
optimized cooperation of purchasing and engineering.

Februar 2014

Introduction of Krehl & Partner

- Krehl & Partner was established 1969 by Prof. Hermann Krehl, the „German Father of Value Analysis“. He learned VA from the inventor L.D. Miles in the US.
- Competencies:
 - Products** – Product Strategy, Product Portfolio, Product Optimizing
 - Processes** – Sales Process, Product Development Process, Delivery Process
 - Projects** – Project culture, Project Organization, Project Management
- Special competence in product optimization and development process optimization, especially with the approach of Lean Development
- Head office is in Karlsruhe, Germany – Back-Office and conference rooms
- Team: 19 employees, thereof 16 fix hired and freelance consultants
- Partners of Krehl & Partner Philipp Blattert, since 1996
Dr. Marc Pauwels, since 1999
Sebastian Meindl, since 2004
- Focus on medium-sized, product developing and manufacturing companies
- Successful Projects / References to production costs reduction of Ø 25% (up to 50%)
- Implementation support until the evidence of the effectiveness of projects

Expertise gained > 40 years consulting and > 4.000 projects

Cooperation of CADENAS and Krehl & Partner

Cooperation since 2013:

- Krehl & Partner complements the optimization approaches of CADENAS through approaches concerning product und processes
- Both approaches complement each other perfectly and offer the maximum benefit for all of our customers
- Krehl & Partner is using the software of CADENAS in Value Analysis projects
- PURCHINEERING-Master is offered as united training program from fourth quarter 2014
- Open initiative, more partners welcome



PURCHINEERING – Term

PURCHINEERING is a combination of the words

„**purchasing**“ and „**engineering**“.

PURCHINEERING supports the optimized teamwork
of purchasing and engineering.

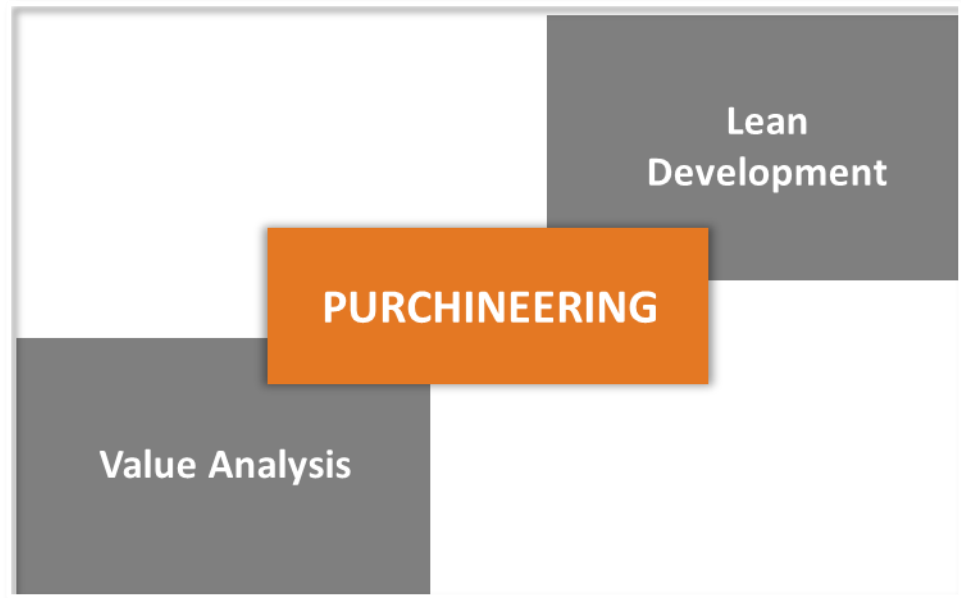


PURCHINEERING - Methods

- PURCHINEERING combines two methodologies in parts.
- On the one hand side the effective product optimization through use of elements of value analysis methodology.
- On the other side the optimization of processes in purchasing and product development through use of elements of the LEAN approach.

Messages:

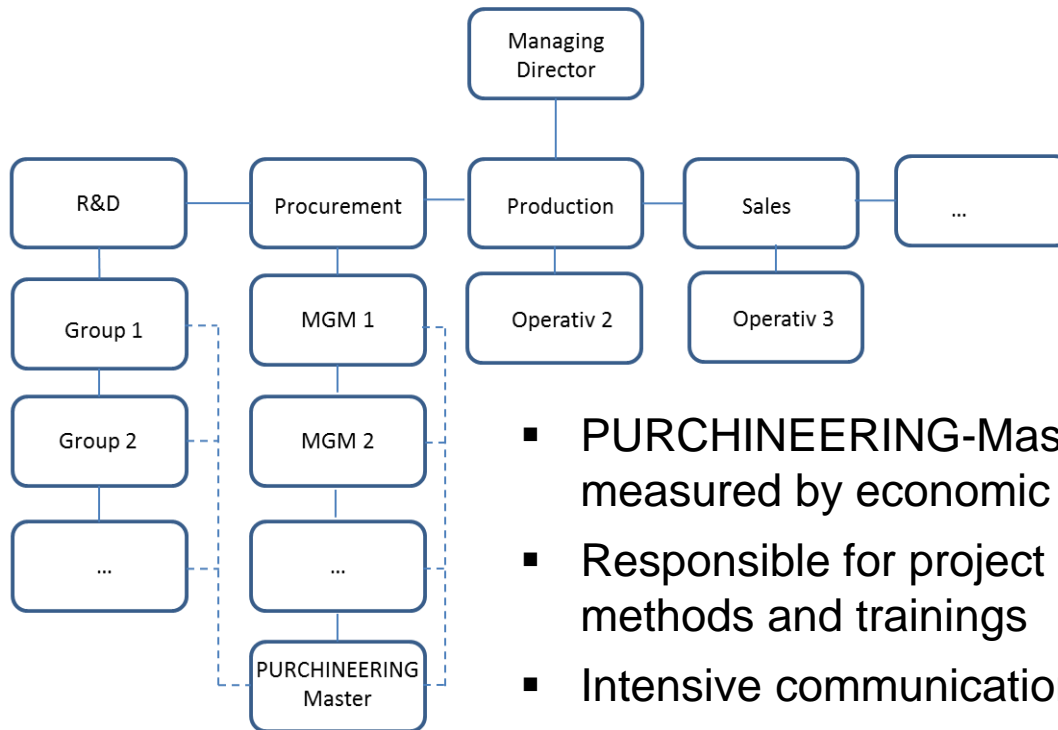
- ✓ Optimized material costs
- ✓ Better service level
- ✓ Support of product development projects
- ✓ Qualify more suppliers ...
- ✓ ... with same team size



Tasks and requirements

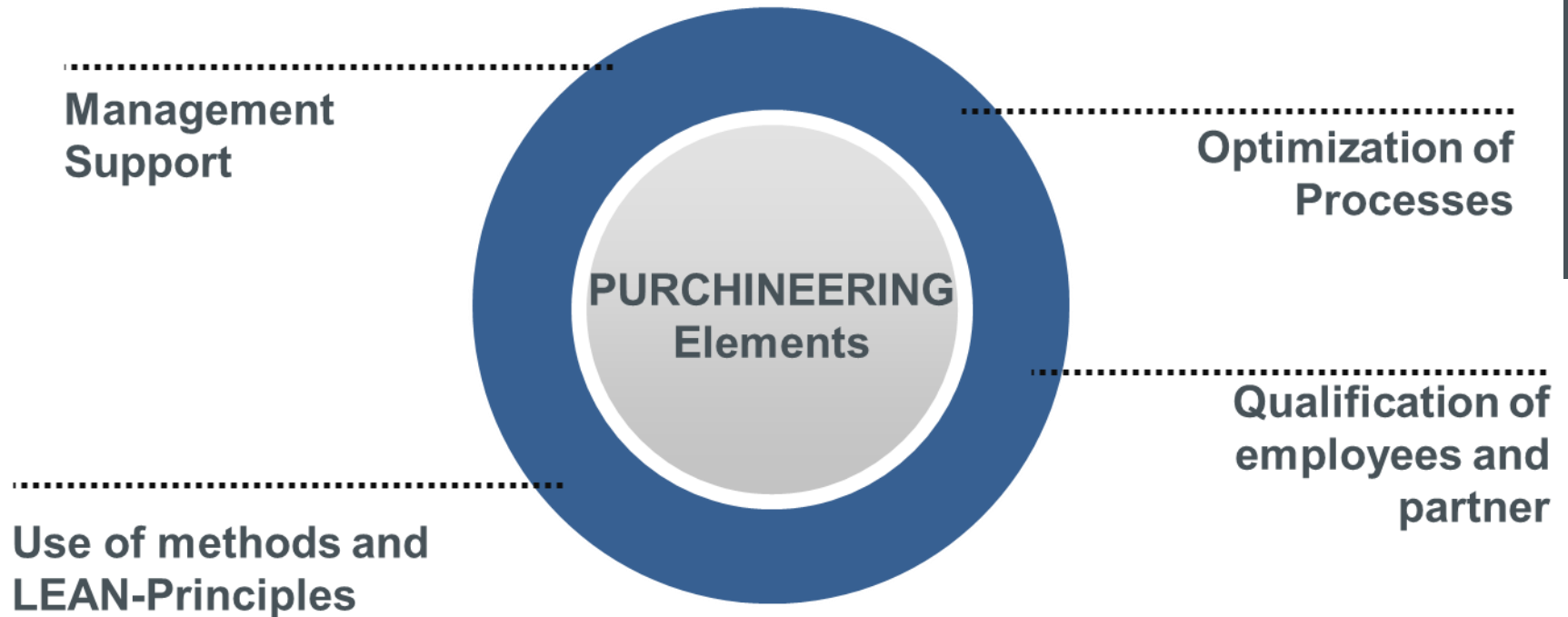
- The PURCHINEERING-Master has experience and the ability to get things done
- Knowledge about technique and methods are required
- He has commercial responsibility
- And defines milestones and planning
- He is responsible for the project selection
- And the correct execution of projects
- He decides what tasks have to be trained
- And looks after the correct application of methods
- He knows very well customers and supplier networks

PURCHINEERING – Example



- PURCHINEERING-Master as organizational link, measured by economic success
 - Responsible for project selection, execution, use of methods and trainings
 - Intensive communication through department merger
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- Process optimization in purchasing and engineering leads to free resources, necessary for more intensive supplier search and qualification
 - Strict project management, strong visualization in supplier communication, meetings and controlling
 - Regular visit of the most important suppliers

PURCHINEERING – Elements



PURCHINEERING – Management Support

- Clear commitment to
 - Use of LEAN-Principles, clear customer focus
 - Optimization of Processes, from Push to Pull
 - Qualification of employees and suppliers
 - More focus on longterm effects
- Provide the necessary resources
- Delegation of competence to team and project manager
- Clear and fast decisions



PURCHINEERING – Optimizations of Processes

- Balance with product portfolio and development process
- Ongoing qualification of existing and new suppliers
- Potential suppliers to be selected by departments
- Avoid waste internal and external, e.g.
 - Communication problems
 - Information has to be collected from many different sources
 - Late supply, not complete, imprecise information
 - Unnecessary serial work
 - Unclear decision criteria
 - Unplanned multitasking
 - Transmission errors
 - Too many details
 - ...



PURCHINEERING – Qualification of employees and partner

- Qualification of employees and suppliers as required (not more)
- Employees and suppliers have to be treated as important asset
- Intensive search and selection of suitable employees and suppliers
- Necessary qualification of suppliers have to be verified by frequent supplier visits
- A Supplier becomes THE right partner
- Regular feedbacks and decision about necessary qualification measures
- Extensive offer of different trainings
- Employees pick trainings by themselves when they need it (Pull)
- Lessons-Learned after failure and correction and short description in a database

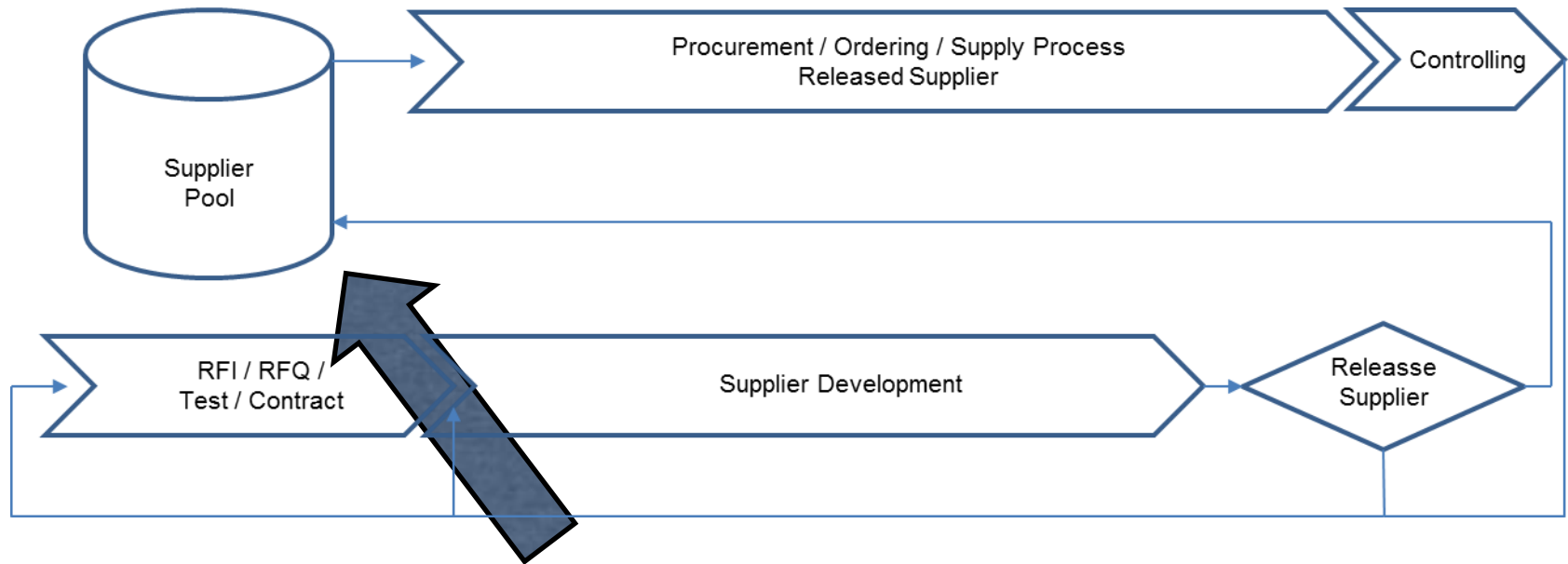


PURCHINEERING – Methods and LEAN-Principles

- Clear customer focus
- Reduce waste, add value
- Standardization of recurrent processes
- Use of mature technologies for the procurement process
- Value Analysis workshops to optimize products
- Value stream analysis für process optimizations
- Product and cost analysis to support purchasing
- Visual communication, e.g. compact reporting, mainly graphically
- Support meetings by using sketches, samples, fotos, and perhaps prototypes – be more visual
- Simulation of processes and technical alternatives
- Collect findings on site, e.g. try itself, produce , assemble, deliver, draw, ...



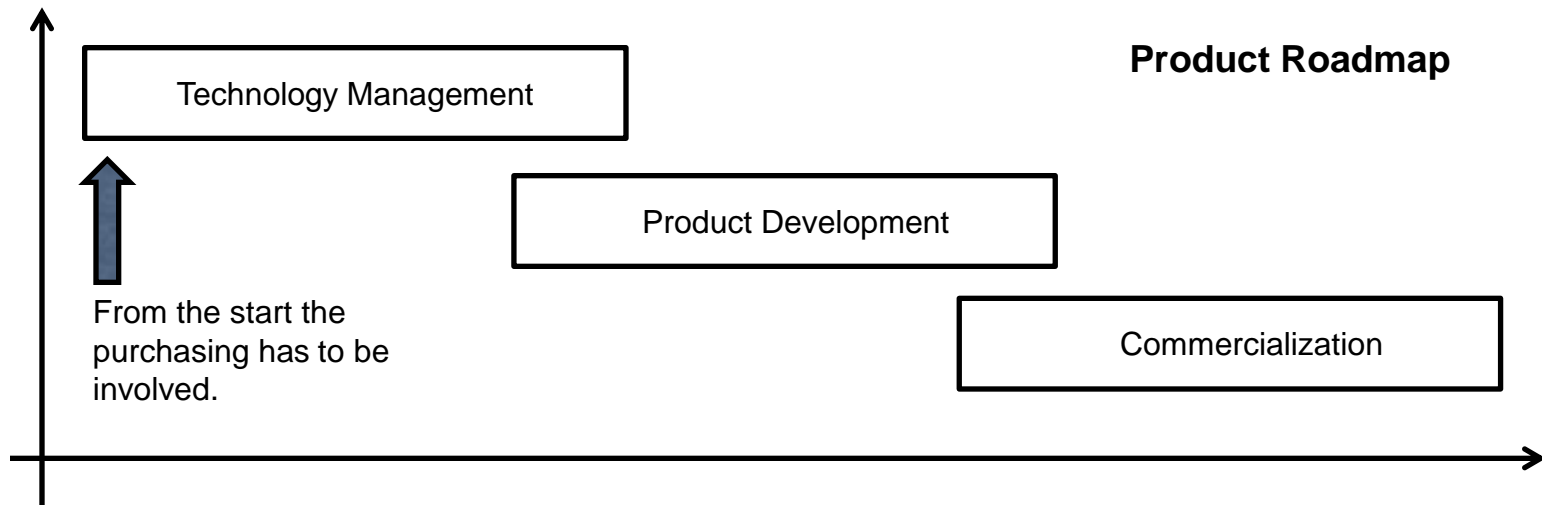
PURCHINEERING – Super Market Principle



The product development shall have the option to choose the right supplier as in the supermarket.

PURCHINEERING – The right moment

- At the beginning there is an idea, we have to check if this idea can be realized with existing technology. Perhaps it is necessary to find external partners, like display producer.
- Purchasing has to start from the very first beginning.
- The right suppliers have to be identified and qualified during the first phase, before the product development starts.



PURCHINEERING – The right partner

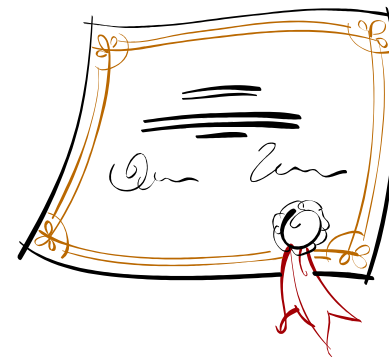
- To find the right partner a list of requirements is necessary
- According to this criterias the worldwide search for partners can start
- Chose the right partner accordingly
- Qualify the partner
- **Criteria can be:**
 - ✓ Searched Technology can be handled
 - ✓ Financial stability
 - ✓ Qualification of employees
 - ✓ Good cooperation possible
 - ✓ Good delivery performance
 - ✓ Attractive price level
 - ✓ Open minded regarding changes
 - ✓ Other



- Maximize profits
- Support of development projects
- Acceleration of lead time
- Shorten „Time to Market“
- Optimization of processes in purchasing and suppliers
- Qualification of employees and suppliers
- Selective use of powerful methods such as Value Analysis
- Integrating the strategically important suppliers
- Reasonable standardization of products and processes
- Run more projects with same team strength
- Reduce the conflicts between the departments

In 7 modules to certified PURCHINEERING-Master:

- Module 1: Optimize Purchasing, Purchasing Assessment
- Module 2: Methods for purchasing and engineering
- Module 3: Efficient product development process
- Module 4: Value Analysis with and without suppliers
- Module 5: Supplier management, from supplier to partner
- Module 6: Reasonable use of IT-Tools
- Module 7: PURCHINEERING-Master – Interaction of elements
(exam and certificate)

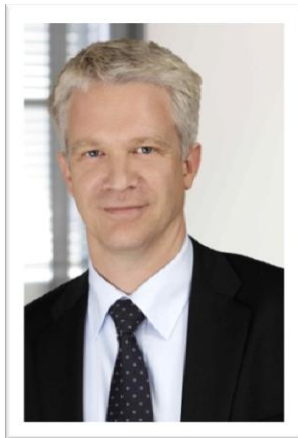


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- **PURCHINEERING**
 - **PURCHINEERING-Master**
 - **Purchasing Assessment**
 - **Supplier Management**
 - **Value Analysis with suppliers**
 - **Product Cost Analysis**
 - **Purchasing Process Optimization**
 - **Purchasing Strategy**
 - **Global Sourcing**

For questions we are at your disposal.

Visit also our website www.einkauf-optimieren.com.

Your Contact



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PURCHINEERING-Master

Check out also our cooperation website
www.purchineering.com



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THE VALUE MANAGER