TÜV SÜD Global Expert Development Program
Co-operation
between TÜV SÜD and Technical University of Munich (TUM)

Foster internationalization and innovative skills through development of technical experts

Add value.
Inspire trust.

EFMD – Excellence in Practice Award 2024

Agenda

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Main authors: Christine Petersen (TÜV SÜD) and Stephanie Bastin (TUM)

Executive Summary

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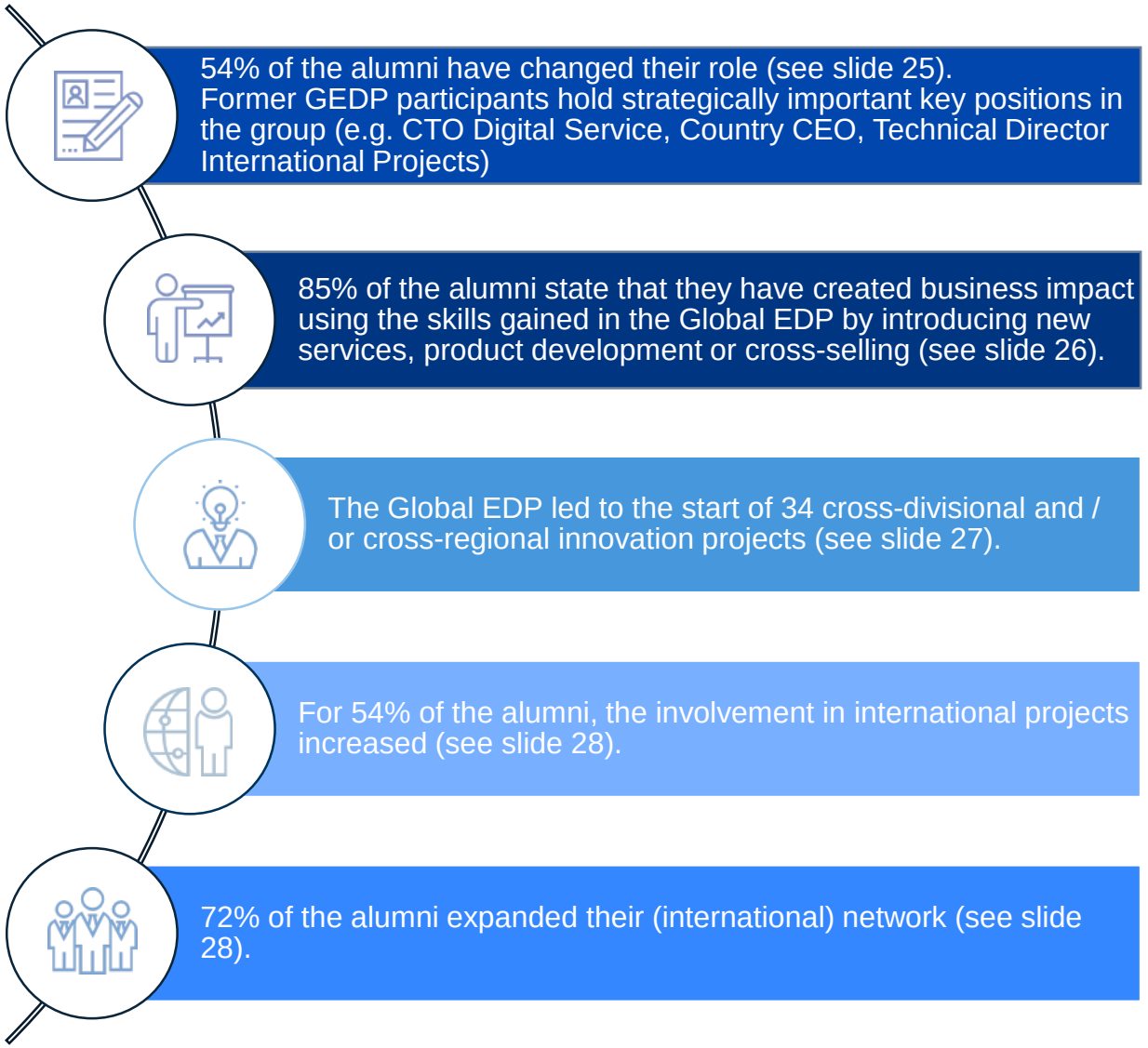
Global Expert Development by TUM and TÜV SÜD

The **internationalization and the growing portfolio of TÜV SÜD** led to the need for expanded requirements for the technical experts within the company. **Technical experts** with the ability to work in an **international context** play a crucial role to reach the strategic goals regarding further globalization and technological leadership. In order to build the **necessary competencies and mindset** from within, this targeted group of technical experts was trained through a customized development program **co-created with the Technical University of Munich (TUM) to meet the needs of TÜV SÜD.**

In **three modules**, the experts' skills were **developed to drive innovation**, keep a better eye on **customer orientation and sales**, and **support change processes** as well as an **open knowledge culture**. Additionally, participants gained an **internal network** as well as a broader understanding of the **TÜV SÜD product and location portfolio**. Over the last **10 years, 185 participants from 27 countries were trained in 11 runs of the Global Expert Development Program.** The impact of the program on the international experts as well as on TÜV SÜD's business manifested in **great results** (see right side).

The training program was established through the **collaboration of two unique partners** and can be deemed **a true success story** that is continuing to unfold.



The Challenge

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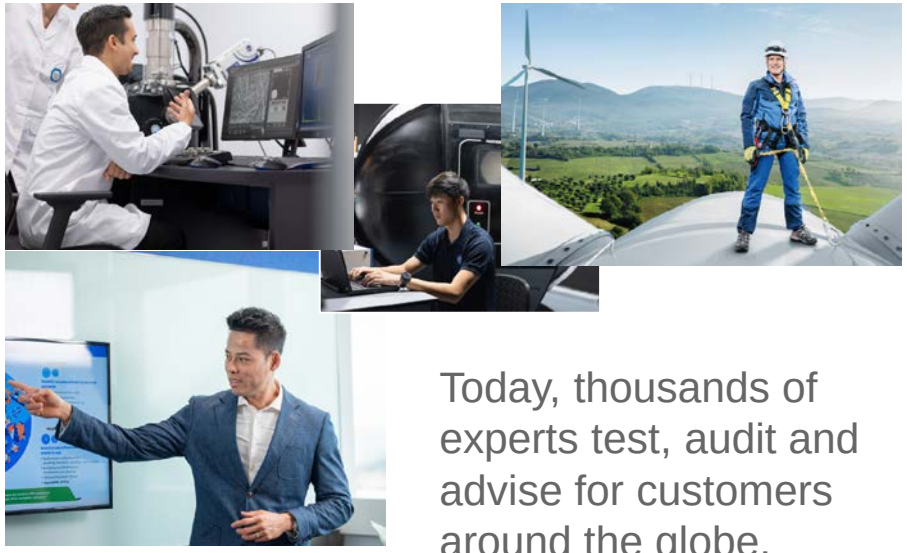
TÜV SÜD‘s growth and development …

TÜV SÜD’s story began when steam boilers were the innovative new technology powering the Industrial Revolution. Following a devastating explosion that claimed one life and injured many, the first steam boiler inspection association was formed in Mannheim in 1866. This association marked the beginning of technical safety in Germany.

1868, Carl Isambert became the first full-time expert at a technical inspection association in Germany.

Today, TÜV SÜD is the largest Technical Inspection Association (TÜV) in the world in terms of revenue, network and the number of experts employed. TÜV SÜD is represented by more than 26,000 employees located across over 1,000 locations.



Today, thousands of experts test, audit and advise for customers around the globe.

… created a need

Along with the **expanding portfolio** and **internationalization the demands** placed on **technical experts** have changed.

TÜV SÜD's challenge is to develop its technical experts in such a way that they are able to meet **future technological challenges through innovative products** as well as to exemplify **international collaboration and knowledge sharing**.

To achieve this goal, not only the experts' core competencies have to be developed but also a **mindset change** has to be initiated and promoted.

In response, TÜV SÜD decided to initiate the **Global Expert Development Program (Global EDP)**.

The Commitment

© Andreas Heddergott / TUM

How the co-operation started

In light of the strategical challenges and determined to create a development program for TÜV SÜD experts, **TÜV SÜD looked for a well-known partner** with a strong (technical) reputation and technological strengths as well as profound business / management competencies.

Not only the geographical proximity, but especially the **reputation of Technische Universität München (TUM)*** and the TUM School of Management** as well as existing cooperation in other fields (like research, undergraduate studies, etc.) and TUM's international orientation led to a partnership for the envisioned program.

TUM quickly understood the importance of expert development in an organization which is expert-driven on such a high level as TÜV SÜD.

To reach the training goals, participants would need to make a **fundamental mind-set change** from "technical expert in my field" to a more open mindset: having a holistic company view, thinking international, share knowledge, listening und understanding customer needs.

It also became clear we would not reach these goals with only a few runs but would need to create an alumni community of this program. **It's a marathon, not a sprint!**

Nevertheless, it became obvious that we would need **some quick-wins** as well, to make stakeholders happy. Therefore, the creation of new **business ideas** should be used.

The addition of an **international module** as well as **recruiting an international cohort** was very important in shaping and changing the TÜV SÜD culture from a very "German" company towards a more international one.

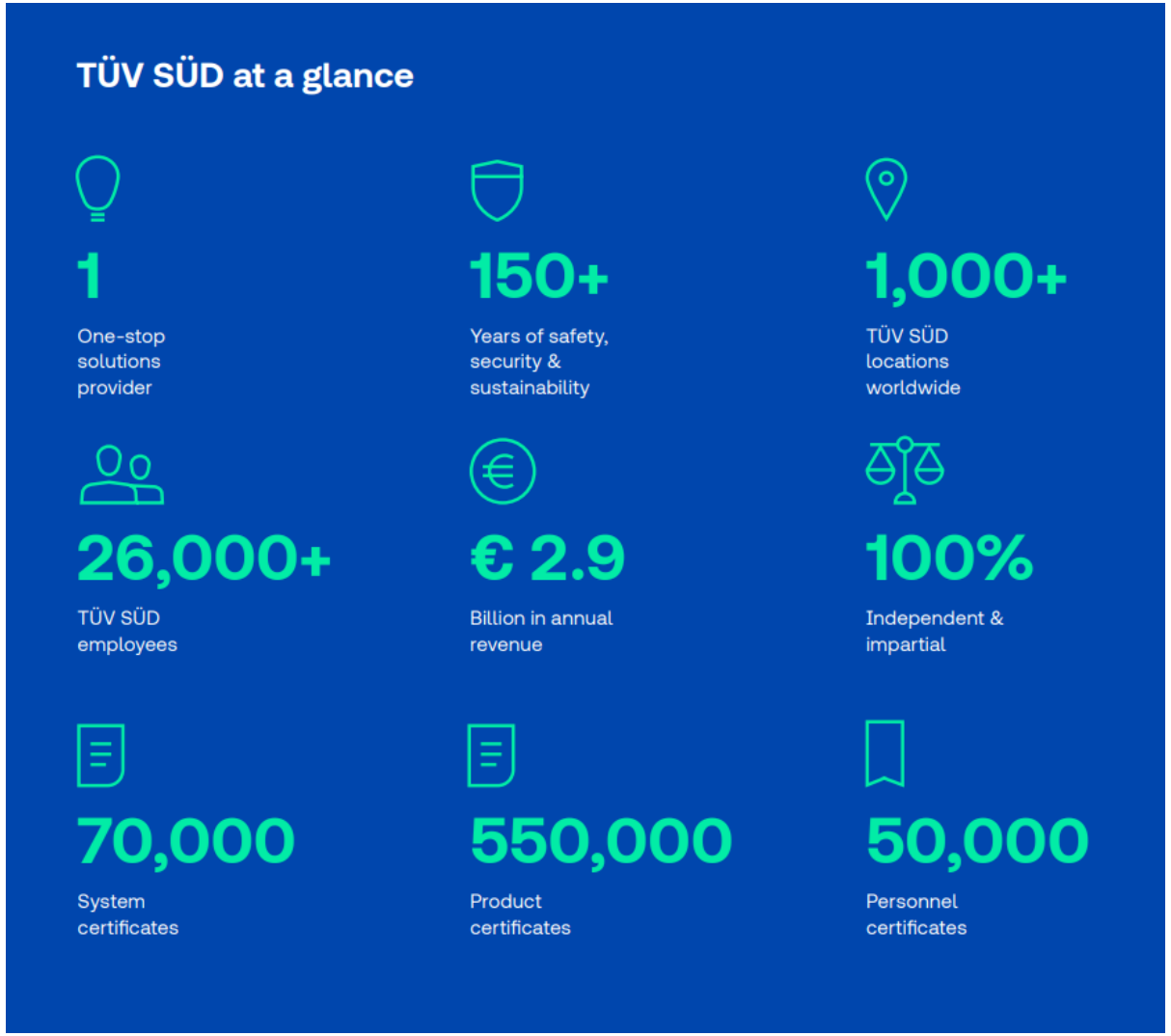
* https://www.tum.de/en/about-tum/facts-and-figures/rankings ** https://www.mgt.tum.de/about/excellence-rankings-accreditations

TÜV SÜD: Add Value. Inspire Trust.

TÜV SÜD's story started in 1865 when a fatal accident gave rise to an enduring legacy and spawned a global industry. Since then, we have grown to become a trusted partner of choice in safety, security and sustainability solutions.

OUR MISSION

We are passionate about people, the environment and technological progress. We anticipate technological developments and facilitate change – defining standards and going beyond regulatory compliance. Staying true to our founding principle, we add value by creating a safer and more sustainable future.



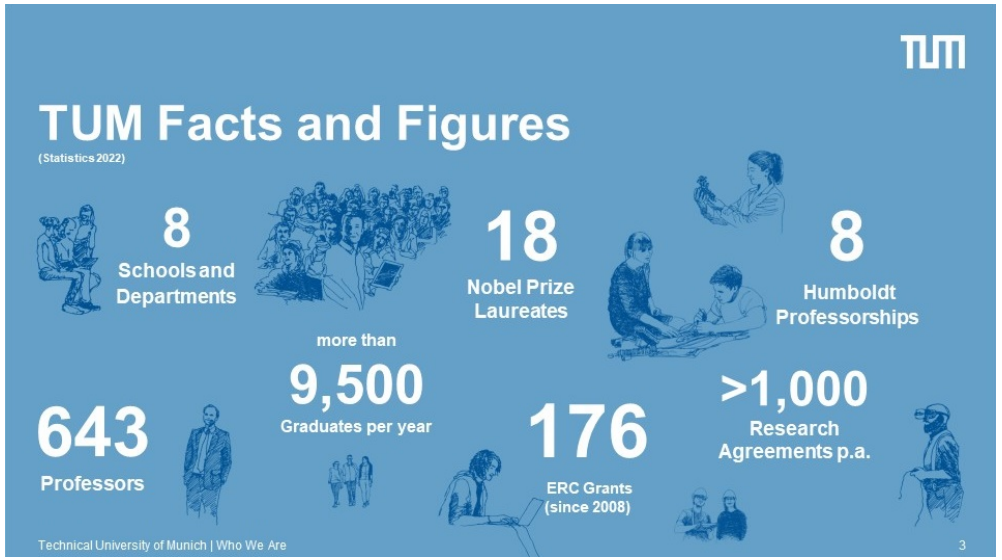
TUM: Excellence in research and teaching

The **Technical University of Munich (TUM)** is a global market-place of knowledge.

As one of **Europe's most outstanding universities** in research and innovation, TUM finds solutions to the most important scientific and social challenges of our time. It specializes in engineering, technology, medicine, and applied and natural sciences.

Established in 1868 by King Ludwig II of Bavaria, the university now has **additional campuses** in Garching, Freising, Heilbronn, Straubing, and Singapore, with the Garching campus being its largest.

A **University of Excellence** under the German Universities Excellence Initiative, TUM is among the **leading universities in the European Union**.



The L&D Initiative

Development needs for experts were set based on TÜV SÜD's four strategic angles together with CEOs of divisions and regions

New trends and developments, driven in particular by **digital technologies and sustainability**, offer additional opportunities, both for TÜV SÜD as well as for TÜV SÜD's customers. **Four strategic angles** are pursued in order to exploit this potential:

- Establish **excellence and efficiency** in our services, distribution, and processes, and excellence in our employees.
- **Reinvent TIC (Testing, Inspection and Certification) core business** and **develop standards for new fields** of technology.
- **Offer technical advisory services and platforms** for exchanging knowledge and experience throughout our business, as digital and customer-centric services.
- Scale up **internationalization**.

TÜV SÜD's regional and divisional **CEOs together with HR** determined that **technical experts need to grow to live up to these targets** by

- **Driving innovation** - anticipating technical and regulatory developments in order to offer market-oriented and up to date products and services
- **Focusing on customers** and on providing the best solutions to meet their needs
- Intensifying **peer exchange** and leverage **on joint knowledge**
- Taking on a **global perspective**: Think beyond their own working area and field of expertise (think outside the box)

Region and Division CEOs took **program patronage**, **nominated participants** and provided **topics and coaching for group work**.

The topics for the **group work** in the training was individually aligned with **corporate strategy and the innovation department** for each run.

These development needs led to the objectives of the Global EDP

➢ **Develop core competencies of technical experts**

The core competencies to be developed with the Global EDP were selected from **the existing TÜV SÜD competency model** through group-wide review and consolidation of job descriptions. The results were a list of competencies most relevant for the TÜV SÜD strategy:

- **Innovation & Product Development** (ability to develop, evaluate and implement new ideas)
- **Change Management** (ability to deal effectively with change on an individual, team and corporate level)
- **Knowledge Acquisition and Transfer** (ability to learn and actively share new information)
- **Customer & Solution Orientation** (ability to adopt a customer perspective & service mindset)

➢ **Foster international collaboration and knowledge exchange between technical experts**

In order to enhance collaboration between regions and divisions and thus set the ground for technological leadership, the **exchange between the technical experts** plays an important role in the program.

➢ **Orchestrate a mindset shift among technical experts**

In order to reach the objectives, technical experts need to make a **fundamental change towards a new mindset.** Therefore, **soft skills** (like communication skills, presentation sills, addressing management, etc.) also have to be addressed in the program.

The Global EDP was embedded in corporate learning landscape – the LED House

- TÜV SÜD visualizes the internal development offers in the so-called LED (**L**eadership and **E**xpert **D**evelopment) House.
- The target group of the Global Expert Development Program are technical experts with a current or future global focus.
- Based on the blueprint of the Global EDP, regional expert development programs were designed and delivered in local language (German, Chinese).

Desired Impact of the Global EDP

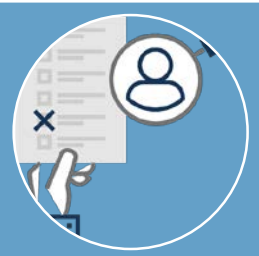
With the implementation and roll-out of the Global EDP, TÜV SÜD intended to **initiate a cultural change towards a more international and innovative mindset** of technical experts in all regions and divisions:

Start of cross-divisional and cross-regional projects

Creation of Business impact by

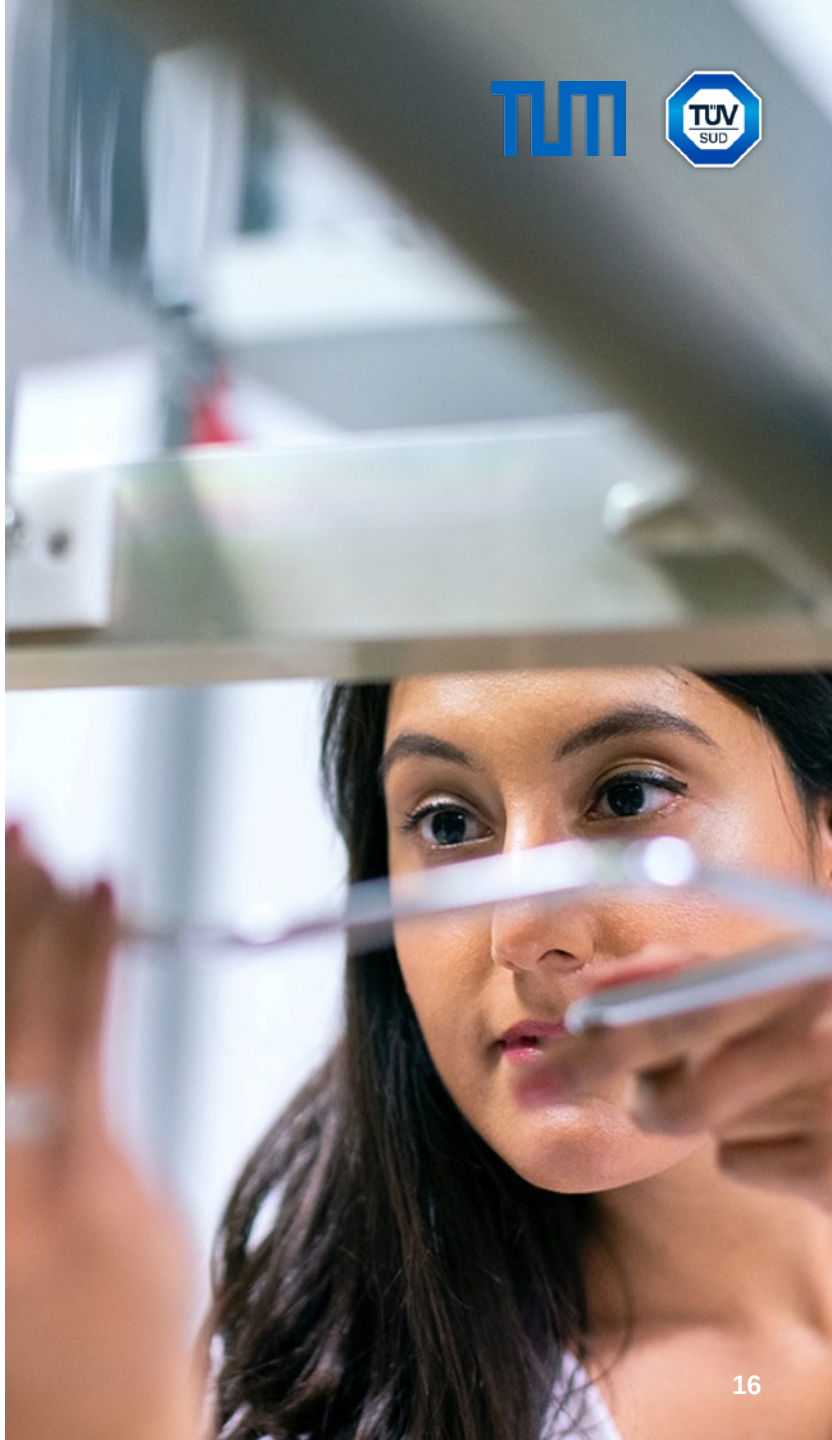
- Developing new business models / services (innovation & product development)
- Identifying new business opportunities by thinking broadly and using a customer-focused perspective

Creation of a technical expert network for knowledge exchange



Visibility of technological pioneers

The aim was to develop **200 technical experts globally to drive this culture change** in all regions and divisions.



The Initial Program Design (1)
Modules and Timeframe

The developed program consisted of **three modules with three days each** taking place in the German Headquarters and one other country. The duration of the whole program was determined to a period from 9 to 10 months. The participants would receive a TUM Certificate with successful participation and pitching on the final day. All contents are delivered by a mixture of TUM professors, experts from TUM network and practitioners (mainly internal experts from TÜV SÜD). The **program content has been defined as follows**:

Module 1: Innovation & Product Development

- Innovation management and strategy
- Innovation culture and processes: how to develop technologies and business models
- How to place new products on the market

Module 2: Selling Solutions & Project Management

- Anticipating customers' needs and providing solutions through technical consultancy
- Understanding and recognizing current tasks, new concepts and tools of PM to derive positive results in daily business

Module 3: Change & Knowledge Sharing

- Change management as a process of sustainable innovation
- Sharing and managing knowledge for organizational benefit
- Establishing a knowledge sharing culture within TÜV SÜD

M1: Innovation and product development
Participants know the TÜV SÜD innovation process and can apply various methods during the different phases of it, e.g. ideation, business model canvas, value proposition canvas, first communication, Elevator Pitch).

M2: Selling Solutions & Project Management
The participants understand the necessity of truly understanding the customers' need / problem, they can get on eye-level with the customer and are able to deliver their message / product / proposal in a targeted and solution-oriented way.

M3: Change & Knowledge sharing
Participants know how to support change processes as senior experts; they are able to actively shape innovation-oriented change; participants also understand the importance of knowledge sharing and how to contribute to cultural change, this module also includes the final day pitching/presentation.

The Initial Program Design (2)
Additional elements

The program was accompanied by **additional elements** to foster the training goals:

Personal Action Plan (PAP) to support the learning transfer to the daily business. Discussion with line manager.

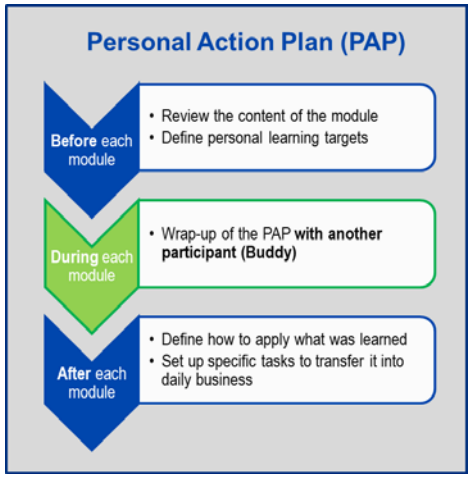
Project work in groups along the whole program with coaching sessions, ending in pitching of business ideas to management.

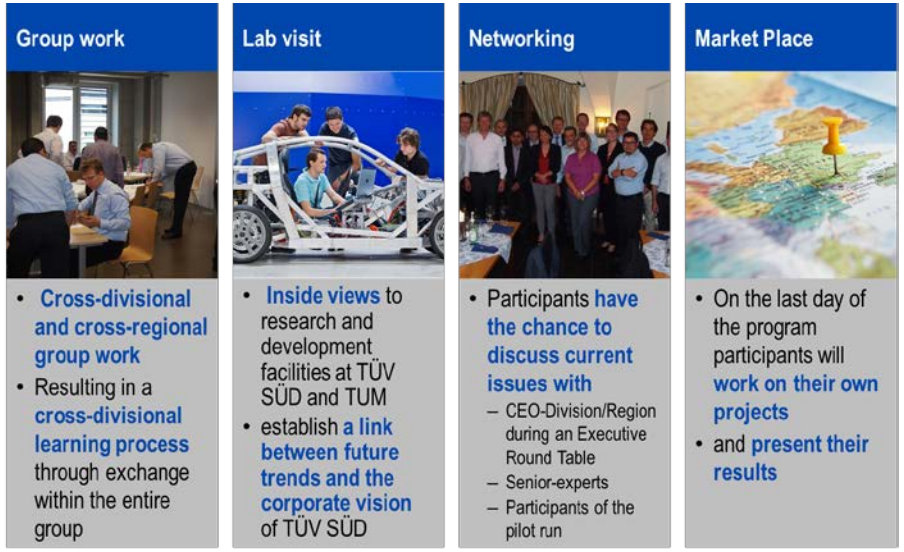
Lab visits to TUM labs (e.g. Makerspace) and TÜV SÜD facilities (e.g. TÜV SÜD car certification).

Social Events for networking, e.g. cooking event.

Evening Sessions with TÜV SÜD division CEOs and other management members for inspiration and learning about the management's perspectives.

International Experience: Module 2 took place at a TÜV SÜD location outside of Germany, e.g. in Singapore, Madrid, Shanghai or Florence.





Selection of participants – An important success factor for the program

The program was designed for participants who…

- have a **focus on technical responsibilities** and lesser focus on leadership
- have **more than 10 years of relevant experience**
- are **specialized in more than one area** of expertise within their dedicated discipline(s)
- are **actively involved in an international** and / or cross-divisional and / or cross-regional project
- are **willing to work** 20% or more **outside her / his home country** on international projects
- have a **minimum of 3 years of continuous service with TÜV SÜD Group**
- have **very good English language** skills

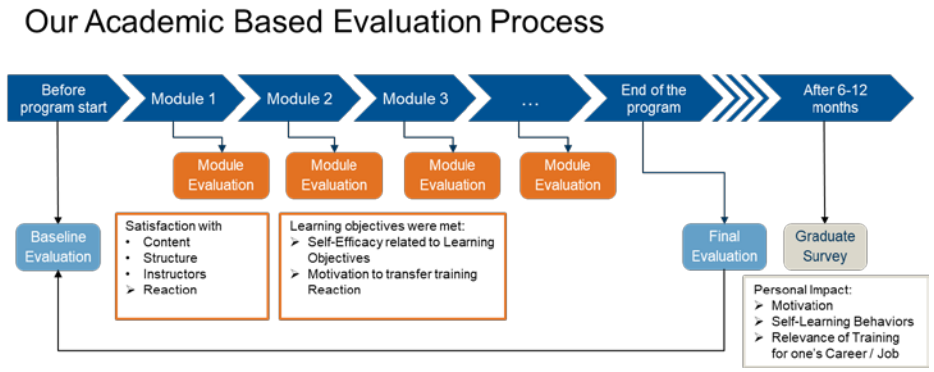
The selection process is shown in the picture on the right.

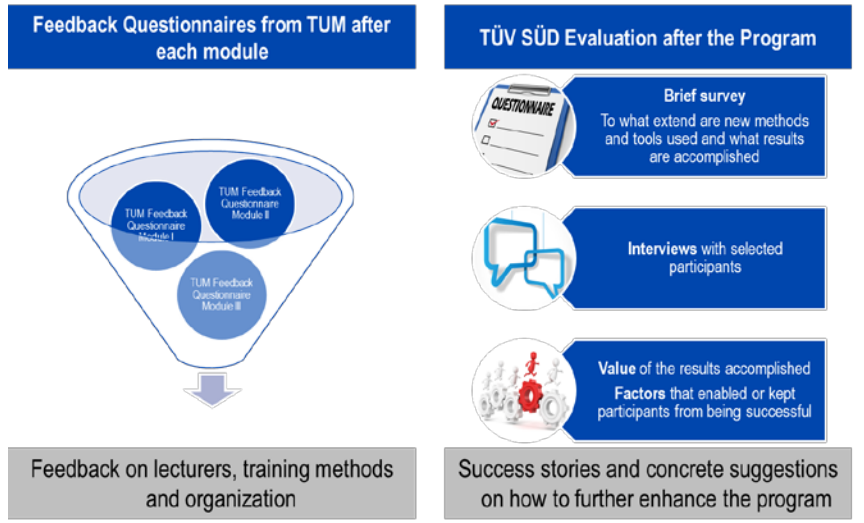
Selection is **accomplished by Corporate HR**. For later runs, **alumni** have been invited to join the interview panel.

Learning measurement - Process

Evaluation played an important role from the outset. Using TUM's evaluation model, an evaluation process was designed. In addition to surveys, the following tools were used:

- interviews
- the project work with clear goals after each module, coaching sessions, presentations in the beginning of the next module
- as well as the final pitch in front of TÜV SÜD management
- and a coaching app





Learning measurement – Progress indicators and measurement

To **ensure the quality of the program**, practical relevance as well as the achievement of our program goals, we defined program indicators and measurements for each module and for the whole program:

	Innovation & Product Development	Solution orientation	Change & Knowledge Sharing	Overall
Progress Indicators	Quality and follow-up / implementation of business ideas	Customer focus, precise and solution oriented communi-cation / interaction with customers and stakeholders	Understanding how to deal with and how to foster change, growth of personal network	Overall satisfaction, recommendation rate, increase of skills, satisfaction of sponsors
Measurement	Pitching session, implementing TÜV SÜD service based on program or own business idea with the learned methods	Everskill app (self-assessment and online coach)	Ability to deal with change (relocation, new position, new projects), size of network	Evaluation of modules by TUM, interviews with experts and their managers on learning targets and learning achievements, final pitch (Outcome, Presentations)

The topic “solution orientation” plays a very important role for the future success of TÜV SÜD. As communication is a major part of this module, it is also key to the intended cultural shift. Therefore in 2017, the program partners decided to collaborate with **everskill – a start-up company in the field of training transfer**. Participants used an **app with a digital coach**, that supported them in changing their behavior regarding communication, customer orientation and a more solution-oriented approach. As the usage rate as well as the outcome was very strong, the partners even received a prize for the most impactful training in 2017.

Continuous improvement

The **program started in 2014** with a pilot run where, in addition to the learning measurement, also **interviews and feedback sessions** have been conducted to sharpen the **content, the practical relevance** as well as the TÜV SÜD fit. After the pilot run as well as after each regular run, **a workshop was held** to define the improvements for the next run. During the years, we **mainly changed the following elements**:

- Type and manner of **the project work** (e.g. introduction of coaching sessions, openness of idea generation (ideation versus case study),...)
- The topic **“Knowledge Management”** (content focus, methods, lecturers…)
- The topic **“Change”** (content focus, lecturer,…)

The Covid-19 pandemic necessitated a program redesign resulting in a **virtual version in 2021**. To ensure a good virtual learning experience the program was structured to have **two modules**. Teaching time has been chosen to meet the requirements of as many time zones as possible. The virtual version allowed us to **reach participants from countries** where the uptake had been minimal in the face-to-face program, **like India or Bangladesh**.

In **2024, the program is meant to develop further** with three different target groups (depending on seniority of experts), additional content and a blended format. The development process is still in progress and is meant to lead to a re-start in autumn 2024.

The Impact

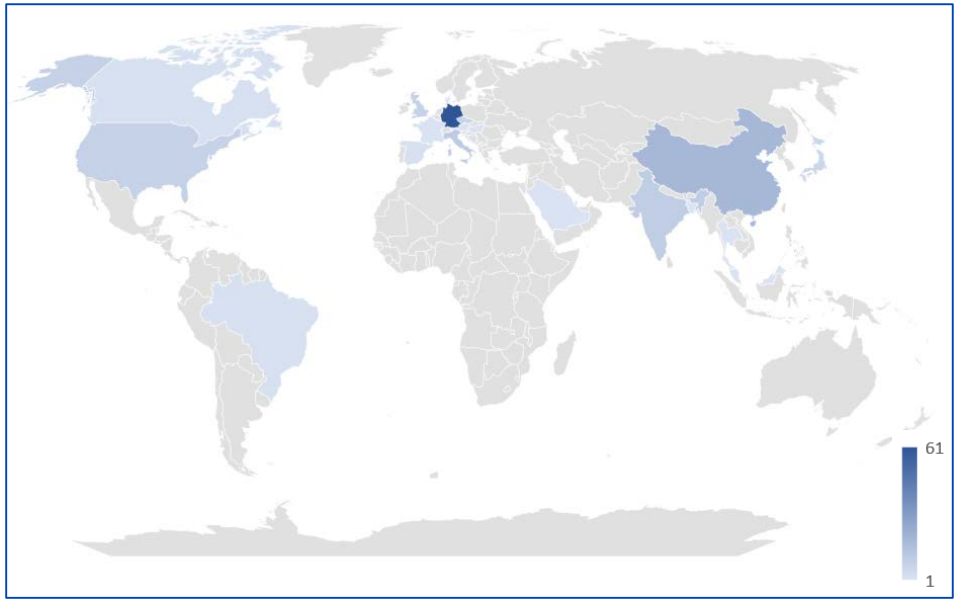
Participants Statistics

- Including the pilot batch in 2014, TUM and TÜV SÜD have conducted 11 runs of the Global Expert Development Program to date, three of which were virtual.
- 185 participants took part in the program.
- These participants came from locations in 27 different countries.

185
Participants

11
Runs

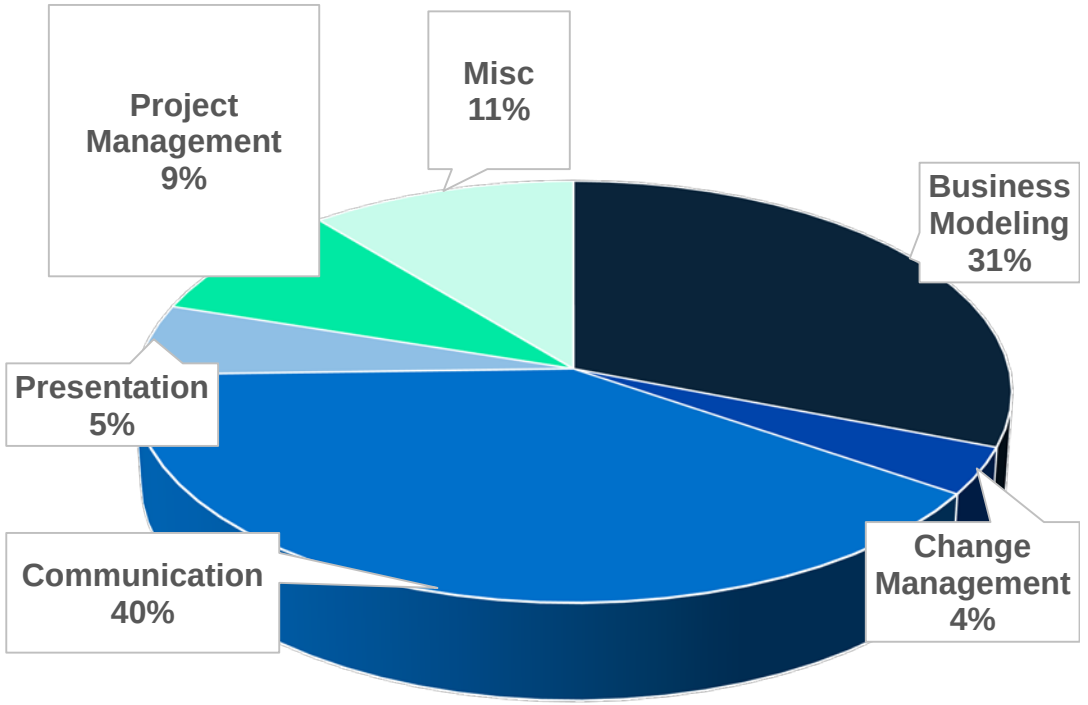
27
Countries



The distribution across countries reflects the company's presence in terms of employee numbers and range of services and greatly contributed to the international networking and collaboration.

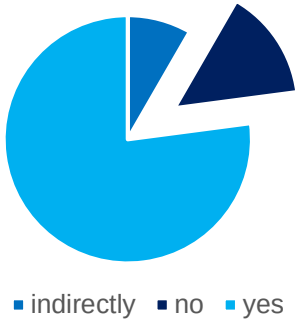
Voice of Global EDP Alumni

- At the end of the year 2023, we have conducted a **survey** among the alumni of the Global Expert Development Program. The participation rate was 40%.*
- For 54% of the alumni their role has changed after participation in the Global EDP.
- When asked for what was/is **different after participation** in the Global EDP irrespective of their role, the alumni reported that they
  - work more international (20%).
  - enhanced their knowledge about TÜV SÜD strategy, product portfolio etc. (19%).
  - changed their mindset with regard to new ways of thinking and taking different perspectives (11%).
- The most **useful skills** the alumni gained/improved during the Global EDP are depicted in the pie chart.



*185 participants, minus 22 in current run, minus turnover led to 119 invites and 48 answers.

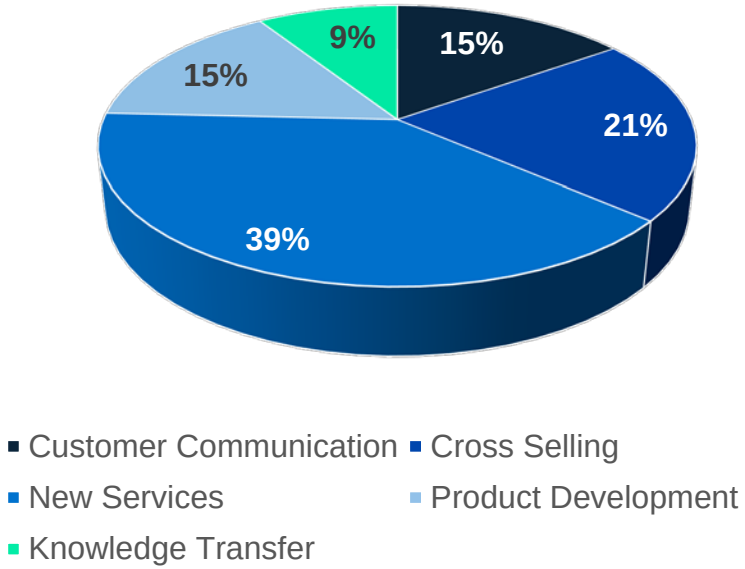
85% of Global EDP Alumni created business impact



In the survey, 85% of the alumni state that they **created business impact using the skills gained in the Global EDP,** of which 8% indirectly.

The Alumni created business impact by

- introducing **new services** (e.g. Recycled Content Certification, AI Certification, sustainability services, new market launch)
- fostering **cross-selling** through broader TÜV SÜD product portfolio knowledge and extended internal network
- demonstrating enhanced **customer communication** when approaching new and serving existing customers
- **developing products** further through digitalization and improvements
- helping other teams and colleagues in their projects with **knowledge transfer**



The Global EDP led to the start of cross-divisional and cross-regional innovation projects

34 projects have been initiated throughout the runs of the Global EDP (2014 – 2020)

of which

3 have been implemented as a TÜV SÜD product (energy consulting service for large buildings; e-charging services for TÜV SÜD facilities; GDPR compliance consulting)

2 have paid into bigger TÜV SÜD innovation projects (smart lift & predictive maintenance power plant)

Many participants have used the new skills to **initiate innovation and / or projects after the program** (16 were specifically mentioned in the alumni survey).

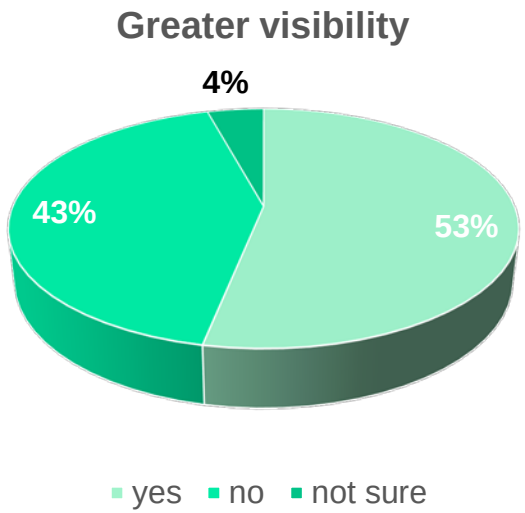
The Global EDP supported the internal network of technical experts and their visibility

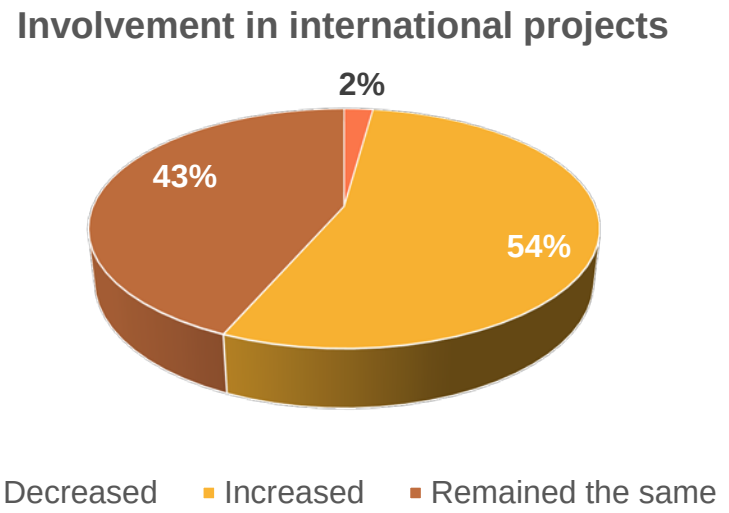
One of the intentions of the Global EDP was to expand the network among our technical experts for better collaboration.

In the survey, 72% of the alumni stated that they have broadened their **network**. This helps them in their daily work life by immediately knowing the right contact person / expert for customer inquiries or for specific questions in projects. They also have better understanding of customer needs across different countries. Additionally, they experience a better co-operation in international projects through personal and deeper connections.

The **visibility** of the majority of Global EDP alumni improved, which was stated by 53% of them in the survey. These alumni explained that the main indicators for this visibility are increased international tasks and project involvement.

This is consistent with the statement that for 54% of the alumni the involvement in international projects has increased.





Conclusion

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TÜV SÜD and TUM – A successful partnership

Our partnership with TÜV SÜD has proven to be special from the outset - their open dialogue, their willingness to foster a culture shift, and their desire to contribute to a genuine professional development opportunity for technical experts – these are among the key aspects that have impressed us about TÜV SÜD throughout our collaboration. We are delighted to work with such a valuable partner and to share our strong technical expertise and comprehensive knowledge-transfer to engineers, in order to contribute to expert development at TÜV SÜD.

Prof. Dr. Claudia Peus

Academic Program Director

TUM Vice President for Diversity & Talent Management

What sets this exceptional program apart is its focus on technical expertise, its strong impact, and the collaborative partnership between TUM & TÜV SÜD. Thanks to our continuous exchange of knowledge and expertise, we have been able to develop, deliver and continuously improve this highly effective program together, making the most of our respective strengths.

Markus Schwarzenböck

TÜV SÜD Head of Corporate Human Resources