
SENIOR LEAN DIGITAL EXPERT LEARNING PROGRAM

– Introduction to the program and registration process –

Information package

Düsseldorf, June 2023

Senior Lean Digital Expert Learning Program at a glance

Target group & requirements



- Department heads and group leaders from operations, plant logistics, maintenance or production planning, innovative Industrial Engineers or process designers, Drivers of Lean and Digital Innovations, upcoming Digital Experts and Smart Factory Designers
- 3-5 y's operations, engineering, SCM experience
- Lean Know-how at Lean Expert Level
- Project Management experience: own projects already led with KPIs, Time, Content, Budget

Concept

- Lean Digital Expert competence with Lean and Digitalization expertise to understand and transform today's Lean Smart Factory requirements
- 18 training days, up to 100 hours
- Included: Group coaching sessions tailored to training modules
- Accompanying implementation of individual & certifiable practical projects in your plant
- Included: individual personal coaching by LMX Expert Mentors for Lean, Digitalization, Change
- Real Gemba live sessions integrated via web
- Online tests to round off the knowledge
- Certified as a Senior Lean Digital Expert by Ruhr University of Bochum and LMX
- Possibility to be certified Scrum Master
- Duration approx. 8 months total

Conditions



- 12 - 15 Participants
- Virtual training with real Gemba live sessions from the Gigaset shopfloor, remote group coaching
- German / English
- Certification as a Senior Lean Digital Expert from Ruhr University Bochum
- Included: Scrum Training sequences and PSM I Assessment-Voucher for Scrum Master-Title
- 9.900 € / participant – expected project savings at plant of 50k€ in 1st and >200 k€ after 3rd year

Highlights

- Interactive, multifaceted online training with deep dives on Lean Value Streams and Smart Factory system applications (hardware & software)
- Live features broadcasted from Gigaset shopfloor and Learning and Research Factory Bochum
- Better personal time management through sequenced training modules, no travel expenses
- Individual 1:1 coaching sessions in 8-month project phase assure savings of 50 k€ already within 1st year
- Analysis and Design of Future Smart Factory Value Stream Systems – Focus Lean and Digital
- The targeted selection of media used: digital whiteboard, quiz tools, online surveys and MS Teams puts the focus on the participant and turns theory into live experiences.
- Leading your agile project as a Scrum Master

Scope (Proportionate focal points)



Lean

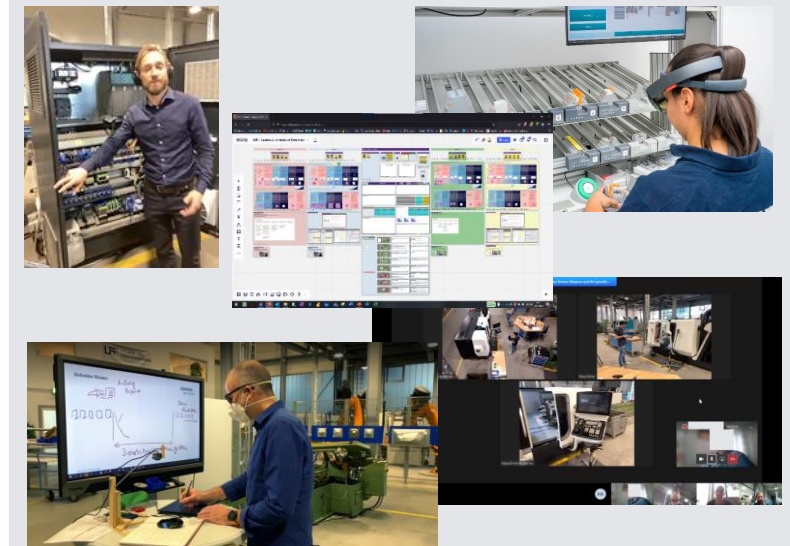


Agile



Digital

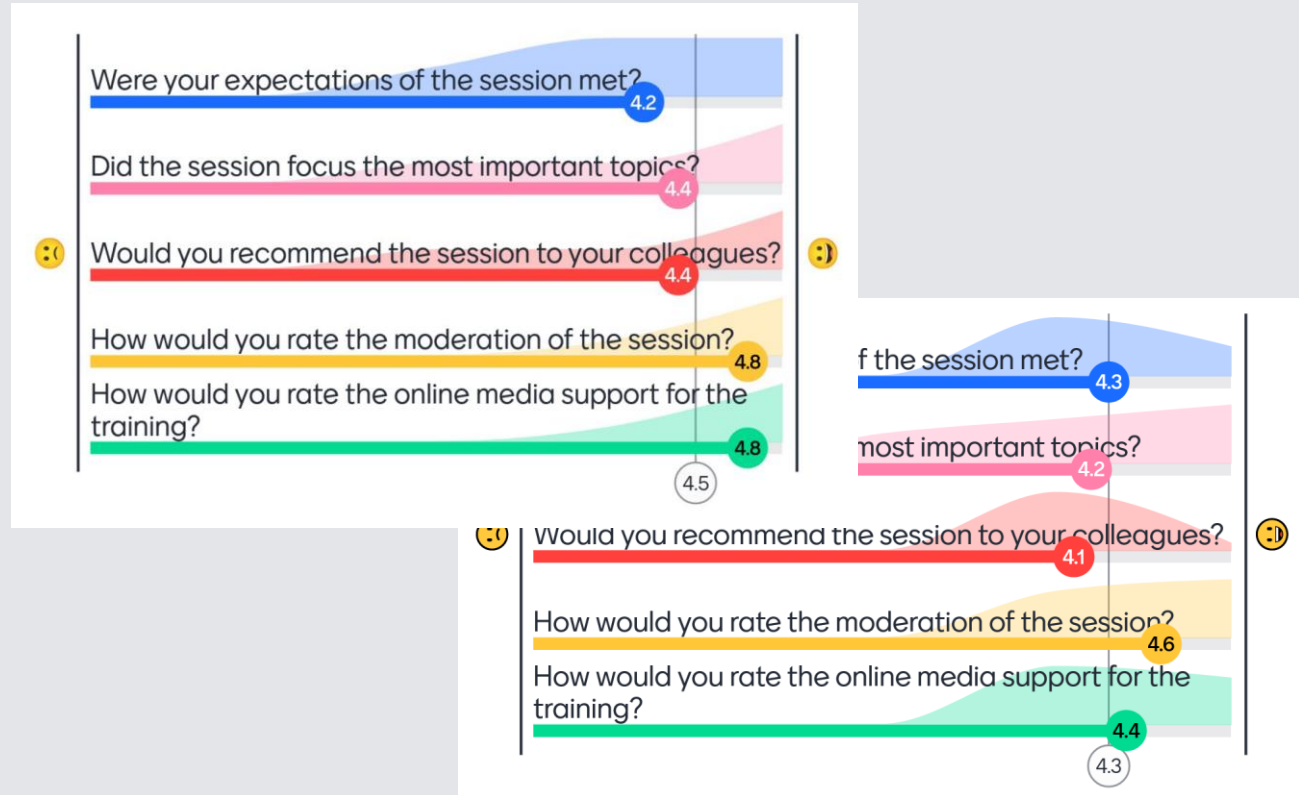
Impressions



Feedback from the previous run



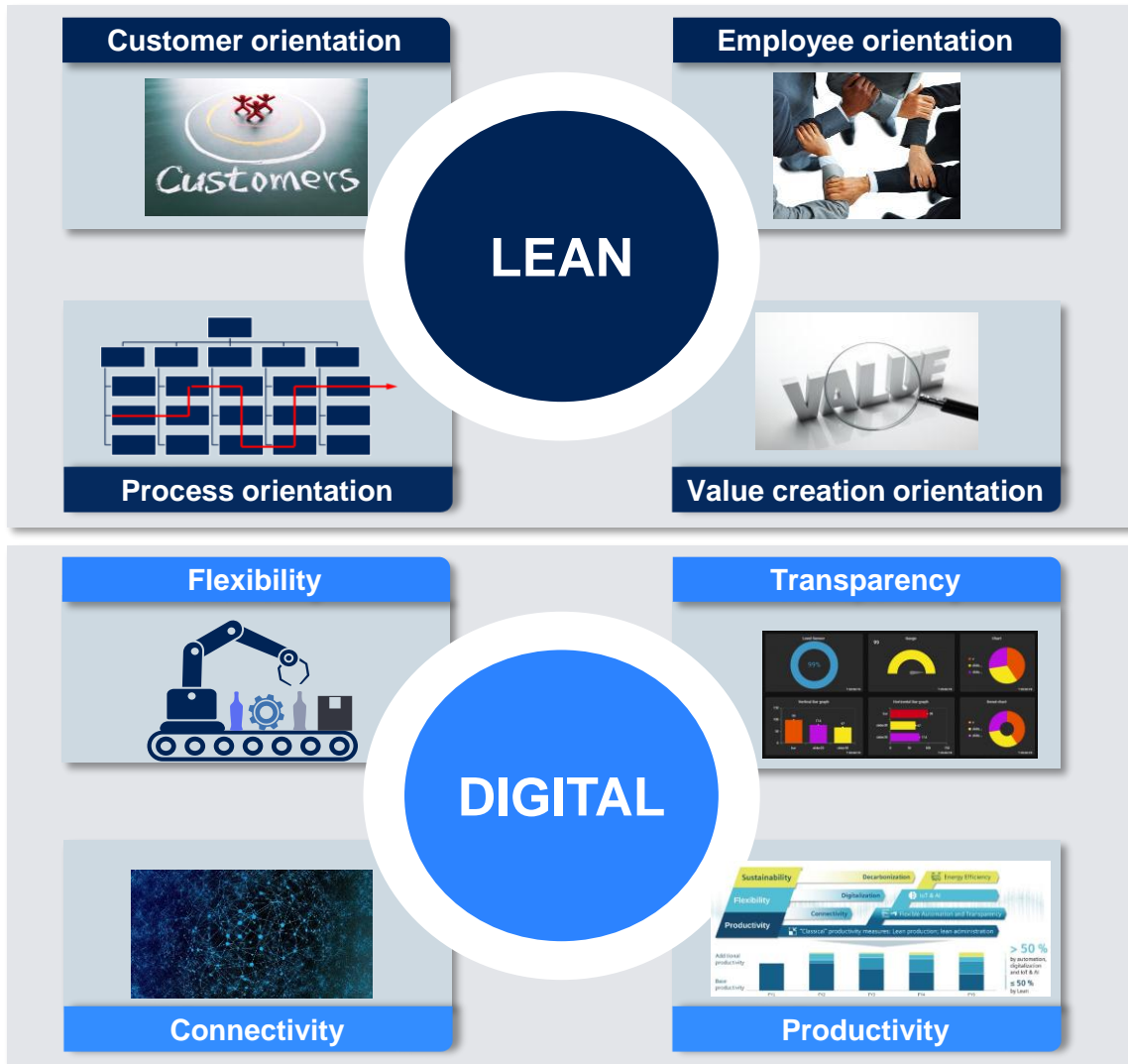
Beside personal Coaching and Project Guidance, on a general high level of commitment in all fields, upcoming **Senior Lean Digital Expert** participants appreciate media delivery and installed trainers of program



Rate: 1 = 😞 to 5 = 😊

Why Lean - why Digital – why lean digitalization?

Lean Thinking and using digital opportunities were today's enablers of growth and success



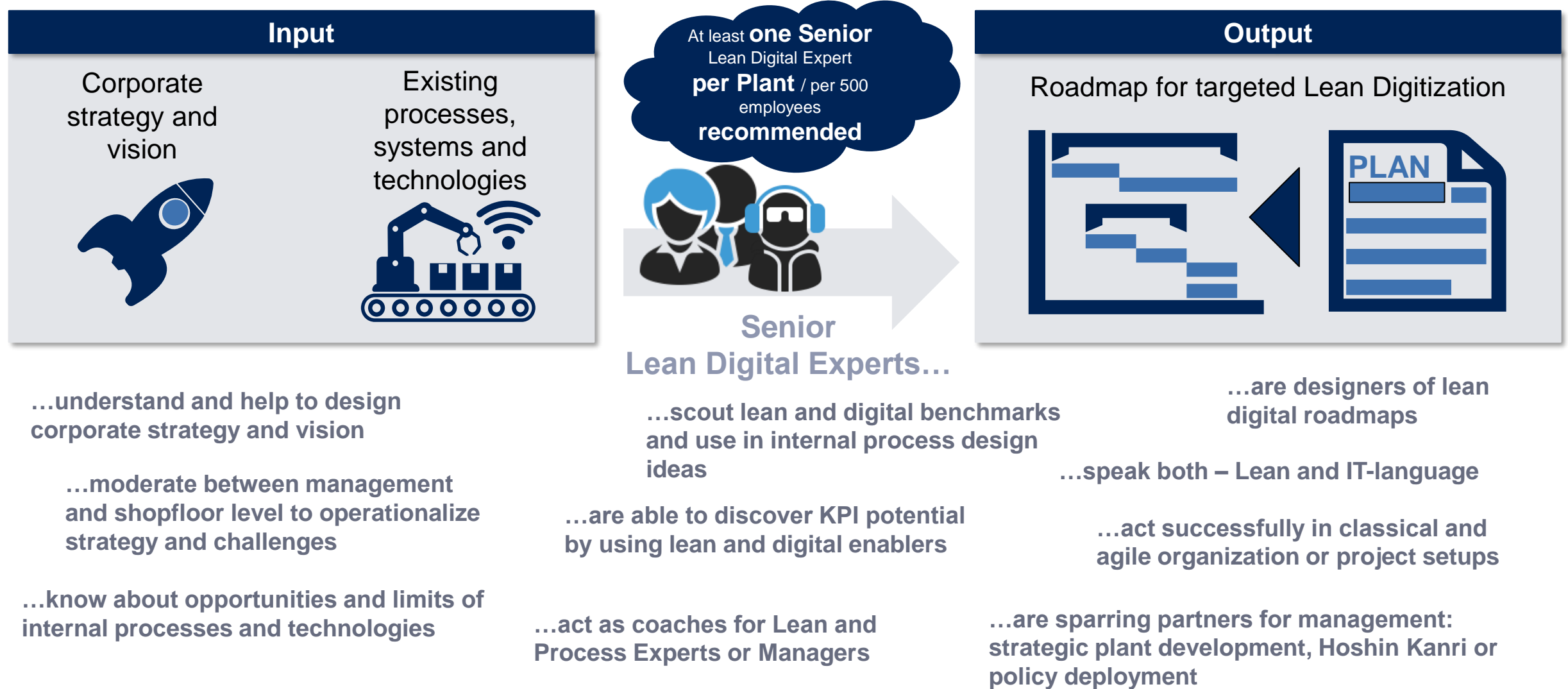
Achieving sustainable growth

by putting customers first, seizing opportunities and exploiting our capabilities / capacity

Setting the bar in the digital transformation market

by leveraging Lean and Digital Know-how

Competences of Senior Lean Experts have been enriched: from Senior Lean Expert to Senior Lean Digital Expert – both skills built a platform for successful plant transformation



Main target group for Senior Lean Digital Experts are process trendsetters and sparring partners of management: all innovators, who create value in your future smart factories

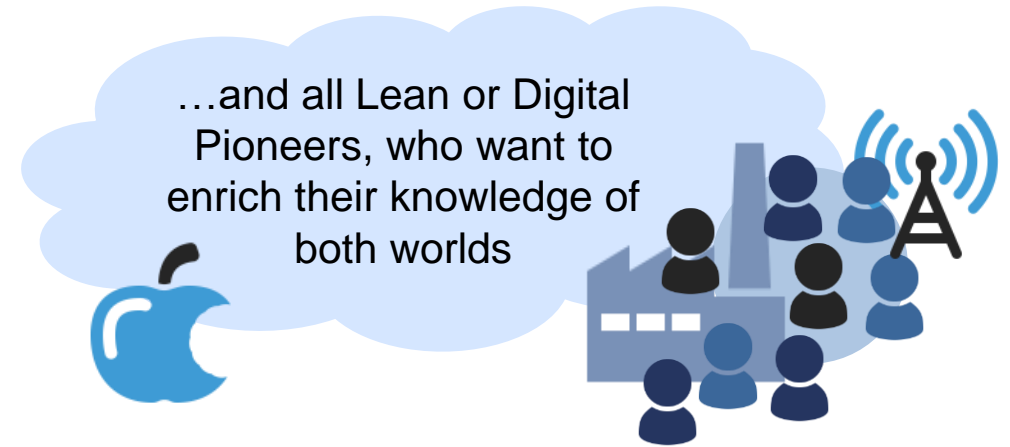
Participants typically come from the following functions...

- Department heads and group leaders from operations, plant logistics, maintenance, shopfloor IT or production planning
- Innovative Industrial Engineers or process designers
- Lean Experts and Drivers of CIP in Business Excellence processes or operative functions
- Upcoming Digital Experts and Smart Factory Designers



Requirements: Participants should have the following skills

- 2-3 years manufacturing or SCM processes experience
- Lean Know-how at Lean Expert Level
- Experiences in project management
- Open mindset for Digitalization and IT related topics



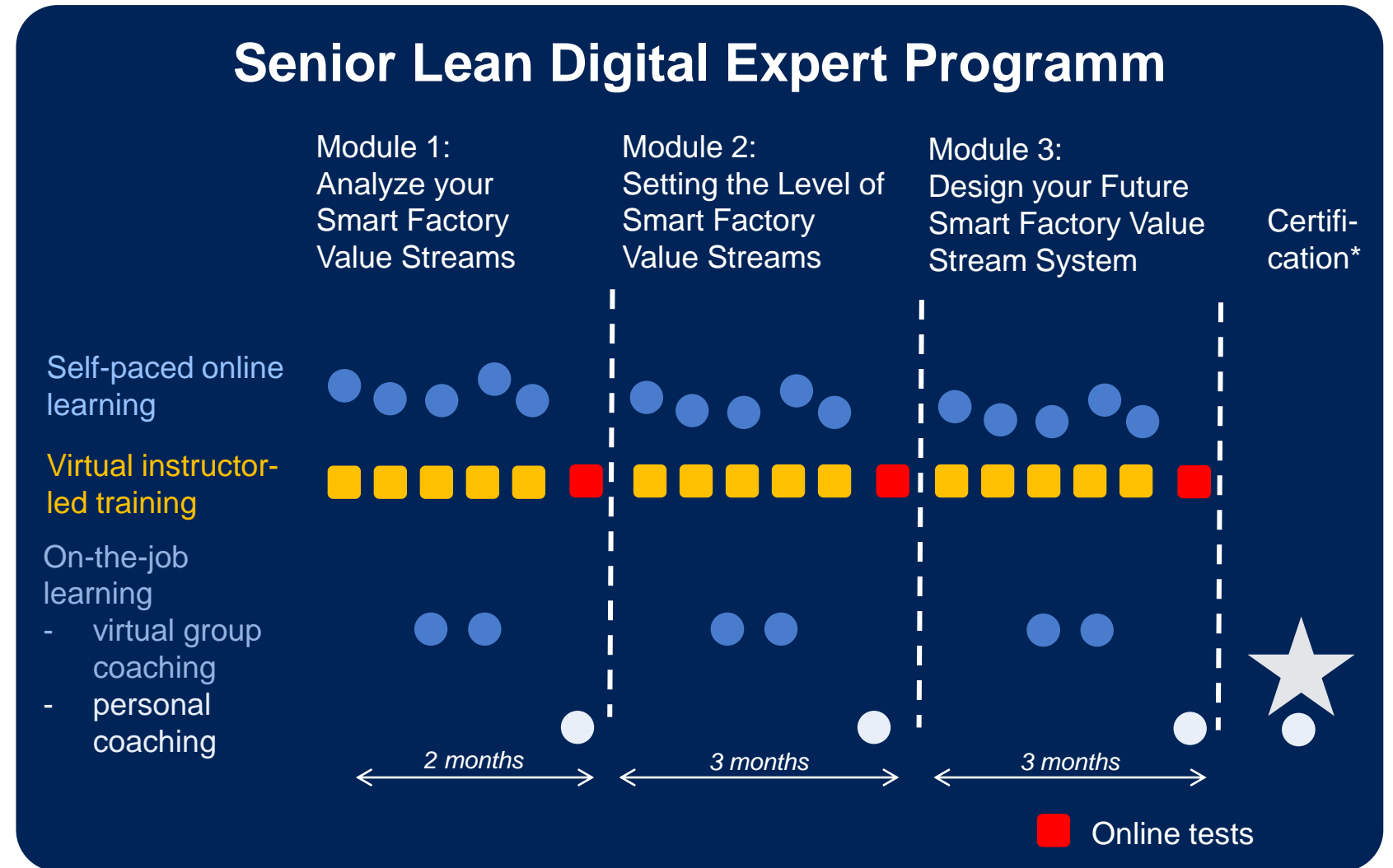
Theory, personal coaching and project work with more than at least 50k€ savings at plant – participants are led to a certification as Senior Lean Digital Expert and as Scrum Master

Included:

- Up to 100 hrs of training and group coaching
- 16 hrs of individual coaching per participant until certification
- **Project savings expectation of at least 50 k€** within first implementation year **and >200 k€** after 3rd year
- **Certification** as a Senior Lean Digital Expert **from Ruhr University Bochum** and LMX.
- **Scrum Training** sequences and PSM I Assessment-Voucher for certified Scrum Master-Title
- **No additional costs:**
 - **all training infrastructure** costs included
 - **All licenses** to use training software or learning factory costs included



Fee per participant
9.900 €



* Criteria for certification: participation at training sessions, successful online tests, delivered project

Learning journey of Senior Lean Digital Experts will ramp up and always combine lean and digitalization success factors – on training and on individual project level



Senior Lean Digital Experts will follow their qualification journey through 3 modules

Training
module level

Individual
Project
module

Module 1: Analyze Smart Factory Value Streams

Lean Fundamentals and
common understanding of
synchronized Value Streams

Synergies of Lean
and Digitalization

Understanding
Shopfloor IT-Systems
and architecture

Manufacturing Intelligence
and E2E understanding of
Smart Factory Value
Streams incl. indirect areas
and BPMN

Value Stream Management
for Smart Factories:
Analysis of Potentials via
VSM4SF and other Add-ons

2 months

Smart Factory Project Setup – Analyze your
Smart Factory Value Streams

Module 2: Setting the Level of Smart Factory Value Streams

Enablers of a Smart Factory
– toolbox

(Online) live best
practice visit
Digital Plant Simulation and
AI in Manufacturing

Status-Quo current Factory
state – lean and digital
maturity potential analysis

Scrum and Agile Work -
Theory and case study

Group Coaching Event

3 months

Smart Factory Value Stream System: Analysis
of Potential and scouting best practice
solutions

Module 3: Design your Future Smart Factory Value Stream System

Design your
Smart Factory and quantify
potential

Roadmap your Smart
Factory

Meet challenges at transfer
towards a Smart Factory
(incl. Guest Speaker) +
Group Coaching

Connect the ends at a Smart
Factory and Roadmap finish

Scrum Test
preparation and additional
deep dive

Drive Digital
Transformation Change

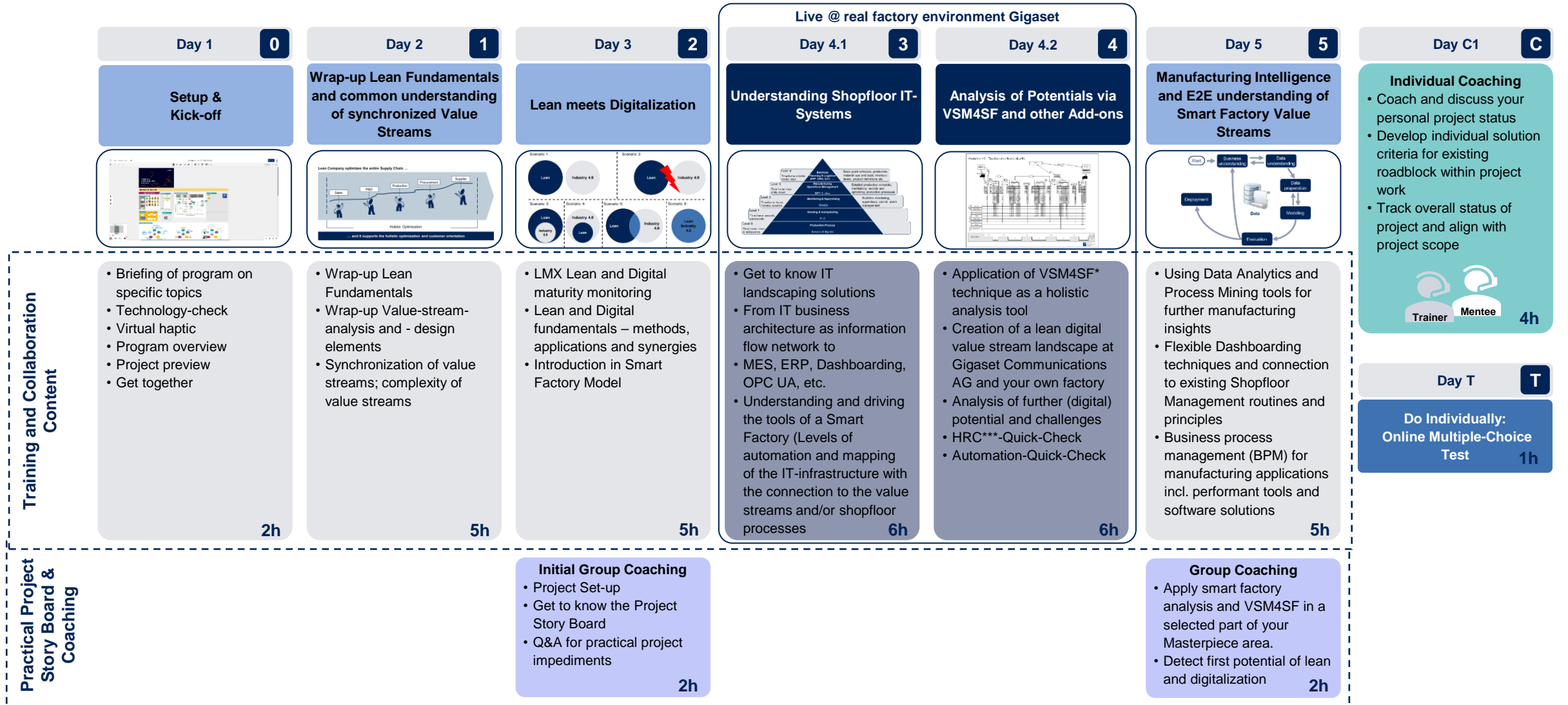
3 months

Design your future Smart Factory Value
Stream System and develop Lean Digital
Roadmap

Live features broadcasted from a factory
environment

Live features broadcasted from benchmarking
plant at LMX-best practice-Partner **Gigaset**

Module 1 – Analyze your Smart Factory Value Streams

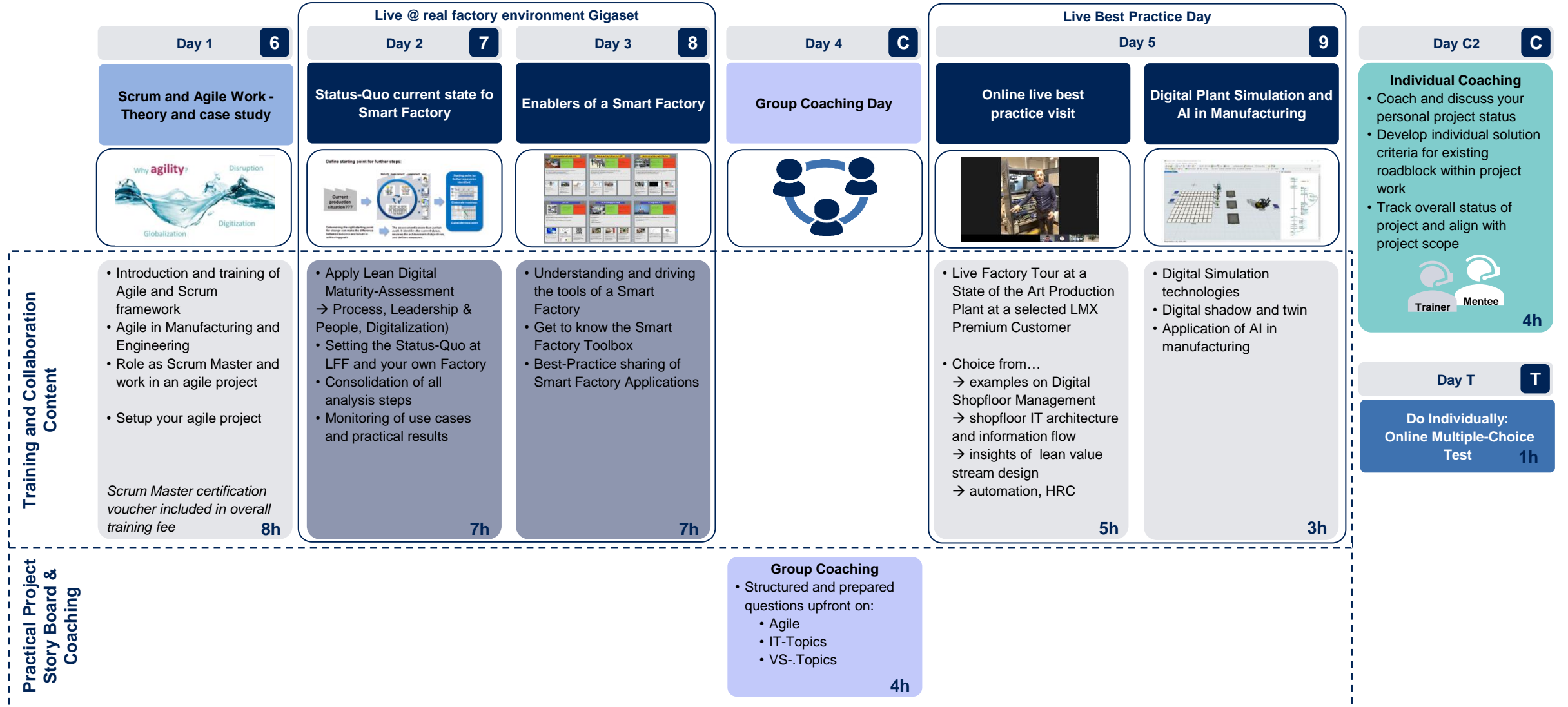


* Value Stream Management for Smart Factories (VSM4SF)

** LFF → Learning and Research Factory Ruhr University Bochum

*** HRC → Human Robot Collaboration

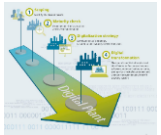



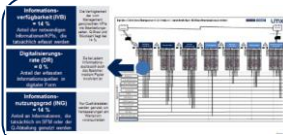

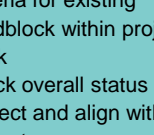

Module 2 – Setting the Level of your Smart Factory Value Streams



Source: Learning Factory Location © Lehrstuhl für Produktionssysteme (LPS), Bochum

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Module 3 – Design your Future Smart Factory Value Stream System

Live @ real factory Gigaset		Day 1 11	Day 2 12	Day 3 13	Day 4 14	Day 5 15	Day 6 16	Day C3 C
		Design your Smart Factory	Meet challenges at transfer towards a Smart Factory (incl. Guest Speaker)	Drive Change of Lean Digital Transformation	Roadmap your Smart Factory	Connecting ends of your Smart Factory / Roadmap finish	Scrum Test preparation and additional deep dive	Individual Coaching
								
Training and Collaboration Content		<ul style="list-style-type: none"> Value Stream Design for Smart Factories Combining physical and virtual product flow Add support functions/indirect areas to VSD4SF Get to know Smart Factory Style Guides for green- and brownfield applications Technology and innovation scouting 5h	<ul style="list-style-type: none"> Guest speaker / Key note "our Transfer and Challenge" Know your status/challenges - "analyses/meet your analysis" Change Leadership COO Guest speaker 1.5h	<ul style="list-style-type: none"> Lean / digital Change Management and Leadership aspects based on the challenges of the developed roadmap Strategic Change Management at/towards a Smart Factory Future of work and digital Leadership Leadership benefiting of digital performance Mentoring 5h	<ul style="list-style-type: none"> Development of Smart Factory roadmaps and systematically define main fields of actions Smart Hoshin Kanri Connect digital lean KPIs with Business KPIs Lean-Digital-Leadership-Change Roadmap 5h	<ul style="list-style-type: none"> Describe and face the Challenges, Business, Digital and Lean KPIs (Set-up Point at plant etc.) Wrap-up Modules 4h	<ul style="list-style-type: none"> Deepen Scrum Framework in preparation of Professional Scrum Mater Assessment 4h	<ul style="list-style-type: none"> Coach and discuss your personal project status Develop individual solution criteria for existing roadblock within project work Track overall status of project and align with project scope  4h
Practical Project Story Board & Coaching			Group Coaching <ul style="list-style-type: none"> Extend your analysis to multiple value streams and setup framework for designing a smart factory. Apply agile project work in your masterpiece. 1.5h		Group Coaching <ul style="list-style-type: none"> Design your smart factory Masterpiece area Roadmap your transfer of Lean Processes, Digitalization Strategy and organizational change 1.5h	Group Coaching <ul style="list-style-type: none"> Design your smart factory Masterpiece area Roadmap your transfer of Lean Processes, Digitalization Strategy and organizational change 1.5h		
								T - Days T
								Do Individually: Online Multiple-Choice Test 1h
								Do Individually: Professional Scrum Master (PSM I Assessment) 1h
								Day Z Z
								Senior Lean Digital Expert Certificate Approved Masterpiece 4h

* Value Stream Design for Smart Factories (VSD4SF)

Your project during 8-month training and coaching phase is consequently following training modules and delivers qualitative and quantitative results to up to more than 200 k€



each Senior Project Roadmap delivers potential... at about at least **50 k€ savings at the end of first year** and **more than 200 k€ at the end of third year forecast**

* Value Stream Management for Smart Factories (VSM4SF)

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Certification project selection – can I choose and how to choose



Your project has to deal with many requirements...

But First of All:

It has to fit to your company and your management needs



These are some framework conditions, that may help you to discover your company and value streams from the Senior Lean Digital perspective...

Check 1:
Hoshin Kanri

Your project is already foreseen in your company's Hoshin Kanri/ Policy Deployment. That's fine!!

Check 4:
Strategic
needs/impact

Project area has to deal with strategic change. Raise of volume, competitive costs, lean automation. Develop Roadmap!

Check 2:
KPI Potential

Your project could help for quantitative savings like productivity/ efficiency gains or quality losses. Don't wait!

Check 5:
Adequate
Project size

Of course, to get 200 k€ revenue after 3 years, project area should offer adequate size of KPIs and physical value stream. Think holistically!

Check 3:
Upcoming
Digital
Challenge

There's need for digital transformation in your project area and you guide it both with lean and digital view. Smart, Lean, Digital!

Check 6:
Performance
Gap

You don't meet today's goal expectations at project area? Hey, this is a treasure and let's start to systematically solve!

**Even if you meet at least one of these Checkpoints or several of them, your project may be adequate!
Through first coaching sessions we will precise, align goals and lead you through pre-analysis.**

Active participation in training and accompanying project work will ramp up Lean Digital skills to a Senior level – at your personal and your plant's advantage

Experiences you made before you start the training

- ✓ You were experienced in managing Lean Projects on manufacturing department level
- ✓ You designed first value streams
- ✓ You know the problem-solving toolsets
- ✓ You started to act as coach within your organization
- ✓ Your leaders respect and get in your opinion concerning process development questions
- ✓ You touched or are at least keen on discovering the synergies of Lean and digitalization

What you want and will learn within training and project

- ✓ How to see and sketch value stream systems as a whole synchronized network
- ✓ How Smart Factory IT-solution work and they connect E2E-Lean Processes
- ✓ How to identify optimization potential on value stream system level
- ✓ How to design and simulate new value stream systems and roadmap them
- ✓ How to coach your leaders and Experts within lean / digital change challenges
- ✓ How to act and lead agile project structures

How plant manager profits with your training, project and future

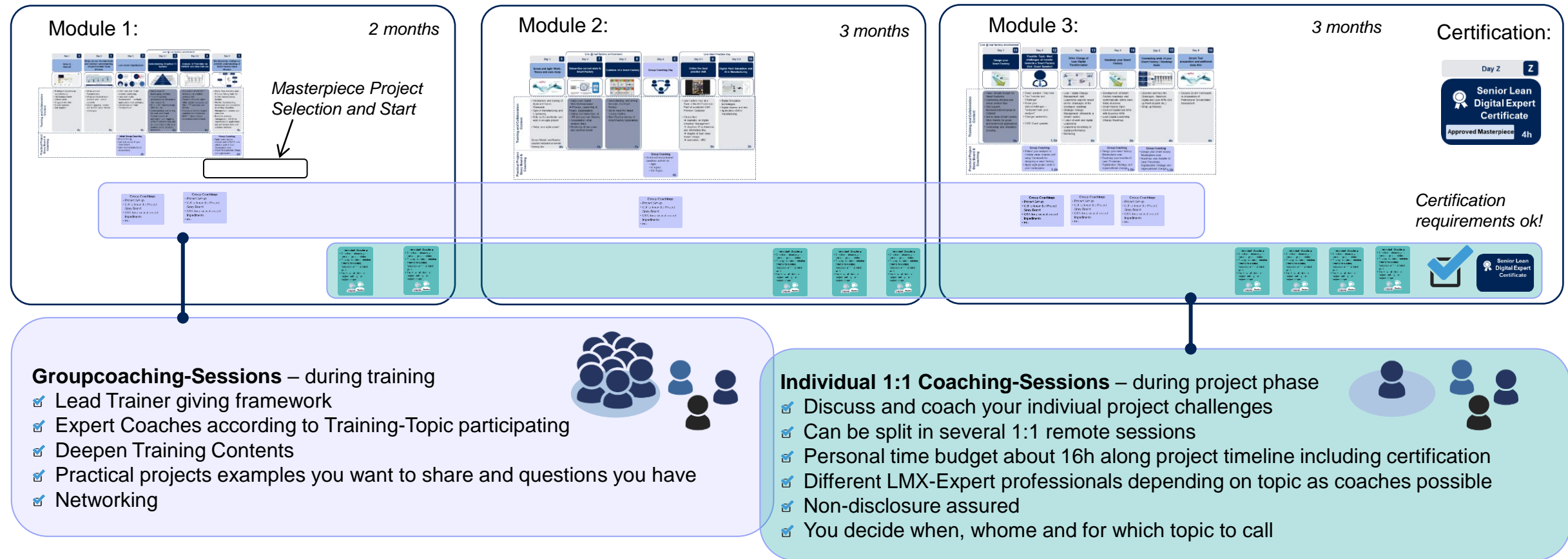
- ✓ An again more respected personality in developing your organization: processes – people – systems
- ✓ A strategic roadmap of a challenging area at your plant combined with quantified potential of at least 50k€ within first year
- ✓ A bilingual interface between Lean and Digital world
- ✓ A coach and sparring partner in strategic and operative questions
- ✓ A potential candidate for upcoming leadership roles



Will you check in?



Individual coaching with selected LMX mentors* upon your requirements is included in your training fee as your personal coaching time budget. Your choice!



Group coachings getting you future Seniors Lean Digital experts together
Individual and confidential coaching session in your pull-signal
LMX Experts for different training and project problem solving topics

*see following slide: mentors for lean and smart factory tools, change, IT shopfloor architecture, agile work

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Virtual coaching on the job: group coaching sessions and individual sessions based on personal needs are included in Senior Lean Digital Expert Program

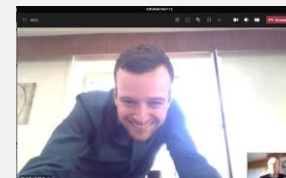
Virtual Coaching / on-the-job

- Joint **digital walk-through** in Miro Boards by the participants
- Joint **review of progress and projects**
- **Critical reflection** on **challenges** and **approaches to solving** one's own practical tasks
- Joint **removal of barriers**
- Support in the **application of methods** by the trainer
- The trainer acts as a **provider of feedback** and **input** for questions
- Determination of **next steps**

Group coaching sessions



Digital Whiteboards (Miro)



Individual coaching sessions

Group coaching benefits

- **Interdisciplinary exchange** between participants
- Get to know **best-practice transfer** of procedures
- Promotion of cross-team/cross-functional understanding
- Creation of a **community**

Each participant **actively presents** his or her practical project on a regular basis respecting NDA-restrictions

- Personal feedback on status
- Confidentially discuss solutions
- Individually select best fitting mentor competence profile for selected sessions
- Agile Work: agree time slots based on your project progress needs

Personal coaching benefits

Your coaches will provide a bunch of experience during group and individual coaching sessions through various methods and practical solutions around lean digitalization



					
Name/ Function	Christian Jagla, Partner at LMX	Judith Fellsches, Partner at LMX	Prof. Christian Magnus, Professor University of Applied Sciences	Alexander Schnichels, Senior Consultant at LMX	Felicitas Kell, Project Manager at LMX
Role in Training Program	<ul style="list-style-type: none"> Lead Trainer Program Management Mentoring Certification process 	<ul style="list-style-type: none"> Trainer Business Process Management Program Management Mentoring 	<ul style="list-style-type: none"> Trainer Smart Factory Design and Shopfloor IT Applications Mentoring 	<ul style="list-style-type: none"> Trainer Smart Factory Design and Lean Digitalization Mentoring 	<ul style="list-style-type: none"> Training Change Management Mentoring
Key competencies	<ul style="list-style-type: none"> Lean Management Hoshin Kanri Strategy deployment 	<ul style="list-style-type: none"> Business Process Management & Optimization Digitalization of processes Lean Transformation 	<ul style="list-style-type: none"> Smart Factory Design Shopfloor IT Systems and Architecture 	<ul style="list-style-type: none"> Smart Factory Design Lean Manufacturing 	<ul style="list-style-type: none"> Lean Change Management Hoshin Kanri, Policy Deployment
LinkedIn	https://www.linkedin.com/in/christian-jagla-a3664216a/	https://www.linkedin.com/in/judith-fellsches-b29b44128/	www.linkedin.com/in/christian-magnus/	www.linkedin.com/in/alexander-schnichels/	www.linkedin.com/in/felicitas-kell-64719a71/

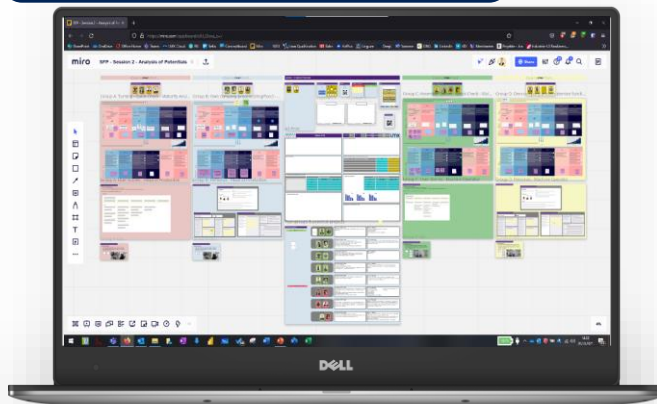
...and
furthermore

Based on the media mix, the virtual training concept brings the Shopfloor to the participant's screen – in theory modules, group exercises and live streams

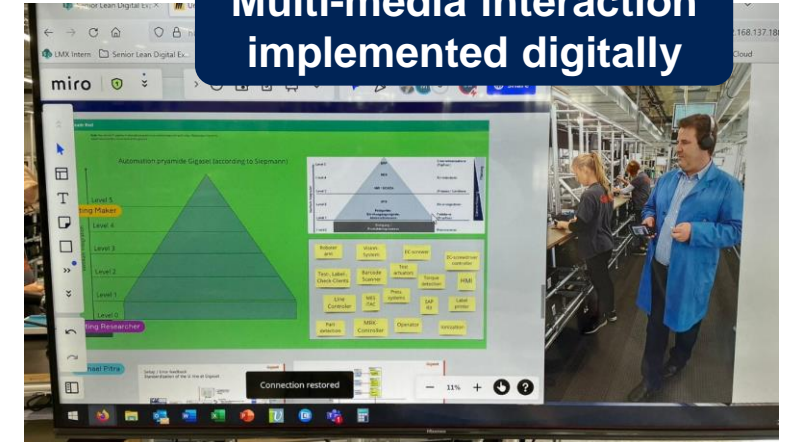
Microsoft-Teams



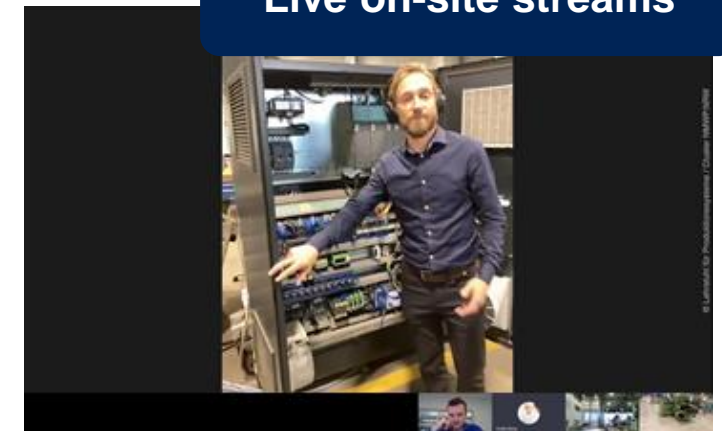
Miro



Multi-media interaction implemented digitally



Live on-site streams



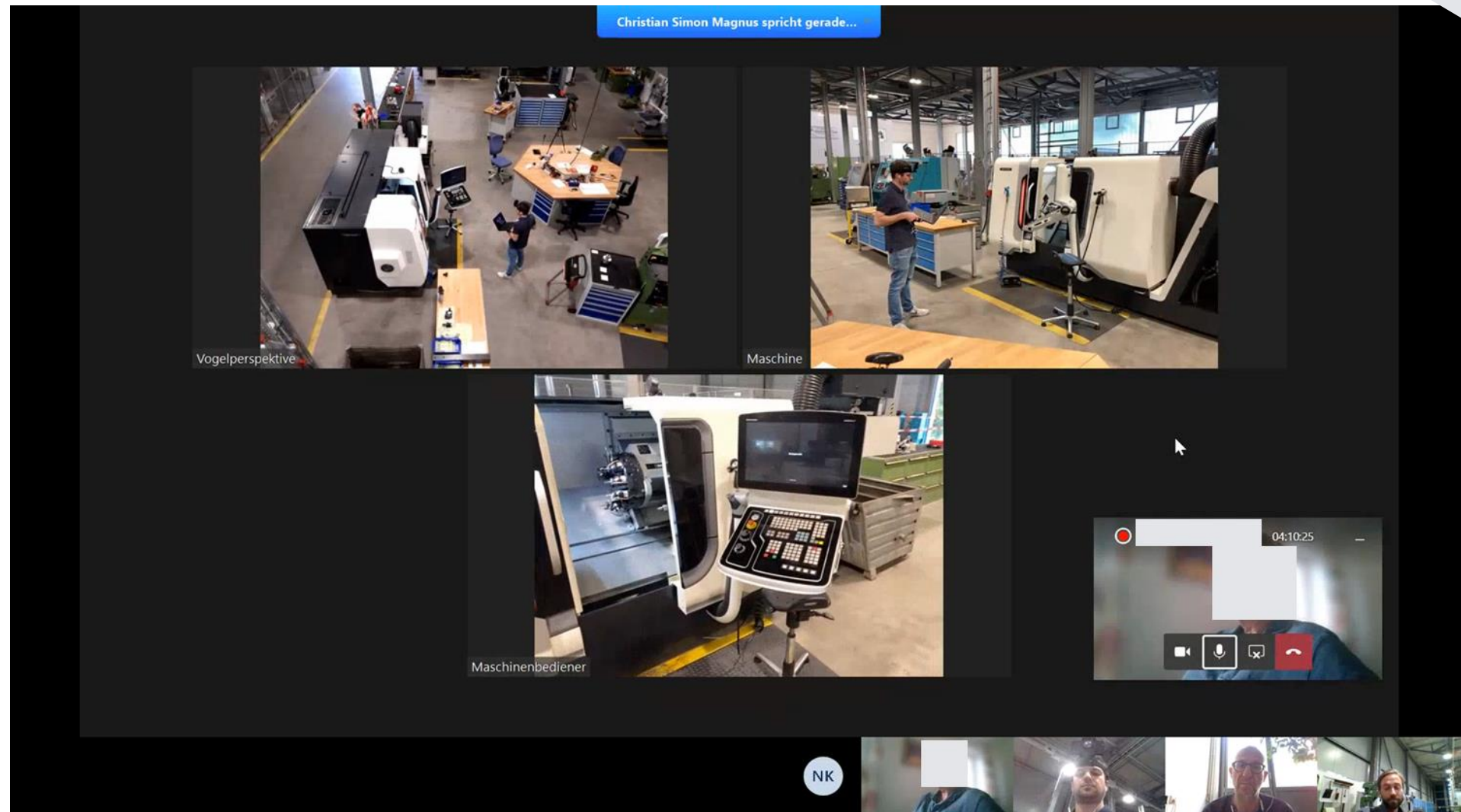
The **targeted selection** of the **media used** always puts the **focus** on the **participant** and turns the **theory modules** into **live experiences**.

Including virtual live technology tour at the Learning Factory Bochum with deep dives on several systems (hardware & software)



In the tour as well as during the exercise: suitable media support brings the training participant to the Gemba!

Live streaming from the learning and research factory brings the shop floor from different perspectives realistically to the participants' screens



Example
Live-Streaming

Participants participate exclusively "remotely" and require the usual equipment for mobile work

Remote equipment



PC or laptop with camera turned on
Optional: Second screen



Stable broadband Internet connection



Quiet, undisturbed environment



Preferably headset with micro

Tools used in training

- For the training, the participants receive access for the tools used within the training
- **Administration rights are not necessary!**

- Communication Tools: MS Teams and MS SharePoint



Microsoft Teams



SharePoint

- Digital whiteboard: Miro



- Surveys: Mentimeter



Mentimeter

Planned time schedule of program – training and group coaching slots

Modules	Title	Step	Date	Duration	Start CET
Modul 1	Kick-Off	B0	Dienstag, 17. Oktober 2023	2 h	8:00 AM
Modul 1	Common understanding of synchronized Value Streams	B1	Montag, 23. Oktober 2023	5 h	8:00 AM
Modul 1	Lean meets Digitalization (+Coaching 2h)	B2	Donnerstag, 2. November 2023	7 h	8:00 AM
Modul 1	Understanding Shopfloor IT Systems	B3	Dienstag, 7. November 2023	6 h	8:00 AM
Modul 1	Analysis of Potentials via VSM4SF	B4	Mittwoch, 8. November 2023	6 h	8:00 AM
Modul 1	Manufacturing Intelligence and E2E-BPMN (+Coaching 2h)	B5	Montag, 13. November 2023	7 h	8:00 AM
Modul 2	Scrum and Agile Work	B6	Montag, 15. Januar 2024	8 h	8:00 AM
Modul 2	Status Quo Current state Smart Factory	B7	Dienstag, 16. Januar 2024	7 h	8:00 AM
Modul 2	Enablers of a Smart Factory	B8	Mittwoch, 17. Januar 2024	7 h	8:00 AM
Modul 2	Group Coaching Day (Coaching 4h)	B9	Freitag, 26. Januar 2024	4 h	8:00 AM
Modul 2	Online best practice visit, Digital Plant Simulation and AI (+Coaching 1,5h)	B10	Donnerstag, 1. Februar 2024	8 h	8:00 AM
Modul 3	Design your Smart Factory	B11	Mittwoch, 7. Februar 2024	5 h	8:00 AM
Modul 3	Meet challenges towards Smart Factory (incl. Guest Speaker)(+Coach. 1,5h)	B12	Freitag, 23. Februar 2024	3 h	8:00 AM
Modul 3	Drive Change of Lean Digital Transformation	B13	Donnerstag, 29. Februar 2024	5 h	8:00 AM
Modul 3	Roadmap your Smart Factory (+Coaching 1,5h)	B14	Donnerstag, 7. März 2024	6,5 h	8:00 AM
Modul 3	Connecting ends of your Smart Factory (+Coaching 1,5h)	B15	Mittwoch, 13. März 2024	5,5 h	8:00 AM
Modul 3	Scrum Test preparation deep dive	B16	Donnerstag, 14. März 2024	4 h	8:00 AM

Planned dates as of June 20th 2023

The application process at a glance

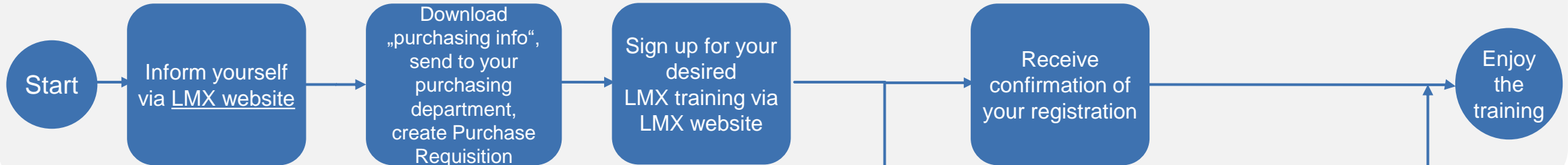
Registration via LMX website-link
<https://www.lmx.eu/veranstaltungen>:



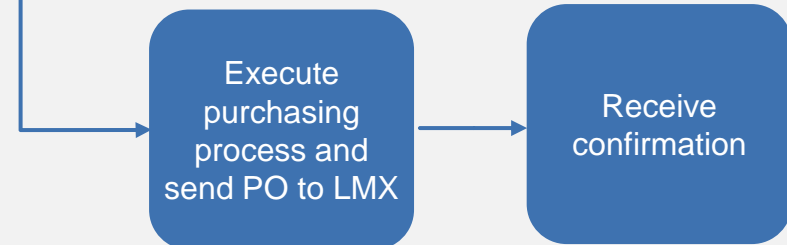
All upcoming Senior
Lean Digital Experts



Participant



Your Purchasing Department



Direct contact LMX

Please don't hesitate to contact LMX with all organizational matters around the training



Ulrike Schömig

Email: schoemig@lmx.eu

Phone: +49 211 63 55 89 60

Web: <https://www.lmx.eu/veranstaltungen>

The total participation fee for the Senior Lean Digital Expert Learning Program is 9.900 EUR



Specifications	Fee (€)
<p>Senior Lean Digital Expert Learning Program</p> <ul style="list-style-type: none">▪ Module 1 – Analyze your Smart Factory Value Streams▪ Module 2 – Setting the Level of your Smart Factory Value Streams▪ Module 3 – Design your Future Smart Factory Value Stream System▪ Minimum 12 participants – max. 15 participants▪ 18 days remote training & group coaching / in German or English▪ 16 hours individual remote coaching▪ Real live gemba tours a LMX best practice partner factory	<p>Start: Kick-off Oct. 17th 2023</p> <p>9.900,- €</p>

Based on the close cooperation with the Ruhr University Bochum, we have jointly founded 2 successful startups for further education and Smart Factory

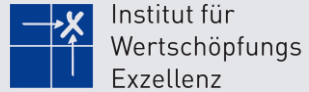
LMX GROUP

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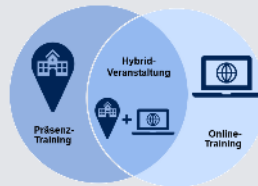
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UNIVERSITÄT
BOCHUM**

RUB

LPS
LEHRSTUHL FÜR
PRODUKTIONSSYSTEME



Qualification for Professionals
on site or online



LFF
LPS LERN- UND
FORSCHUNGSFABRIK

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nexpro.digital

Your Shopfloor Experts for the Smart Factory

