

Matthias Krause



"Paths are made by walking"
Franz Kafka

Interims Manager – SCRUM Master – Agile Coach – Software Passionate

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Profile and Skills

The following is an overview of the last 12 years of experience in agile coaching and the implementation of agile principles that I have acquired in various software development and IT projects. The foundation of any successfully implemented project are the people. Identifying their strengths and weaknesses (as well as those of the organization around them) is the starting point for executing a common journey to the targeted goal. Whether a general change and transformation or a specific project outcome, my contribution to actively shaping and developing the big picture is the character and drive of my daily work. My strong business orientation has led me to be responsible as director for all software and hardware products in my former company, to establish alignment and focus on a common goal, and to make the change happen. However, I am convinced that learning never stops and there is always room for new things and personal development.

System architecture of .NET- and web-technology local and distributed systems (+12 years)

Business visioning and strategy, financial planning, and monitoring (+10 years)

Agile leadership and management (+12 year)

Company and software development processes (Scrum, Kanban, CMMI, A-SPIICE) (+12 years)

Communication and presentation (+20 years)

Team development, training, and motivation (+25 years)

Abstract thinking and problem solving (+15 years)

Acquisition, sales and negotiation (+12 years)

Language Skills

- German: native language
- English: fluent in negotiation
- Russian: fluent in communication

Short curriculum vitae

I spent a large part of my career in the FEV Group before I started my own business with two partners. FEV is one of the world's largest independent development service providers for automotive technology, headquartered in Aachen, Germany. In this context, I was able to build up a wide range of experience in automotive engineering, software development and project as well as product management over the years, in various projects with different internationally important OEMs and TIER-1.

2023-02	Completion of PhD thesis "Objectified automated drivability application by means of Design of Experiment", Univ.-Prof. Dr.-Ing. Stefan Pischinger, RWTH Aachen University
2021-01 – today	Founder-Partner DrySoc GmbH, Director Products & Projects
2021-06 – 2022-12	FEV STS GmbH Director of Products and Member of the Steering Committee
2020-05 – 2021-06	FEV STS GmbH Product Group Manager "Data Management & Evaluation"
2017-06 – 2020-04	FEV STS GmbH Product Owner, Senior Project Manager
2015-10 – 2017-10	FEV GmbH Global Head of Business Development Calibration Tools
2012-01 – 2015-10	FEV GmbH Product Owner Online Calibration Tools
2009-06 – 2011-12	FEV GmbH Team Leader Software Development Calibration Methods and Project Manager
2008-10 – 2009-05	FEV GmbH Development Engineer Test Bench Methods
2002-09 – 2008-06	Master of Science Mechatronics Technical University of Dresden
2001-07 – 2002-06	Civilian service, Paul-Geheeb-Schule state regional support center Bad Salzungen
2001-06	High school diploma Bad Liebenstein

Below you will find details and more information about the steps mentioned in the curriculum vitae and some selected projects.

References are available upon request.

Detailed curriculum vitae and career steps

2021-01 - today – Co-Founder & Director products & projects

DrySoc – Co-Founder

During the years as an employee in the automotive industry, pursuing a career in software and product management, there was regular consideration and discussion with colleagues and friends "how would we do it in our own company?" In 2021, the move was finally made and the new company DrySoc (as an acronym of the most important and essential software development principles DRY = don't repeat yourself and SOC = separation of concerns) was founded. Because the trend towards digitalization and cloudification is accelerating, skilled and experienced professionals are in high demand, so several projects were quickly acquired and the need for expansion was there.

In 2021 and 2022, I pursued the two business roles as Director Products FEV STS GmbH and DrySoc GmbH partner. The developed roadmap and transformation strategy had to be led to a reasonable handover status in FEV. Since the beginning of 2023, I have dedicated 100% of my energy and focus to DrySoc. The current steps so far are focused on entering project and interim manager positions as a freelancer, while building the DrySoc product vision continues.

- Business and product strategy
- Process transformation and change management
- Agile management

Company and business strategy based on KPI with PowerBI, Azure CI/CD, JIRA & Confluence, Microsoft Office products

2020-06 - 2022-12 – Director products and later member steering committee FEV STS GmbH

FEV – Product consolidation, transformation & change management

FEV builds and operates complete test centers for automotive OEMs and TIER1, for testing engines, batteries, fuel cells and the like. In the context of Industry 4.0, the efficient (preferably fully automated) operation of test centers is the top priority. For this purpose, various hardware and software products are developed at FEV STS GmbH. In context of the globally challenging market and business situation, a consolidated product strategy was derived together with the responsible product owners. The consolidation of similar products as well as end-of-life decisions of selected products were made and implemented.

In line with the new corporate strategy, towards battery-centric solutions and services, in parallel a roadmap with product targets in cloud technology solutions was created for business area of product and its implementation was started. To facilitate this, suitable customer projects (5M€), public funding (1M€ share in a consortium of ~10M€) and internal investment projects were successfully acquired and coordinated with the adjacent teams and product owners. A suitable employee qualification concept as well as organizational redesigns were driven forward in coordination with the resource responsible. In total, my position was responsible for >50 employees in parallel projects and products.

- Business and product strategy
- System, Azure Cloud, and software architecture
- Process transformation and change management
- Agile management

Company and business strategy based on KPI, Microsoft PowerBI, Azure CI/CD, SAP, JIRA & Confluence, Microsoft Project, Microsoft Office products

2017-10 – 2020-06 – FEV Product Group Manager

FEV – Product group manager “Data management & evaluation”

As an extension of the responsibility for the TOPEXPERT product landscape, I stepped into the overall responsibility for product group "Data Management & Evaluation". Together with 6 other internationally distributed product group managers, we were responsible for implementing the company's product development strategy. Observation of market trends, development of product road maps and strategies in cooperation with customers, development teams and management as well as budget planning, execution and monitoring of development were part of the daily tasks.

Included in this phase was the execution of several internal sub-projects and customer projects in alignment with the product group strategy. A key component was the preparation for the merger of two core products that had previously been developed in different companies of the FEV Group. In addition, the product portfolio was expanded by the acquisition of another company and its product. Technical, process and business analysis of the company to be acquired were in my area of responsibility. Corresponding decision papers were prepared for the management. Subsequently, the company with its technologies and processes was integrated into FEV STS GmbH. The corresponding change management and planning of transformation projects was another core aspect of this phase. In the meantime, this new product has become a valuable part of the value creation of FEV STS GmbH.

- Project management
- Requirements management
- System architecture
- Process transformation
- Agile management

SAP, JIRA & Confluence, Microsoft Project, Microsoft Office products

2017-06 – 2020-04 – FEV Product Owner, Project Manager, Process Responsible

VW – SPA for semi-automated calibration along ASPICE-L2

A new software was developed by FEV STS GmbH for the end customer VW. This web-based management and processing system enables calibration engineers to derive correct engine calibration parameters semi-automatically to ensure safe vehicle operation for passengers and pedestrians under all conditions. Due to its safety relevance, the end customer required software development according to the ASPICE process model, which was the first project of this nature in the field of specific end-user software development at VW. Over the course of 2 years, a group of developers previously working according to CMMI-L2, evolved into an agile team successfully audited according to ASPICE-L2, which was able to develop the software at a high pace and to high quality standards.

In this project I acted as a mixture of project manager and product owner. Together with the team, we worked out an approach to merge the ASPICE process model with agile concepts. After some initial hesitation, the real success was to have created the team's belief and spirit that many of the established practices had real positive impact on their work and enabled the delivery of high quality results.

- Project management
- Requirements management
- System architecture
- Process transformation
- Agile management

Agile Transformation, Automotive Calibration, SCRUM, Product Owner, C# .NET + Angular 8, JIRA & Confluence, ASPICE-L2, CI/CD, SAP

FEV – Sales Transformation

After transforming the calibration software product landscape to new models of working and process maturity, also the sales approach needed to be adjusted. As globally responsible for all sales activities with respect to a product group an agile transformation was initiated. Following a potential and market analysis, methods for managing, modelling, and monitoring sales and acquisition activities have been introduced. International (Asia, America, and Europe) direct B2B customer contact, representation on trade fairs and presentations on conferences have been daily business.

- Product strategy
- Business development
- Process transformation

Microsoft Dynamics, Microsoft Office products, SCRUM

FEV – Product Development

In synchronization with two other SCRUM teams, a new configurable software landscape TOPEXPERT was developed. Starting from individual developers, responsible for separated tools, a new business model and subsequently a common software architecture and platform was derived. The cooperation with the stakeholders was transformed to a structured agile approach, leading to more transparency and improved development speed. I acted as classical product owner and system architect to the customer and the team.

- Product strategy, vision and road mapping
- Team management and recruiting
- Requirements management
- System & software architecture design
- Process responsible

.NET, C#, NUnit, Test Driven Development, SCRUM, CMMI

PSA France – System for automatic transmission calibration

In preparation of a multi-million frame contract for several years, the end customer PSA conducted a 1.5-year competition pre-project. Two suppliers had to present their competencies in transmission calibration methodology. One aspect of this assessment was the availability and efficiency of appropriate software tools. As product owner of this software development (in duty at FEV GmbH), I led the development team, stakeholders, and product to success. We transformed a team of individual developers into an efficient agile team, delivering value to the customer in a technologically complex environment. The software TraCE (Transmission Calibration Expert) was rated as vital part to convince the customer, finally starting the cooperation with FEV's experts and methods.

- Project lead
- Requirements management
- Software architecture and development
- Testing validation and approval

SCRUM, Product Owner, C# .NET, Test Driven Development, Agile Transformation, Automotive Calibration

Other selected projects

2022-11 – 2023-02 – Consultant

VW – Training- and learning concept

Based on my extensive experience as a product owner in the topic of ASPICE-relevant automated calibration of functional safety aspects, I was asked to develop a training concept for the developed software as well as the underlying processes and domain contexts. This training concept and the content will be used to introduce new as well as established users (and also developers) in a structured way to the topic. Due to my personal past, I developed a passion for training and mentoring people and talents. From this context, accepting this request was very exciting for me, in which it was possible to prepare a not simply topic that requires explanation in an understandable way. Together with domain specialists the core aspects of the workshop were discussed and outlined. Content material together with active incorporation of the participants via comprehension verifying tasks was designed. The two-day workshop ends with a complex group task in form of a competition, that consolidates and strengthens the complete understanding of the acquired knowledge. As an option, a concept for interactive and cooperative collaboration was prepared, in which a digitalized 3D learning space was fundamentally created as a comprehensive entry point for quick orientation as well as specialized application of the acquired knowledge.

Microsoft Office Products, Digital Learning platforms

2022-04 – 2022-10 – Product Owner

VW – Product Owner

I was asked to support this continuous product development for a customer, temporarily as Product-Owner parallel to my task as Director-Products. In fact, the development was in a critical phase and was on the verge of a possible termination. Announced release dates could not be met, product quality was low, and the customer was accordingly dissatisfied. Initially, it turned out that the lack of technical and industry experience of the previous project manager in the automotive industry, as well as the lack of knowledge in the ASPICE software development process, accounted for a large part of the challenges. Another part arose due to a lack of experience in execution of the role as product owner itself.

However, the dissatisfaction in the project was not only with the customer, but it had also become widespread in the development team. In coordination with the development team, a true SCRUM setup was re-established, and one of the developers (an experienced agile coach) took on the SCRUM master role. Re-establishing the SCRUM rituals as well as the SCRUM values were the first significant steps. Existing process definitions were analyzed, and the project status was evaluated based on the existing KPIs. Appropriate corrective measures (including more time for concepts and estimates, more effort for test development, etc.) were incorporated into the methodology. Together with the customer, the requirements were analyzed in detail. Structuring and prioritization for achievable release sizes was agreed upon. The SCRUM master's main objective was to promote and restore the team's self-organization. The project was handed over to the new project manager/product owner and there are still many open issues. So far, a fundamental stabilization has taken place, on which further development can be built on.

- Re-establishment of a SCRUM setup and the SCRUM values, agile management
- Process analysis and change management
- Requirements management and product ownership
- Conflict management

Software-Development-KPI with PowerBI, Azure CI/CD, SAP, Microsoft Office Products, JIRA & Confluence

Intelligent Energy – Strategy for IoT in test facility for hydrogen cells

Intelligent Energy is a UK-based company focused on the development and commercialization of hydrogen fuel cell technology for various applications such as automotive, aerospace, and stationary power generation. The company is strongly committed to sustainability and reducing carbon emissions using clean energy. In the context of this project, Intelligent Energy had requested support in revising their test field concept.

Several workshops were conducted to identify the client's current circumstances and challenges, as well as the desired target picture. Based on the value network methodology and an extended positioning of Intelligent Energy as a data trustee and marketplace provider in an IoT business model, a comprehensive concept was created. Based on the experience of organizing automated test bed facilities with comprehensive data and process management, an explicit strategy with important milestones and boundary conditions was prepared. The foundation was built by a centralized data management system with necessary modules and processes, as well as associated data governance and security mechanisms. The project showed very impressively how proven solution approaches can be enriched with new technologies to support companies in other domain areas keeping competitive pace in a rapidly evolving market environment.

- Requirements analysis
- Strategy-, technology and business analysis
- System architecture

JIRA & Confluence, Microsoft Office Products

VW – Product Owner/SCRUM-Master

As the new product group manager for "Data Management and Evaluation", I initially took over responsibility for this project as project manager. A new system for handling and managing up to 350 combustion engine test benches was developed and implemented for the customer. The project was behind schedule. The technical deliverables and functionalities were not delivered to the customer's satisfaction, the complexity of the project with many unknowns, as well as the mood required a reorientation of the approach towards agile methodologies and values.

The first essential step was to establish clear product goals as milestones for development. The team was able to align itself with these and better coordinate and prioritize its work independently. In this project, I had to act as product owner and SCRUM master at the same time in a not ideal way, because otherwise the roles could not have been filled. Analysis of the contractual and technical status was performed together with the development team. The requirements were revised, structured, re-estimated based on measurements, and prioritized. Thus, a new milestone forecast for delivery was created. Reviewing the team's capabilities and replacing some specialists, as well as hiring additional skills, was a necessary step to put the project on a stable path and restore motivation and confidence. The project was finally successfully delivered by the team and the solution is in use. In the second phase, one of the team members was guided to grow into the role of product owner. The value maximization for the customer, as well as the re-establishment of the agile values within the team and in collaboration with the customer, were the basis for the overall success.

- Requirements management and product ownership
- Software-Architecture and Design
- Agile project management / Agile coaching

Microsoft Office Products, JIRA & Confluence, SAP

MAHLE – Project consolidation and focus

This project aimed to introduce a new ERP system and design new business processes for the customer. Due to unclear requirements and a complicated contractual situation, hard fronts had formed between FEV as the supplier and the customer in the past. The project had previously been characterized by multiple project management changes and suffered from a fundamental loss of trust between both parties. I joined this project in the context of my main role as product group leader and acted as an Agile coach and mentor. The main challenge in this project phase was to identify common ground between the project parties, clarify the situation and re-establish a cooperative attitude. A new basis for mutually agreed upon content and deliverables was established, and a rough timeline for project completion was derived based on past measurements and developer estimates. The project was managed in a supportive manner together with a project manager with little experience at that time. The corresponding training, consulting and support in agile PM methods and tools was thus my responsibility. In the meantime, this project manager is successfully leading one of the largest software development projects of FEV STS GmbH.

- Conflict management and negotiation
- Requirements management
- Agile software project management mentoring

Microsoft Office Products, JIRA & Confluence, SAP

Academic education

2022-05 – 2023-02

Finalization PhD Thesis, RWTH Aachen

After interrupting the thesis, the doctoral procedure was carried out, graduating on 10.02.2023.

2009 – 2015

PhD Thesis, RWTH Aachen

"Objectified Automated Drivability Calibration Using Design of Experiment" with Univ.-Prof. Dr.-Ing. Stefan Pischinger.

In the thesis, a comprehensive methodology for the automatic tuning of the calibration parameters of the drivability characteristics of vehicles is developed. The method is based on objective criteria for the evaluation of the driving behavior and enables a model-based automatic optimization of different tuning variants by means of Design of Experiment with methods of machine learning and corresponding algorithms (Machine Learning or AI).

2002 – 2008

Master of Science / Diplom-Ingenieur Mechatronik, TU Dresden

Final grade of diploma 1.5, Diploma thesis: "Contributions to modeling, motion planning, control and regulation of walking machines" with PD Dr.-Ing. habil. Joachim Rudolph

The work investigates the possibilities of dynamic walking of bipedal robots considering phases without contact to the ground. The solution is achieved via a time transformation of the equations of motion and application of methods of flatness-based control theory.

2007

Semester abroad Electrotechnical University St. Petersburg Russia

Scholarship with specialization in control engineering (degree "very good")

2001

Abitur State High School Bad Liebenstein

Overall grade 1.4, advanced courses in mathematics and physics