



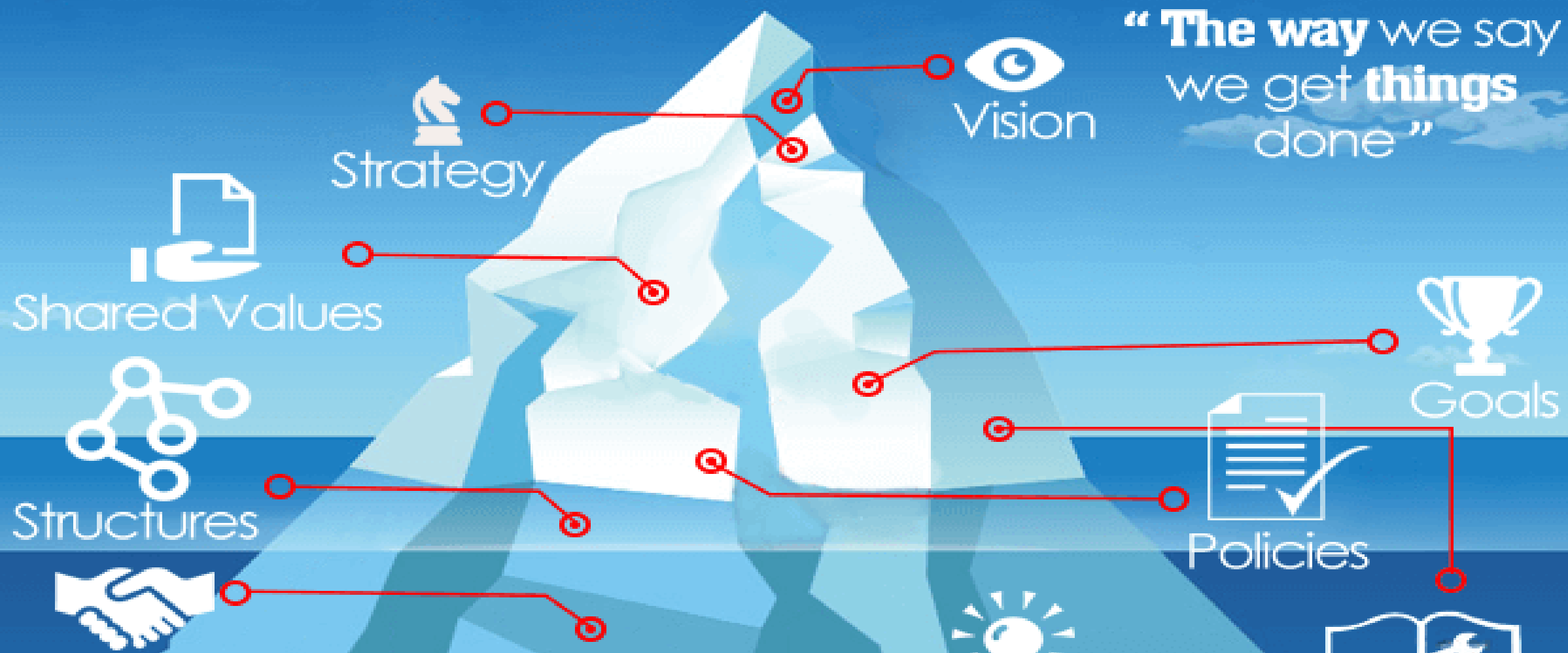
**Mehr Wert.
Mehr Vertrauen.**

**Add value.
Inspire trust.**

How Cultural change brought
about Digital Transformation
@ TÜV SÜD

Mr. Richard Hong,
CEO, TÜV SÜD ASEAN

THE ICEBERG





Why Culture is important to an organisation?

Culture is a strategic enabler

Starbucks



Airbnb



Virgin Airlines



Disney PIXAR



"The only competitive advantage we have is the culture and values of the company....and we all have to own it."

Howard Schultz,
CEO, Starbucks

"Culture is simply a shared way of doing something with passion."

Brian Chesky,
CEO Airbnb

"There's no magic formula for great company culture. The key is just to treat your staff how you would like to be treated."

Sir Richard Branson,
Founder, Virgin Airlines

"A hallmark of a healthy creative culture is that its people feel free to share ideas, opinions, and criticisms."

Ed Catmull,
President, Pixar

**Our transformation started with
a Vision....**

To be the trusted partner of choice for safety, security and sustainability solutions that add tangible value to our clients in a physical and digital world.

As Business Partners

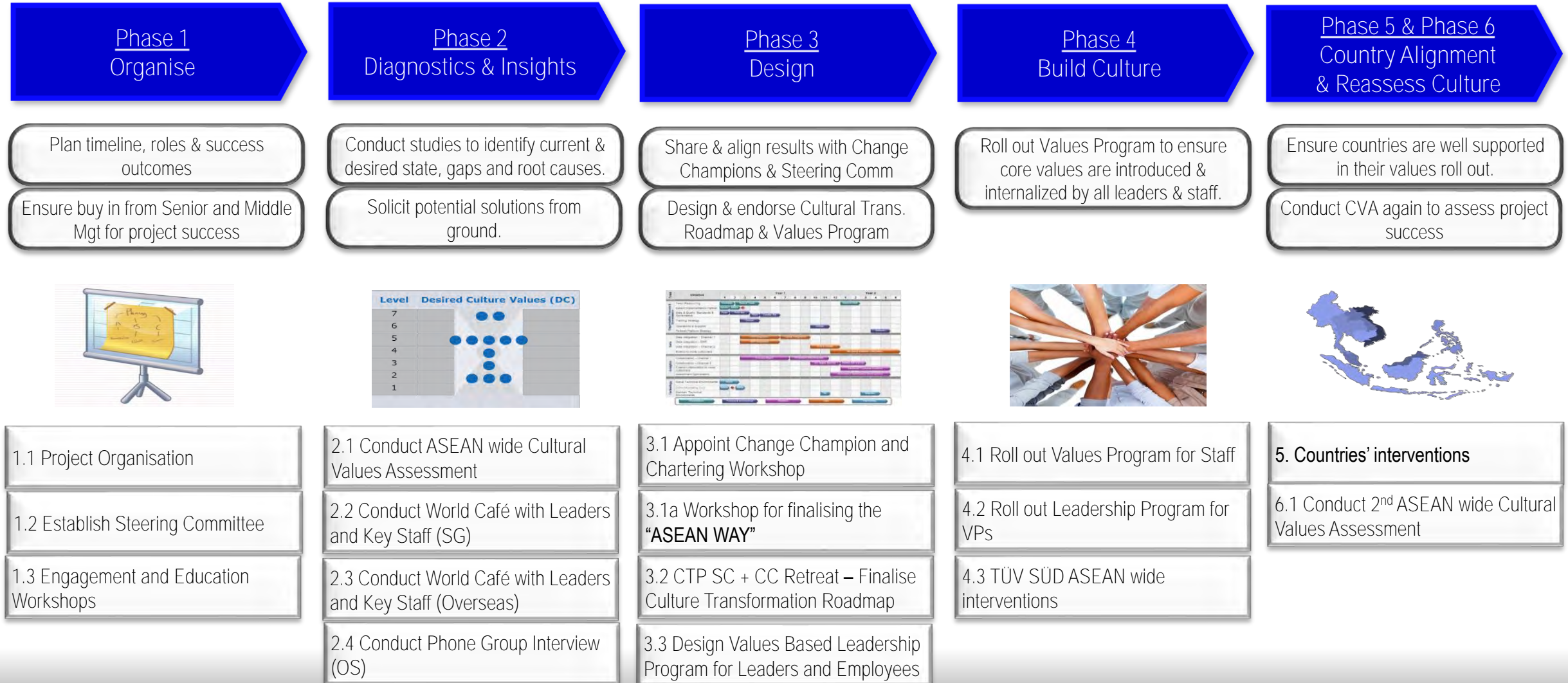


For Our Future



Cultural Transformation @ TÜV SÜD

Our journey....from design to delivery

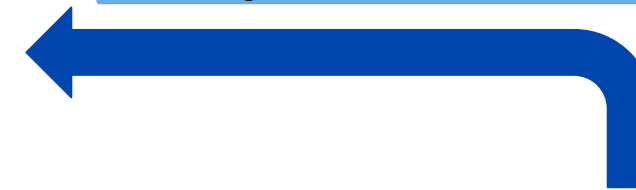


We developed a set of ASEAN values & behaviours

ONE ASEAN T.A.C.T.I.C

| | |
|---|--------------|
| We think and work together as ONE ASEAN team. Collaborate as a region to leverage resources, share knowledge and build expertise. | ONE ASEAN |
| Promote Teamwork . Work collectively to achieve our common goal. | T |
| Acknowledge contributions and appreciate diversity. Treat others as we want to be treated. | A |
| Have the Courage to challenge status quo. Embrace continuous improvement for efficiency & quality. | C |
| Build Trust . Take ownership and honour our commitments. | T |
| Maintain Integrity . Be open-minded, honest and objective in all that we do. | I |
| Understand our Customers' needs. Deliver quality service to increase customer value. | C |

Harmonising our Corporate values + People values +
Management values to form **ONE ASEAN T.A.C.T.I.C**



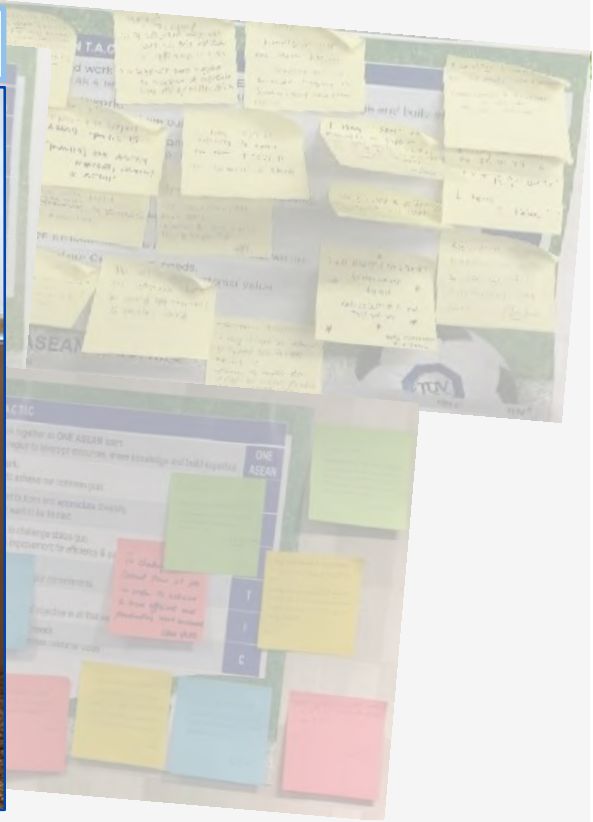
| TÜV SÜD Core Values | Cultural Values Assessment | Mgmt. Rules of Engagement |
|--|--|--|
| Global and intercultural | - | ONE ASEAN voice. |
| Committed to building & sustaining long-term relationships | Teamwork | Win-Win. ASEAN above self. |
| Respectful and trustful | Value employees (Recognition & Growth) | Respect reporting lines. Make each other look good. |
| Competent and solution-oriented | Continuous Improvement (Efficiency & Quality) | Be direct, talk straight. |
| Independent and impartial | Fairness | Walk the Talk. |
| Honest and have strong integrity | Integrity | - |
| - | Customer Satisfaction | Go the extra mile. |

We carried our values across ASEAN...



... pledged our commitment at the workshops...

...and built our ASEAN Strategy House to reinforce our values.



In summary....

- ❑ The “Road to ASEAN” values cascading workshop, was designed to align our goals, work efforts & behaviours, to the vision, strategies & directions of TUV SUD ASEAN.
- ❑ Launched as a core programme across ASEAN, it served as a good engagement platform for our Senior Management to connect and communicate with the staff
- ❑ It's objective was to initiate change, promote innovation & design thinking, provide better understanding of the ASEAN Strategy, and build support towards making our Vision a reality.

How cultural change cultivated Digital Transformation

Launch of Digital Academy in Singapore

TÜV SÜD PSB Launches Digital Academy

Inspiring trust in a changing world



Digital Academy Launch



[f](#) [i](#) [in](#) [t](#) #tuvsuddigitalacademy

Digital Academy Launch

Mr. Ishan Palit

Member of the Board of Management, TÜV SÜD

Mr. Richard Hong

CEO, TÜV SÜD ASEAN

Mr. Shankar Mohan

Head and Vice President of Business Assurance Division, TÜV SÜD ASEAN

Digital Academy Launch on 19th June 2018

Digital Academy is our new e-learning platform:

- Equipped with user-friendly navigation & interactive multimedia courses which provide individuals with the ease of self-paced learning
- Provide a platform for organisations to upscale skills of their employees



Digital Academy: E-Learning

| E-Learning Programmes | No. of Registrants |
|---|--------------------|
| 5 Whys | 184 |
| EU General Data Protection Regulation (GDPR) Awareness | 83 |
| Fishbone Method | 178 |
| IATF 16949:2016 Automotive Quality Management System Overview | 60 |
| ISO 14001:2015 Environmental Management System Awareness | 103 |
| ISO 22301:2012 Business Continuity Management System Awareness | 86 |
| ISO 45001:2018 Occupational Health and Safety Management System | 115 |
| ISO 9001:2015 Quality Management System Awareness | 152 |
| Safe Handling of High Voltage Systems in Motor Vehicles | 40 |
| Grand Total | 1001 |

4.1 What did you like best about this e-Learning course?

"Easy to navigate, understand" - Johannes Bier

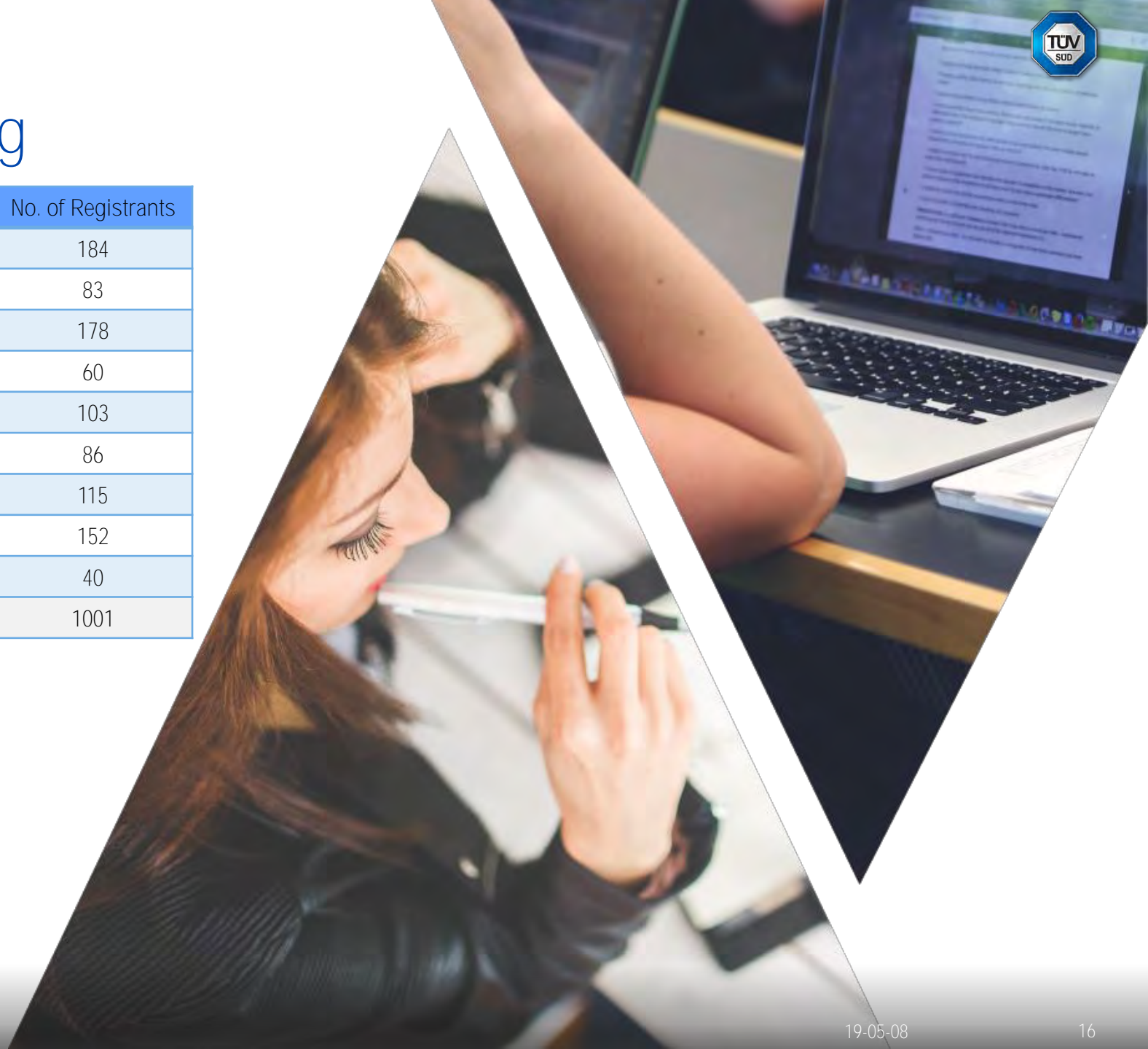
"Flexible and short duration to learn the core subject" - Meng Tak Kiau

"It's quite convenient to study" - Minh Nhat Phan

4.2 What did you like least about this e-Learning course?

"Too short?" - Nur Shahirah Hassan

"No review after completion" - Tung Nguyen



Showcasing our Digital Expertise at events and workshops

ICS Cyber Security Conference

- Business Assurance (BA) – Cyber Security Services (CSS) participated in the conference together with the Centre of Excellence (COE) team
- Objective was to showcase our Cyber Security capabilities within the ICS / Operational Technology field
- TÜV SÜD PSB also shared about its Cyber maturity assessment models, our IEC 62443 certification and consultancy services.



TÜV SÜD participated at the Applications of Printed Electronics and Functional Coating for Smart Wearable Product Innovation.

- TÜV SÜD participated in CIP Project Kick-off Seminar (28 Feb) & CIP S14 Technology Workshop (23 May) on “Wearable Product Certification – Reliability Test & Standards”.
- Chua Su Chen, AVP, EEC presented on **TÜV SÜD’s** testing expertise & certification for wearables.



TÜV SÜD Approach - CIP Workshop by SIMTech



**Wearable Product Certification -
Reliability Test & Standards**
23 May 2018

- Identification of Wearable Product Applications and its Market Segments.
- Test Standards (Safety, EMC / RF, Quality & Performance - Textile, Chemical, Battery & Reliability).
- Regulatory & Certification Requirements.
- Case Study on Wearable Technology project/s based on best industry practices.



EV & AV Masterclass for transport and logistics companies

Electronic Vehicles (EV) & Autonomous Vehicles (AV) Masterclass

- TÜV SÜD Digital Academy collaborated with the Employment & Employability Institute (e2i) of Singapore to roll-out 2 Masterclass workshops for transport & logistics companies, industry associates and Govt. agencies in Singapore.
- TÜV SÜD Global Experts, Mr Volker Blandow (Global Head of E-Mobility) & Dr. Houssem Abdellatif (Global Head Autonomous Driving and Advanced Driver-Assistance Systems (ADAS) were invited as keynote speakers for each respective workshop.

Masterclass on Electric Vehicle with TÜV SÜD PSB

1 March 2019, Friday | 9.00am to 5.00pm | Classes Main Room for Employment and Employability Institute (e2i) Level 3, East Wing, Singapore 117439

The masterclass on electric vehicle aims to promote EV awareness, focusing on the EV-related issues and safety standards. Gain in-depth knowledge from domain experts on the background and insights of EV related products and services.

Get up to speed with the knowledge needed to drive in the highly dynamic EV market. The course will set the stage for a series of future EV industry training, timely to meet with the revolutionary transformation in the Automotive Industry.

PROGRAMME OUTLINE:

- 1. EV Charging trend and market outlook
- 2. The impact of integration of EV distribution on manufacturing power system
- 3. Standards and regulations for EVs Working
- 4. Safety & environment: policies & implementation
- 5. Innovative EV charging infrastructure
- 6. Clear & consistent standards & safety of EV charging operation
- 7. Need for continuous charging

WHO SHOULD ATTEND:

- EV industry stakeholders of automotive and transportation

REGISTRATION:

Go to the e2i website for more information

<https://www.e2i.com.sg/AVMC>

Organised by: e2i, TÜV SÜD PSB

Masterclass on Autonomous Vehicles with TÜV SÜD PSB

5th April 2019, Friday | 9am – 6pm
LEVEL3, Mapletree Business City,
20 Pasir Panjang Road (East Wing), #03-22/24, Singapore 117439

The Masterclass on Autonomous Vehicle aims to promote AV awareness, focusing on the AV technology advancement and safety standards.

Gain in-depth knowledge from domain experts on the background and insights of AV related products and services. Get up to speed with the knowledge needed to thrive in the highly dynamic AV market. The masterclass will set the stage for a series of future AV industry training, timely to meet with the revolutionary transformation in the Automotive Industry.

PROGRAMME OUTLINE:

- 1. Introduction to Highly Autonomous Driving
 - AV Industry Landscape
 - Technology Vs Regulation Roadmap
 - "How Safe are AVs?"
- 2. Basic AV System Architecture and Operational Design Domain
- 3. Operational Safety of Autonomous Vehicles
- 4. Current testing framework for AVs:
 - Scenario based testing
 - Simulation Testing
 - Physical Testing on circuit/road
- 5. Connectivity and the challenges

WHO SHOULD ATTEND:

Mid to senior management in Transport Industry

REGISTER NOW!

<https://event.e2i.com.sg/web/AVMC>

Registration closes on 4 April 2019, 5pm or upon full registration.
Admission is strictly by pre-registration.


Organised by: e2i, TÜV SÜD PSB

Supervisory Control and Data Acquisition (SCADA) Training

- In 2019, TÜV SÜD PSB Singapore was awarded the tender for the provision of Cyber Security training for a local statutory board.
- The programme aims at improving the general awareness of Cyber Security best practices by training participants on ways to respond to Industrial Cyber Security incidents.
- It is designed to help operators and engineers have a better understanding of the threatening landscape in the cyber world and know the ways to protect their critical infrastructure and data, from new vulnerabilities and emerging threat vectors.



Mapping courses from Institutes of Higher Learning (IHL) to SIRI

Mapping of IHLs' Courses to SIRI (Smart Industry Readiness Index)





In collaboration with SkillsFuture Singapore, TÜV SÜD PSB will be conducting a complimentary workshop on **Mapping of IHLs' Courses to Smart Industry Readiness Index (SIRI)** on 29th April 2019.

Mapping of IHLs' Courses to SIRI Workshop

The workshop aims to guide Institutes of Higher Learning (IHLs) on how to accurately map their respective available courses in alignment to the 16 Dimensions of SIRI. Through the course, attendees will gain an in-depth understanding of SIRI through case studies of companies who have undergone SIRI assessment.

Course objectives:

- Participants will undergo an introduction to SIRI and how it works
- Learn how to map existing courses to the 16 Dimensions of SIRI
- Case study sharing of companies who have undergone SIRI assessment
- Hands-on workshop on mapping
- Review draft of course mapping

Mapping Period: Participants will be given 2 months to complete the mapping after the workshop.

Contact us for any queries

Write to us:
training@tuv-sud-psb.sg

Workshop details

Day & Date:
Monday, 29th April, 2019

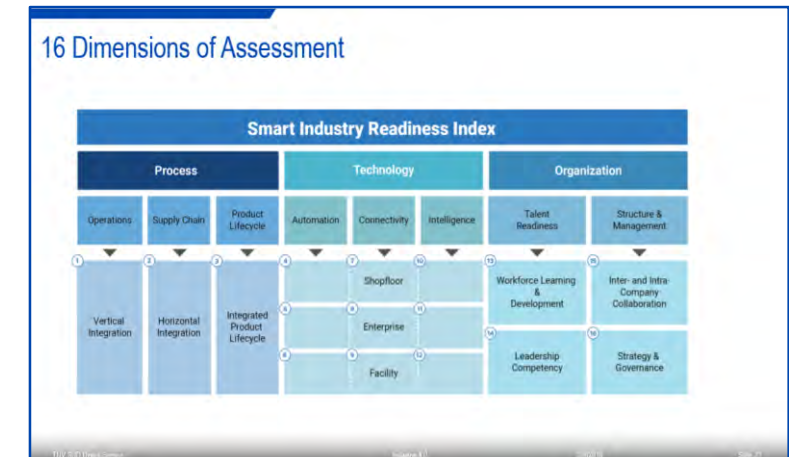
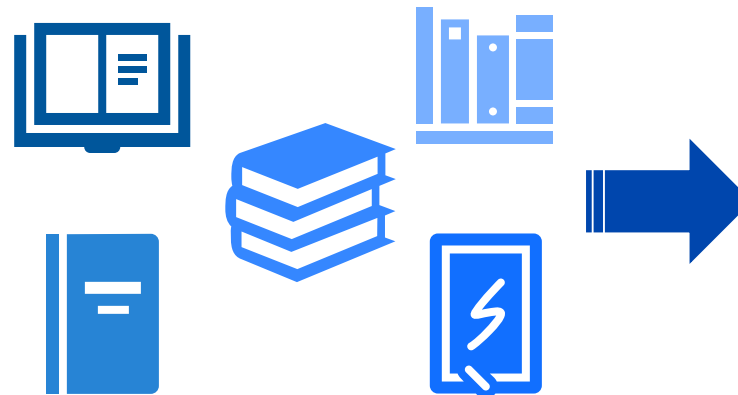
Time:
9.00 am – 5.00 pm

Venue:
Da Vinci Lounge @ TÜV SÜD PSB
1 Science Park Drive,
Singapore 118221

For more information, please click [here](#).

Mapping of IHL courses to SIRI

- In collaboration with SkillsFuture Singapore, TÜV SÜD Digital Academy conducted a workshop on Mapping of IHL Courses to the Smart Industry Readiness Index (SIRI).
- The workshop aims to guide IHL's on how to accurately map their respective available courses in alignment to the 16 Dimensions of SIRI.

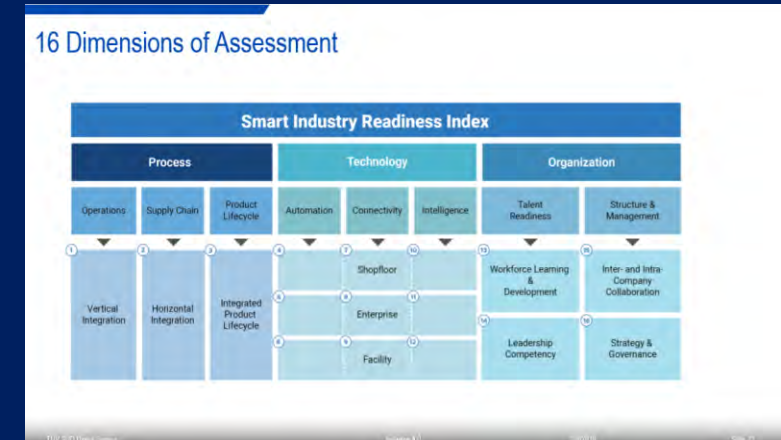
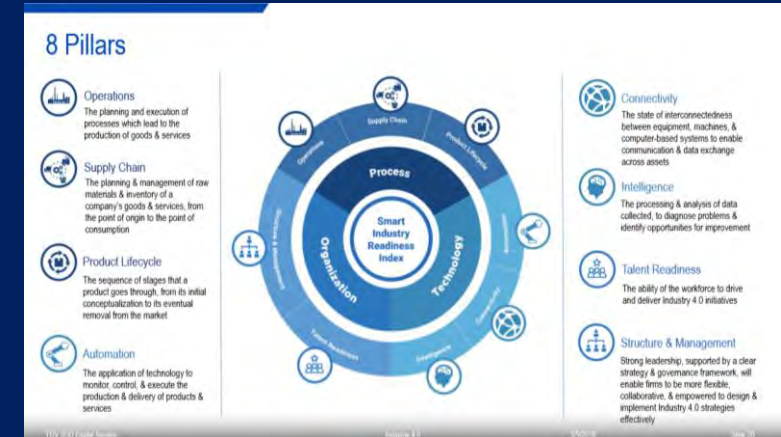


New business collaborations in the Digital World

Smart Industry Readiness Index (SIRI)



- Economic Development Board (EDB) **S'pore**, appointed TUV SUD, Digital Services, to help develop a diagnostic tool which companies, across all industries & sizes, could use to,
 - better understand Industry 4.0,
 - evaluate the state of their facilities,
 - and architect a comprehensive transformation roadmap to deliver sustained value for their business.
- SIRI is the world's first Industry 4.0 tool to catalyse the transformation of industrial sectors during in this 4th Industrial Revolution.



First certification body to embark on ISASecure® ISA/IEC 62443 certification programme

- TÜV SÜD PSB inked an Application and Contract with the ISA Security Compliance Institute (ISCI) and the Singapore Accreditation Council (SAC) to conduct certification assessments using ISASecure certification specifications.
- **TÜV SÜD PSB is South East Asia's first** certification body to embark on the ISASecure® ISA/IEC 62443 Certification Program.



TÜV SÜD develops Drone Flyaway Risk test methodology

- TÜV SÜD has been requested to develop the test methodology for Drone BVLOS (Beyond Visual Line of Sight) applications in **Singapore's urban environment** based on Avetics use cases.
- Selected and funded by Civil Aviation Authority of Singapore / Ministry of Transport over 2 years. Results will be used for future drone regulatory considerations, as Proof of Concept whether 10^{-7} risk is achievable for Drone system airworthiness criteria.



Centre of Excellence for Testing & Research of Autonomous Vehicles - NTU



Singapore has set up „Smart Mobility 2030 strategy“

- Convenient and faster travel experience
- Seamlessly connected transportation system through state-of-the-art ITS technologies
- Access to a variety of real-time information on-the-move
- Safer travelling, also for the elderly and mobility-challenged
- Sustainable and environmentally friendly land transport

Strategies:

- Implement innovative and sustainable smart mobility solutions
- Develop and adopt ITS standards
- Establish cooperations with private sector

Autonomous bus for a mass transport service that operates on fixed routes and scheduled timings.



AV Fix and scheduled public transport for decreased manpower needs



AV Mobility-on-Demand for car-light living

AV Mobility-On-Demand for point-to-point travels using a network of demand responsive shared vehicles

AV Trucks for movement of goods on expressways during night time.



Truck Platooning for decreased congestion

CETRAN

- Development of AV Safety testing methodology and best practices in line with technology readiness in:
 - Vehicle technology
 - Evaluation & Testing technology
 - Technical legislation
- Short term targets: **CETRAN AV FUNCTIONAL SAFETY PROJECT**
 - Enable pilot projects for AV car sharing, robo-taxis
 - Create confidence and public acceptance
- Long term targets: **STANDARDIZATION, REGULATION**
 - Determine standards for Autonomous Vehicles in Singapore
 - Early adoption of the AVs in line with technology readiness
 - Adopting regulations to the new technology



TNO innovation for life

Developing Leaders & Experts for the Digital Workplace

Leadership & Expert Development Programmes

Fit4Digital



24 participants at Fit4Digital
Run 3 Module 1 in Singapore
30 May – 1 Jun 2018



Module 1 on Fit4Digital@TÜV
SÜD facilitated by Prof. Dr.
Jan-Marco Leimeister



Project Group working on
Value Proposition Canvas



Group Work – Participants
working on case studies

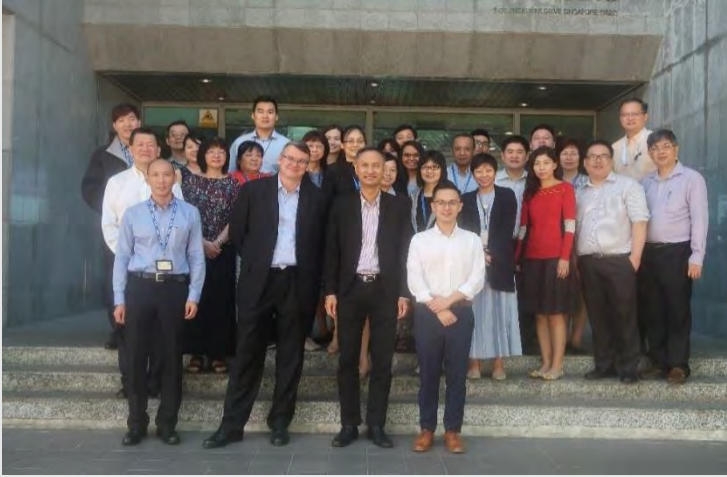


TÜV SÜD Projects Kick-Off
– Pitching of Ideas



Networking Dinner with
Senior Management in
Singapore

Smart Industry Readiness Index's (SIRI) Workshop, 15th May 2018



- Gearing towards Industry 4.0 initiative, ASEAN CEO, Mr Richard Hong, mooted the SMART readiness index assessment to compare TÜV SÜD PSB against the **Smart Industry Readiness Index's (SIRI)** 16 dimensions framework in order to ascertain our strengths and areas for readiness improvements.

Fit for Digitalisation!....Together into the digital future!

Global Intranet

Developed by Global HR & Digital Service, CoE, the [Digital Learning](#) page offers:

- [e-learning module](#)
 - digitalisation at TÜV SÜD
- [Learning nuggets](#)
 - articles & short videos
- [Glossary](#)
 - digital concepts and terminology

HUMAN RESOURCES

[Back to ...](#)

[Digital Learning](#)

[TÜV SÜD goes digital](#)

[Learning Nuggets](#) >

[Glossary](#) >

23.04.2018, last change 23.07.2018

DIGITAL LEARNING

Fit for Digital Transformation!

Digitalisation affects us all and will have an increasing impact on our daily lives and work. We want to benefit from the opportunities offered by digitalisation and lead our company into the digital future together.

On this page you can find an e-learning programme about digitalisation at TÜV SÜD, short video learning nuggets and articles about digital technology topics as well as a glossary.



TÜV SÜD GOES DIGITAL



The e-learning »TÜV SÜD goes digital!« presents current digital TÜV SÜD projects as well as our corporate strategy for digital transformation. → [More](#)

LEARNING NUGGETS



Industry 4.0, Artificial Intelligence, Cybersecurity... you would like to find out more? Here are short video learning nuggets and articles. → [More](#)

GLOSSARY



Short definitions of digital concepts and technologies. → [More](#)

Thank You

