

ABOUT THE COMPANY

YOUR PARTNER TO BRING INNOVATIVE IDEAS TO LIFE TOGETHER.

WE ACCOMPANY YOU IN YOUR DIGITAL TRANSFORMATION JOURNEY.

In 2019, we founded INOYAD Technologies, to drive the digital transformation in production and logistics with innovative solutions. Thanks to our research background as a spin-off of the Fraunhofer-Gesellschaft, INOYAD uses state-of-the-art technologies. With this brochure we would like to give you an overview of our service portfolio and introduce you to our SMART LEARNING FACTORY.







INOYAD TECHNOLOGIES





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OUR VISION

A SPIRIT OF RESEARCH AND INNOVATION

OUR VISION

With INOYAD Technologies, we want to be the first port of call and number 1 partner in the implementation of digital transformation in production and logistics - sustainable, innovative and reliable, regionally, across Germany and the world. As a company, we combine the spirit of research and the joy of innovation, consistency and agility, and thus offer our customers the best of the present and the future.

OUR MISSION At INOYAD Technologies, we create decisive competitive advantages for our customers through innovation labs and innovation and technology projects.

INOYAD TECHNOLOGIES ACTIVELY SUPPORTS THE UNITED NATIONS 17 SUSTAINABLE DEVELOPMENT GOALS (SDGs).



WE PROMOTE THE FOLLOWING THREE GOALS IN PARTICULAR:

INDUSTRY, INNOVATION AND INFRASTRUCTURE	Implementing innovation projects in the industry is one of the key competences of INOYAD Technologies. This includes the avoidance of waste in the context of lean production and logistics as well as the implementation of IT technologies and organizational measures. The introduction of new technologies also facilitates access to innovative solutions and allows us to jointly identify new, promising use cases in companies.
HIGH QUALITY EDUCATION	With the SMART LEARNING FACTORY, we enable education in the field of digitalization at the highest level. The hands-on approach makes challenges in the digitalization of production tangible and com- prehensible for the participants, in a playful way. Innovation you can touch, one could say.
SUSTAINABLE CONSUMPTION AND PRODUCTION	At INOYAD Technologies, we work on AI solutions that automatically detect quality problems and their causes in production at an early stage. This makes it possible to react more quickly with the right measures, which reduces the waste of raw materials and energy and thus improves the eco-

balance.

INNOVATION LABS

INNOVATION YOU CAN TOUCH

Digital transformation, digitalization, agile or lean - terms we hear, read or use ourselves everywhere. Often, however, these terms are very abstract and so inflationary in use that they seem to lose their impact.

Innovation Labs are realistic learning environments for application-oriented vocational education and training. They make the digital transformation directly tangible and understandable through practical learning and innovation processes. In this way, valuable competences for the working world of the future can be taught. These learning factories are the ideal place for professionals and managers to break out of familiar structures, rethink processes and move from theory to transformation. Furthermore, they create a meeting space for people and technology and serve as a playground where the latest technologies can be tested without high investment risks.

INNOVATION LABS IN ACTION

WITH INNOVATION LABS, SOFTWARE APPLICATIONS CAN BE TESTED AND TRANSFERRED TO REAL PRODUCTION.



TARGET GROUP Professionals and Managers, Students

APPLICATION AND ADDED VALUE

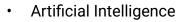
Deepening & broadening of competences

- Learning methods and processes in production & logistics
- Knowledge transfer on topics such as transparency in order processing, automated quality inspection using artificial intelligence, etc.
- Further commercial aspects, such as customer order management, etc.

As an innovative learning system, the SMART LEARNING FACTORY teaches crucial skills for digital transformation. This is done in an action-oriented way using the example of a company model with customized production of model vehicles. In this way, the complex interaction between people, technology and organization becomes comprehensible and the learners are prepared in the best possible way for the working world of the future.



OUR TECHNOLOGICAL COMPETENCIES IN THE AREA OF INNOVATION LABS



- Cloud
- Dashboards
- Digital Assembly Training
- Digital Checklists
- Intelligent Quality Assurance
- loT-Devices
- Manufacturing Execution Systems

SMART

LEARNING

FACTORY

- Process Mining
- Tracking and Tracing

"With the SMART LEARNING FACTORY, we sharpen the skills of our specialists and managers in the area of customised production and always find new, innovative solutions for our specific challenges. In this way we secure decisive competitive advantages for the future!" DR. -ING. DOMINIC GORECKY, HEAD OF SWISS SMART FACTORY

INNOVATION- AND TECHNOLOGY PROJECTS

THE ONLY CONSTANT IS CHANGE

INOYAD Technologies is characterized by a mix of engineering and computer science as well as specific domain knowledge. With these skills and diverse experience in the field of agile, digitalized production, we master the challenges of today and tomorrow together with you.

VOLATILE MARKETS, INCREASING PRODUCT COMPLEXITY AND DEMAND FOR CUSTOMIZED SOLUTIONS REQUIRE NEW APPROACHES TO PRODUCTION MANAGEMENT.

TAILOR-MADE FOR THE INDIVIDUAL AND THE MASSES

INOYAD Technologies supports you in transforming your production. Hybrid production types can be implemented holistically to meet the high demands of customized as well as mass production. The parallel operation of different types of organization with integrated digital order processing is also part of INOYAD's toolkit.



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THE POWER OF NUMBERS

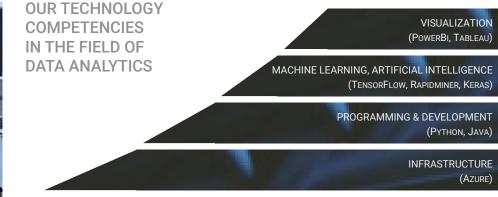
Unimagined optimization opportunities lie in the analysis of existing data from production and logistics. Comprehensive methodological expertise is needed to uncover this potential. Our experts in the field of data analytics support you in extracting insights from the data lake. For this purpose, methods of *Knowledge Discovery in Databases* (*KDD*) are used as well as machine learning frameworks to not only automate quality assurance, but also to make it smarter. Together with you, we develop systems for the automated value stream analysis of your production.



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"Thanks to the cooperation with INOYAD, we were able to release previously unimagined potentials by means of comprehensive data analysis and considerably increase the productivity of our processes".

> THOMAS ZIMMERMANN, PLANT MANAGER B/S/H/, SLOVENIA



COLLABORATIVE RESEARCH

To ensure our innovative strength in our key competences and industry fields, we invest an important part of our time in research and development. Through our knowledge transfer, we can ensure greater competitiveness of local industry and make a valuable contribution to the *sustainable development goals* (*SDGs*).

SECTORS

- Automotive
- Aviation
- Consumer goods
- Electronics
- Mechanical Engineering
- Medical technology

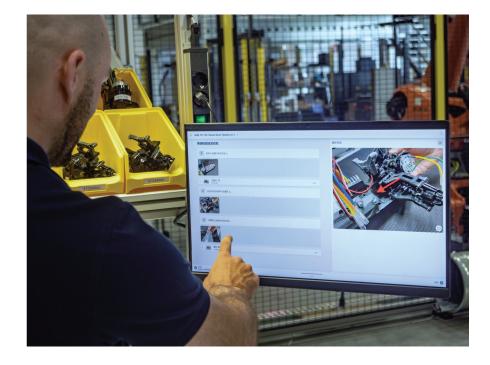
SYSTEMS ENGINEERING AND SOFTWARE INTEGRATION

SIMPLY DO IT (SIMPLE)

In order to meet the ever-new challenges and the constantly increasing complexity, we create new clarity and transparency through interdisciplinary approaches, reduce errors and accelerate processes. Specifically, we can support you here with implementation projects in which we introduce new innovative software technologies on the shop floor. Important core elements of these projects are:

SMART TOOLS

Intelligent tools can receive and send data and thus secure and evaluate processes. This can be, for example, an intelligent torque screwdriver that receives the correct preset torque depending on the screw joint and reports back the actual torque of the screw joint for documentation. Another example is an intelligent caliper that can transmit measured values at the push of a button to efficiently store them for later data analysis. As an external extension, these intelligent tools can make human action sequences more errorfree and faster.



"With INOYAD Technologies, we have already implemented highly complex ERP integration projects for order-specific inspection records and maintenance checklists in a concise, efficient and sustainable manner."

> BENJAMIN BROCKMANN, CEO OPERATIONS1

OUR TECHNOLOGICAL COMPETENCES IN THE FIELD OF SYSTEMS ENGINEERING AND SOFTWARE INTEGRATION

Inspection	Q3/20 ANALYSIS OF FAILURE C	ATEGORIES
1 Inspect main engine		
	Production failure	70.59
	Assembly failure	23.53
	Material failure	5.88 9
Motor cover can be opened easily mandatory OK Not OK	Information provisioning	0 *
Does the shaft rotate without clearance?		
Does the shaft rotate without clearance?	Most frequently created reports	
Tideo		
	TITLE	
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nalytics				COMPARISON VIE
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5/15/2021 - 6/14/2021	幸 CLEAR FILTERS			
- Classifiers				
41 TOTAL PROCESSED	66 % SUCCESS RATE		PEOPLE WHO CONDUCTED REPORTS	343 TOTAL FAILED
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Reports 41 TO	TAL NUMBER OF REPORTS PROCESS	ED 🛛 🚺 REPOR	TS COMPLETED 🔞	EXPORT
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- · Development of IT architectures for networked production
- Connection of IT systems (ERP, MES, etc.) via REST interfaces
- Implementation and connection of SQL databases
- Creation of web-based interfaces
- Training of AI models using TensorFlow

DASHBOARDS FOR VISUALIZING KEY PERFORMANCE INDICATORS CREATE TRANSPARENCY IN PRODUCTION.

SMART LOGISTICS Thanks to intelligent IT solutions, the responsiveness of logistics can be significantly increased. A classic use case here is, for example, the introduction of smart watches in production to inform logistics about material requirements in real time. Another example of intelligent logistics is the use of e-ink displays. These can be used to display current transport tasks on a workpiece carrier. The application in the area of AI quality testing and assurance is also particularly promising for the future. In addition to increasing production efficiency, these and other intelligent logistics applications enable particularly resource-efficient, fast and memorable onboarding and training of new employees.

Just do it the simple way! Feel free to contact us and we will support you in your implementation projects with smart tools and innovative solutions. info@inoyad.com

WHAT MAKES US UNIQUE

BY RESEARCHERS FOR CREATORS: HIGHLY INNOVATIVE & SUSTAINABLE, PATENT & RELIABLE

As a young company originating from science, we are always on the lookout for new, state-of-the-art technologies for direct and sustainable use in industry. Our customers and partners appreciate the straightforward and uncomplicated connection to us. A cooperation based on partnership and trust is essential for us. It enables us to react flexible to short term changes.



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OUR PARTNER NETWORK





YOU HAVE A QUESTION OR ARE LOOKING FOR A CONCRETE COOPERATION? WE LOOK FORWARD BRINGING INNOVATIVE IDEAS TO LIFE TOGETHER WITH YOU!

YOUR PARTNER TO BRING INNOVATIVE IDEAS TO LIFE TOGETHER.

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