เสวนาเครือข่ายจัดการความรู้ ระหว่างมหาวิทยาลัย ครั้งที่ 37

การจัดการความรู้กับการพัฒนาองค์กร

22 ธันวาคม 2564

PTTEP

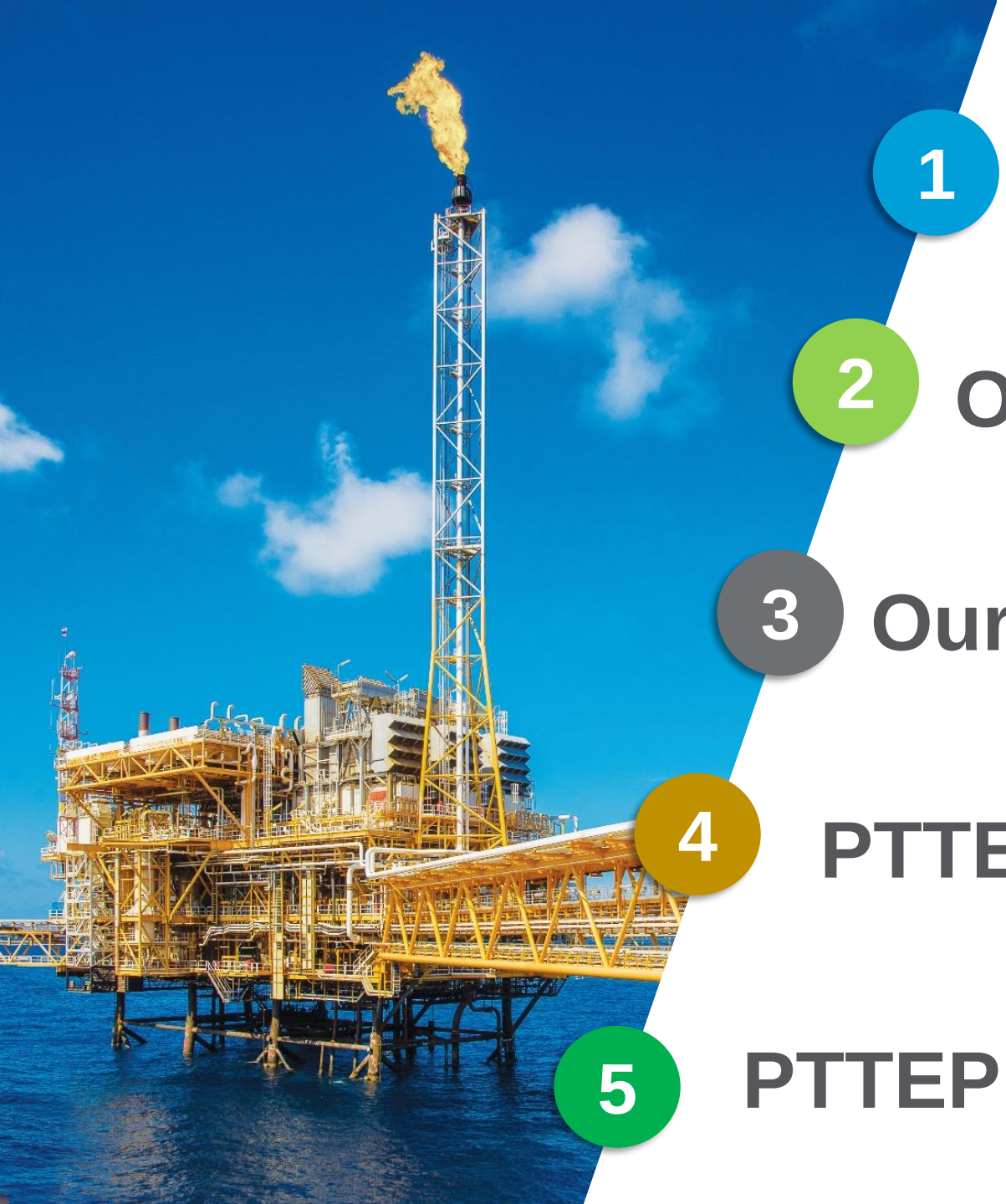
เบญจมาภรณ์ บุญศิริยะ
เจ้าหน้าที่อาวุโส บริหารองค์ความรู้
บริษัท ปตท.สำรวจและผลิตปิโตรเลียม จำกัด (มหาชน)

มหาวิทยาลัยวลัยลักษณ์

PTTEP
Knowledge Management & Innovation Journey

22.12.2021

Energy Partner of Choice



1 About PTTEP

2 Our Business

3 Our KM & Innovation

4 PTTEP Transformation

5 PTTEP New Business

PTTEP Vision & Strategy

Vision

Energy Partner of Choice

through **Competitive Performance and Innovation** for Long-term Value Creation

PTTEP was
founded on **20 June 1985**

Exploration *Production*

Member of
Dow Jones Sustainability Indices
Powered by the S&P Global CSA

PTTEP Sustainable Development

KM is a key enabler to enhance organizational performance and Innovation.

Corporate Values

PTTEP

Explorer

Passion

Synergy

Performance Excellence

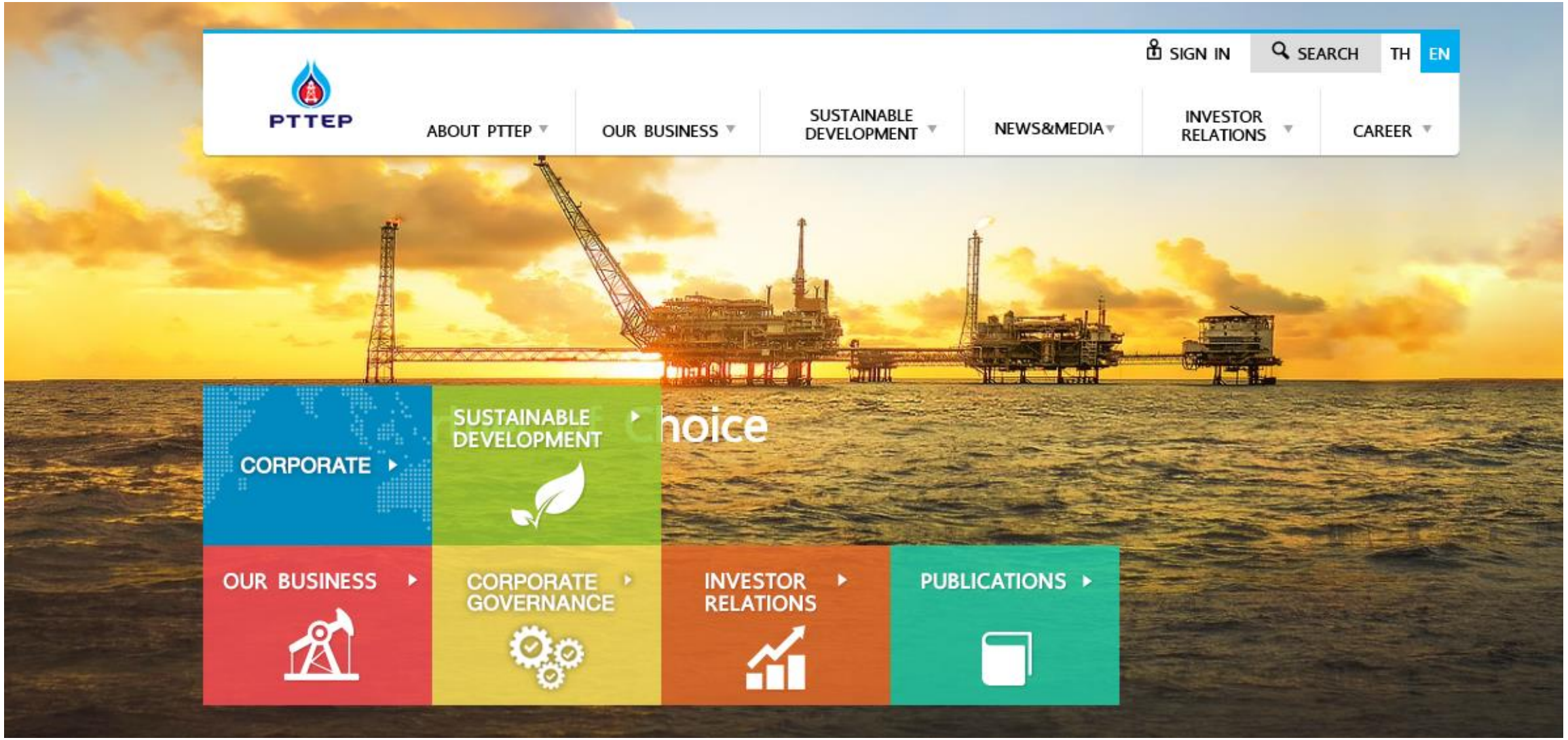
Innovation

Responsibility for Society

Integrity & Ethics

Trust & Respect

www.pttep.com



KM Journey

START!

1999
Learning Organization

2010
Web 2.0 Portal

2012
Create KM Culture/
Capture Lessons learned/
Embed PAR to Work Process/
Build KM Capability

2003
Geosciences CoP/
KM Portal

2009
International Business CoP

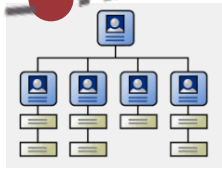
2006
Engineering CoP

2015
Lessons Learned Center

2014
New KM Web on SharePoint 2013
- New CoPs: M&A, S1 Subsurface, S1 Operations, Basin Analysis, R&D

2019
- Expansion to all FGs
- KM Facilitator Camps

2016
Cross-discipline CoPs : Decommissioning



2020
- KM for Process Improvement
- KM for Innovation

2021-2030
- Innovative & HPO

Partner of Choice

PTTEP

Knowledge Management Policy

Knowledge Management (KM) is the key contributor to PTTEP's long-term competitiveness and sustainability. It is developed and shared amongst our competent and motivated staff in the *EP* SPIRIT environment. PTTEP takes the initiative to develop systematic approach to cultivate KM culture of creating, sharing and applying knowledge to become an innovative and high performance organization.

To respond to the Company's vision to be the Energy Partner of Choice, PTTEP shall:

1. Ensure successful KM implementation driven by accountable leadership and staff commitment to support organizational transformation;
2. Promote a continuous KM culture in which everyone believes that lessons learned and best practices are PTTEP valuable knowledge assets;
3. Adopt KM process as part of PTTEP overall strategy and business process;
4. Inspire staff to create new initiatives and innovation to enhance organizational capabilities;
5. Encourage staff to participate in Communities of Practice (CoPs) and KM activities;
6. Foster staff's collaboration in efficiently and effectively sharing and leveraging their knowledge and expertise within, across disciplines and PTT Group.

The successful implementation of this policy requires total commitment from PTTEP management and staff at all levels.

(Mr.Phongsthorn Thavisin)

Ref. No. 11039-PCY-001-R01, Effective Date: 1 February 2019

To become an innovative and high-performance organization

PTT GROUP WAY OF CONDUCT FRAMEWORK

PTT Group Strategy

Governance Principle

1. Key Strategic Positions
2. Rule and Regulation
3. Reporting Line and Performance Management
4. Multi level Governance
5. Management Committee

Policies

Strategic Alignment (MUST DO)

GRC
1. Corporate Governance
2. Risk Management
3. Compliance
4. Internal Control

F &A
6. Finance
7. Accounting
8. Tax

Planning & Investment
5. Strategic Planning

Core Values
9. Core Values

Performance Excellence (SHOULD DO)

Assurance
10. Internal Audit

Corporate Citizenship
11. CRSR

Sustainability
12. Sustainability MGT and BCM

Protecting Value
13. QSHE (SSHE, 5S)

HROD
14. HR MGT
15. Organizational Structure
16. Knowledge Management

Service Center
17. Procurement
18. RD & T
19. Digital
20. Insurance

Deployment

1. Strategic Owner (PTT 100% Owned)
2. Strategic Director (Majority Owned)
   - 2.1 CEO from PTT
   - 2.2 CEO from Others
3. Holding
4. Financial Investors (Minority Owned)

Enablers

Technology

Advisory (PTT WoC Toolkits, GRC Helpdesk, Subsidiaries Advisory Program)

Leadership

KM VISION:

Sustainable Learning Organization

KM in Action

7 กระบวนการสำคัญในการบริหารองค์ความรู้สำหรับผู้บริหาร

เพื่อให้ ปตท.สผ. เป็นองค์กรแห่งนวัตกรรมที่มีสมรรถนะสูง และมีความสอดคล้องกับการบริหารองค์ความรู้ของบริษัทในกลุ่ม ปตท. อีกทั้งองค์ความรู้ที่สำคัญต่อการดำเนินธุรกิจสามารถนำไปประยุกต์ใช้และต่อยอดสร้างมูลค่า/คุณค่าให้กับองค์กร

ขอเชิญชวนพี่ๆ ผู้บริหารร่วมเป็นส่วนหนึ่งในการส่งเสริมให้เกิดการเรียนรู้อย่างยั่งยืนในองค์กรของเรา ดังนี้

- **เข้าใจและบอกต่อ**พนักงานถึง**ประโยชน์ของการจัดการความรู้**ที่จำเป็นต่อการปฏิบัติงานของหน่วยงานของท่าน
- **ในการประชุม**ภายในหน่วยงาน**ควรมี** Agenda **ในด้าน** KM
- ผู้บริหาร**มีการแบ่งปันความรู้และประสบการณ์ในการทำงาน** เช่น success, failure และ lesson learned จากการทำงาน
- **ส่งเสริมและสนับสนุนให้พนักงานมีการแลกเปลี่ยนเรียนรู้**เกี่ยวกับความรู้และประสบการณ์ในการทำงานเพื่อให้สามารถนำมาประยุกต์ใช้ได้
- **ส่งเสริมและสร้างบรรยากาศ**ให้พนักงานแสดงพฤติกรรมในด้านการแบ่งปันความรู้ผ่านช่องทางต่าง ๆ
- **ยกย่อง ชมเชย พนักงาน**ที่แสดงพฤติกรรมโดดเด่นในด้านการจัดการความรู้

PTTEP
Energy Partner of Choice

"An Innovative and High Performance Organization where knowledge **Creating, Sharing** and **Applying** are the way we work."

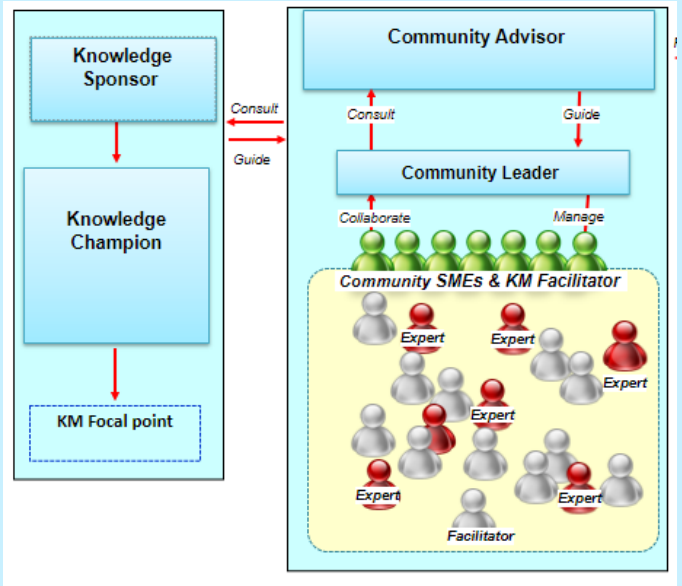
"To enhance **Organizational Capabilities** by **learning** and **innovating** for competitive advantage."

PTTEP Knowledge Management

KM Cycle

KM Governance

Corporate Strategy Division



KM Partners

Technology Management

Business and Organization Transformation

AI AND ROBOTICS VENTURES

PTTEP

PTT Exploration and Production Public Company Limited

KM Management System Guideline

Document Code: 11039-GDL-001-R00

1 May 2020

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Energy Partner of Choice

PTTEP's KM Strategy

PTTEP's KM Strategy

- Delivering Business Value
- Nurturing KM and Innovative Culture
- Enhancing PTTEP Visibility

Grow Together

Collaborate Better

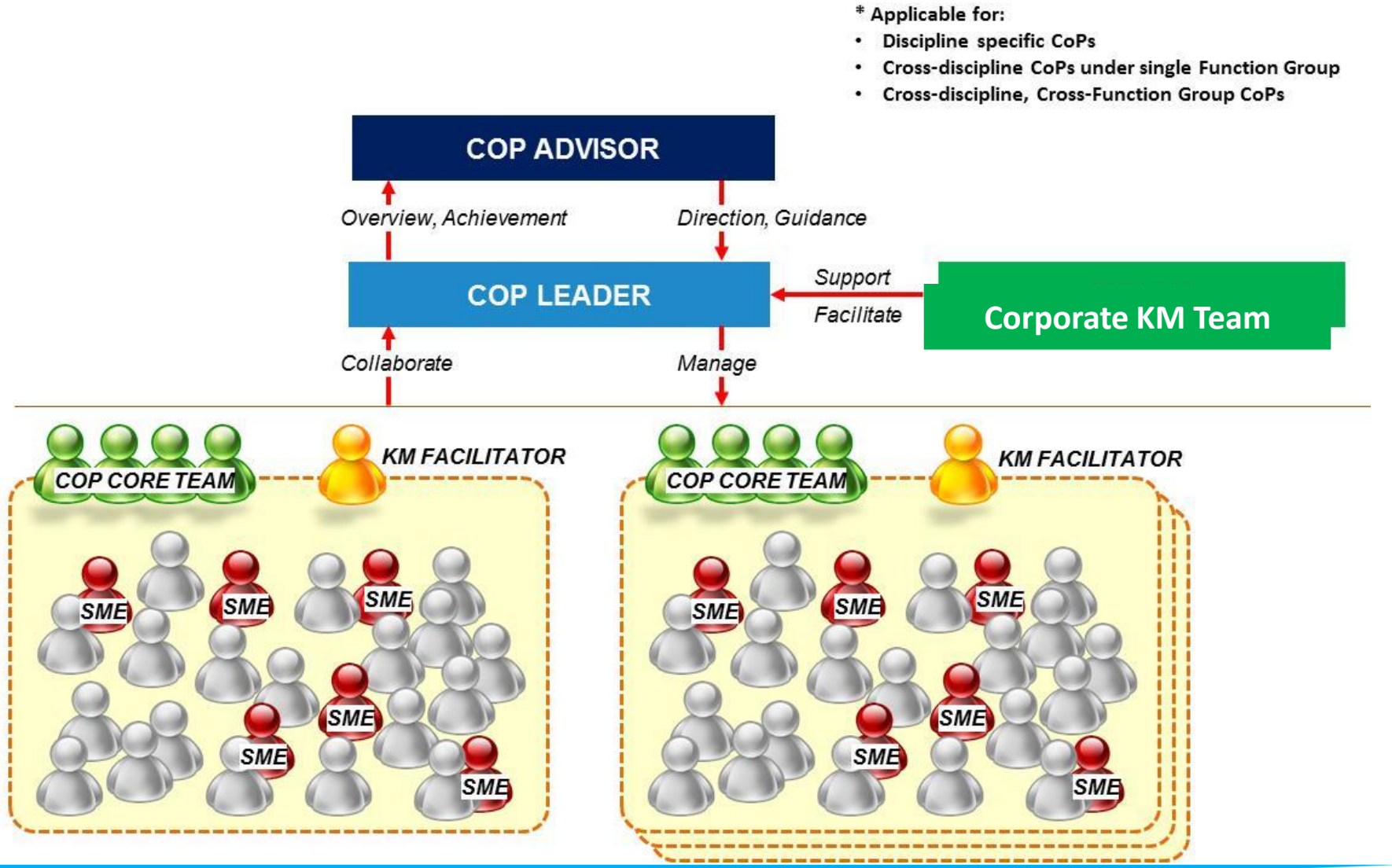
Lead Together

KM Tools

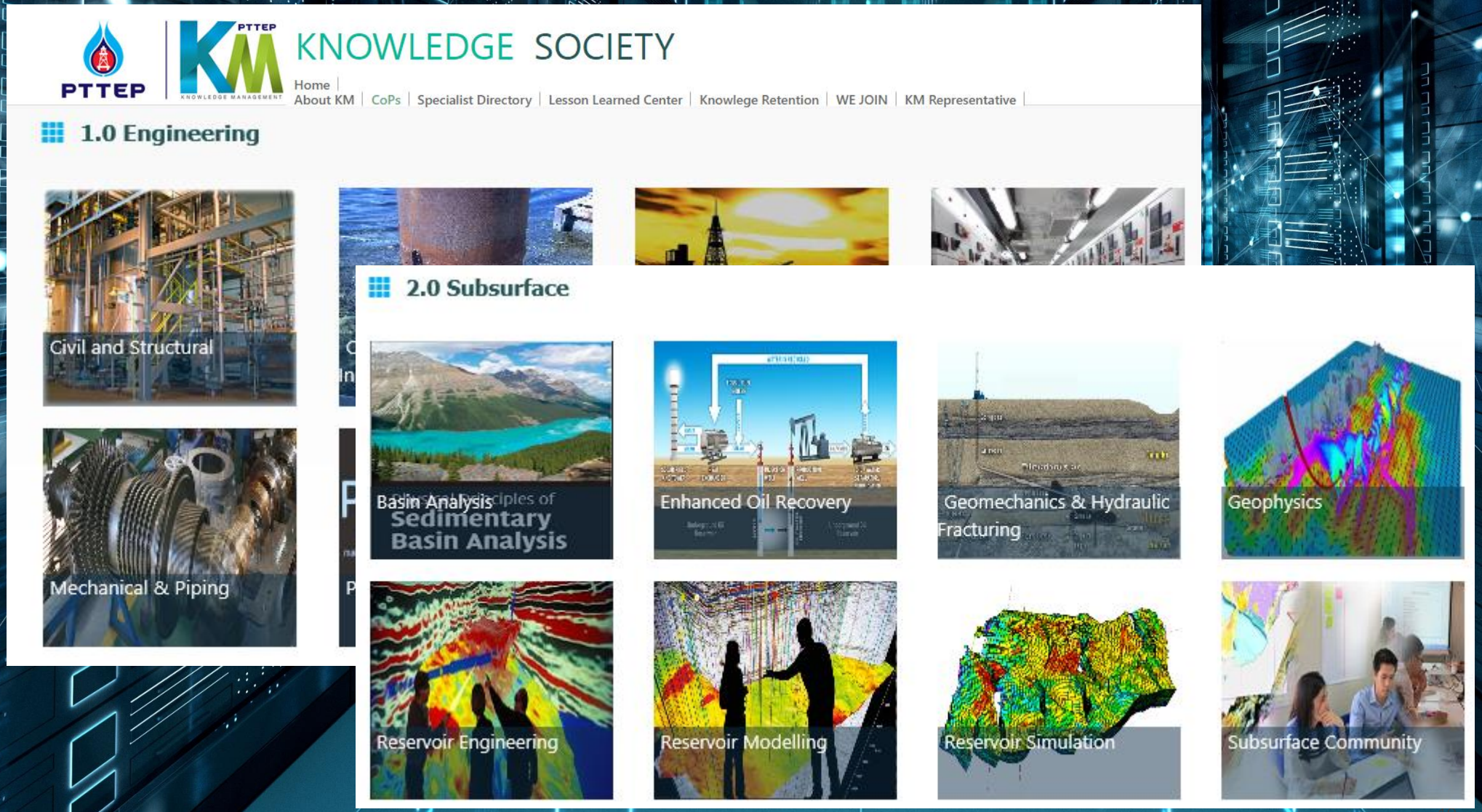
A Community of Practice (CoP)

is **a group of people who come together to share and learn from one another**, both virtually and face-to-face. CoPs are held together by a common interest in a body of knowledge and are driven by a desire and need to share problems, experiences, insights, tools and best practices.

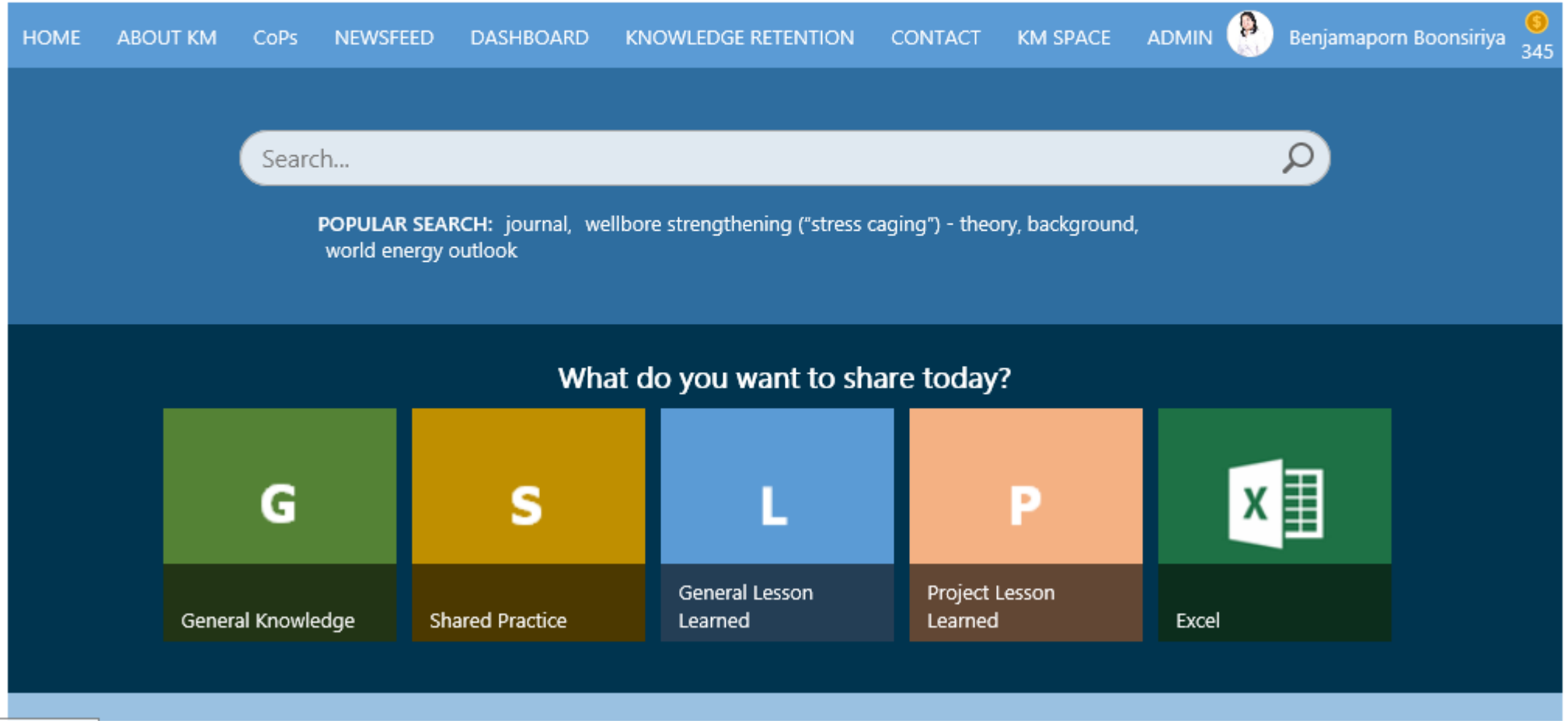
Community of Practice (CoP) Structure



KM Implementation via CoP



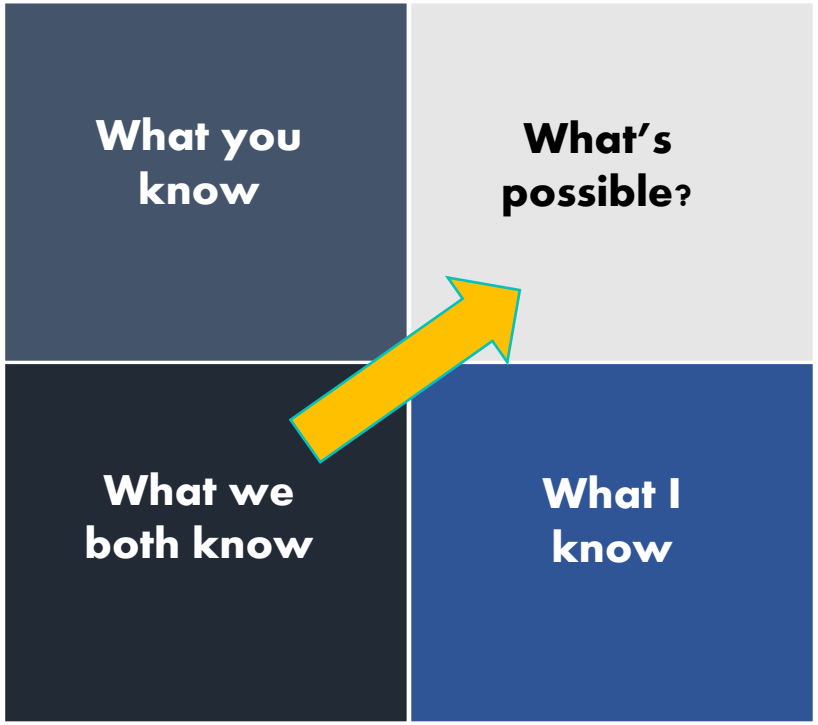
KNOWLEDGE SOCIETY



Knowledge Capture Process

Peer Assist, After Action Review, Retrospect (PAR)

Peer Assist ‘Learning before’



- ✓ Learning before doing
- ✓ Learning from what others know
- ✓ Sharing what we know
- ✓ Gaining new knowledge together before taking actions

“Peer Assist” is a meeting or workshop where outside experts and people from other teams, with familiar experience on similar project elsewhere, are invited to share their experience, insights, and knowledge before embarking on a project or activities.

After Action Review 'Learning during'

What was supposed to happen?	What actually happened? (incl. the unplanned)
Why is it different from our plan?	What can we learn from this?

- ✓ Review what has happened
- ✓ Summarize new knowledge
- ✓ Decide what action should be taken next

"After Action Review (AAR)" is a tool to evaluate and capture lessons learned. It takes a form of a quick and informal discussion at the end of a short project or at a key stage within a project or activity.

Retrospect ‘Learning after’

What was the objective of the project? Draw a timeline.	What did we achieve?
What were the successes? Why? How can we repeat the success?	What were the disappointments? Why? How can we avoid them in the future?

- ✓ Retain learning from what has happened
- ✓ Understand why it happened
- ✓ Look at what went well, what needs improvement & what lessons should be applied in future project

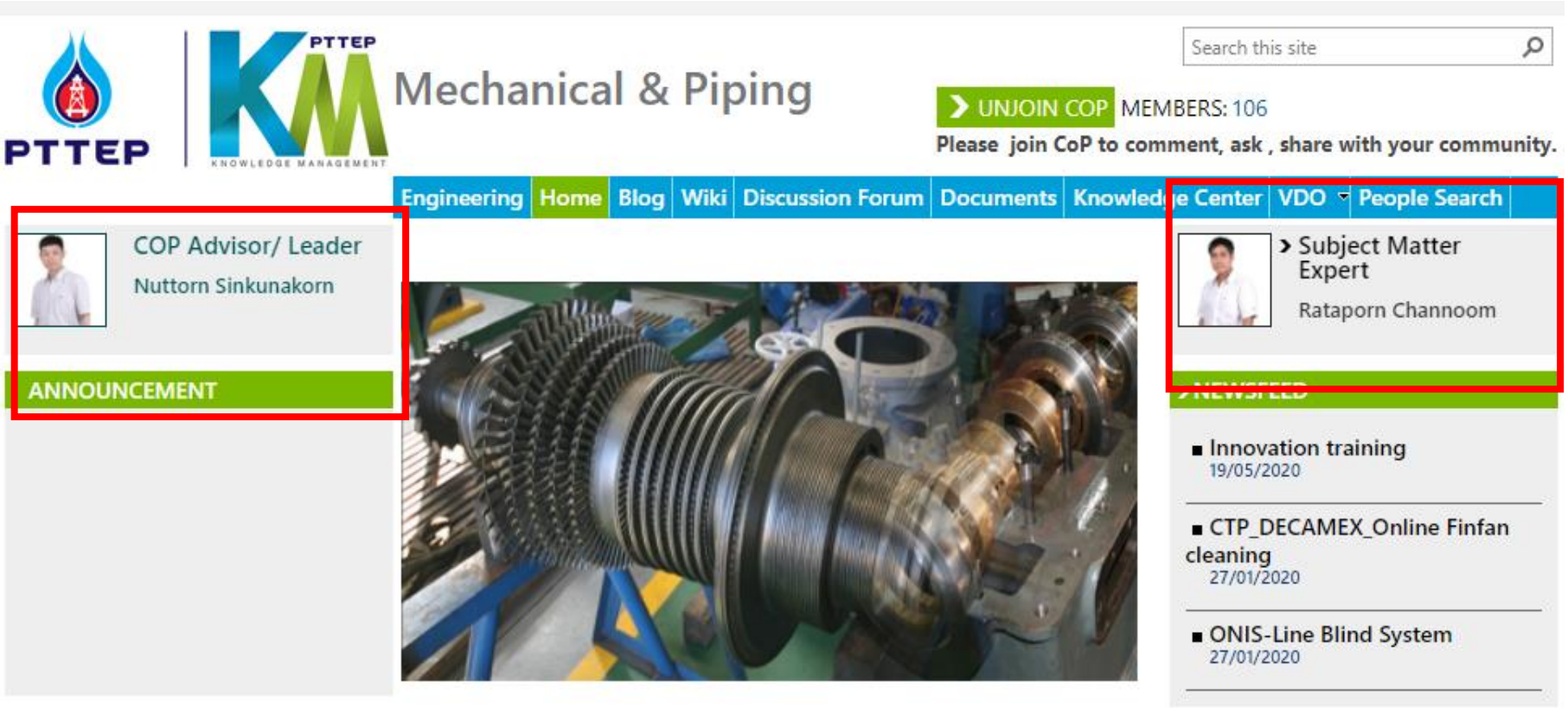
“Retrospect” is an in-depth discussion that happens **AFTER** the completion of a project, event or activity. It is structured to help the people involved reflect on the project in detail.

Knowledge Mapping

Strategic Map

Process Map

Expert Locator



Knowledge Retention

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All

Search name

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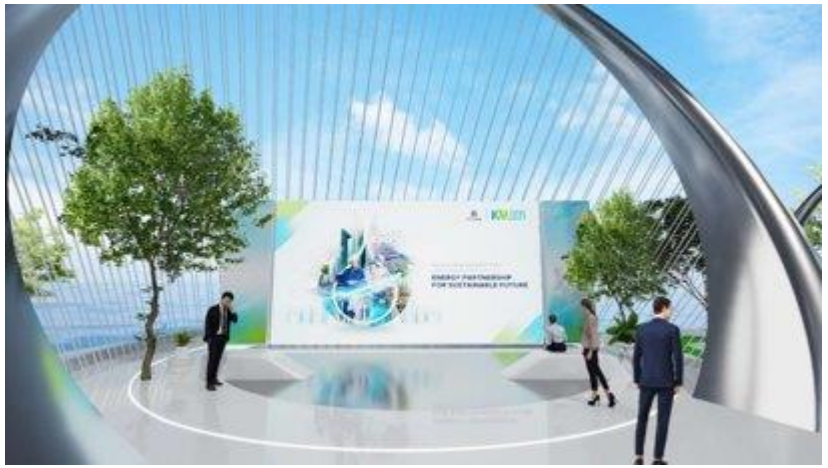
Enhance KM Culture with KM Activities

KM Week



Knowledge Management News
KM WEEK 2021
VIRTUAL CONFERENCE
Professional Area
Submission Deadline Revised
Shaping for Sustainable Future

Opening Ceremony
PTTEP
KM WEEK 2021
Mrs. Natruedee Khositaphai
Keynote Address
Dr. Sarawut Kaewtathip
Director General,
Department of Mineral Fuels

Expert Talk 1
"Meeting Next Normal Expectation"
Dr. Pakorn Peetathawatchai
President of The Stock Exchange of Thailand
Expert Talk 2
"Exploration Success for E&P Long Term Sustainability"
Mr. Kanok Intharawijitr
EVP., Geosciences, Subsurface & Exploration Group
Expert Talk 3
"Turning Crisis into Opportunity
Asst. prof. Dr. Ake Pattaratanakun
Assistant to the President for Communication, Brand, and Alumni Relations, CU.

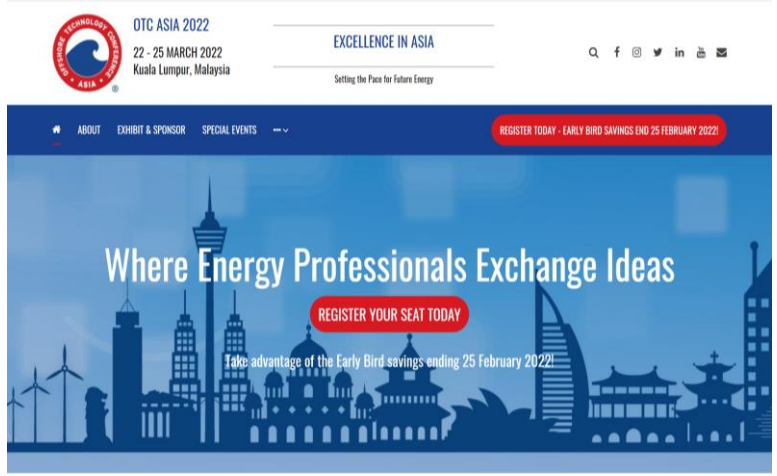
25th Technical Forum
3rd Business Forum

PTTEP Knowledge Management Activities

Corporate Knowledge Sharing & Lessons Learned Sessions : Support Business Strategy

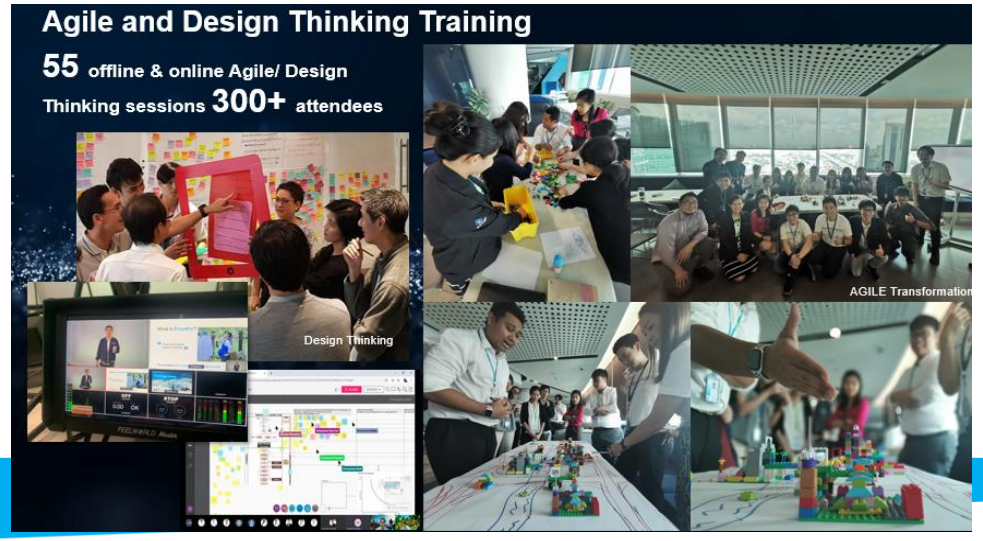
PTTEP Knowledge Management Activities

International Conferences



Building Capability & Expertise

Capability Management :
Management & KM Facilitator Workshop



PTTEP Technology and Innovation Center

Research Center and Test Facility

Opportunity to Explore

HANGZHOU

Scent Realm

In the world of digital virtualization, people have been trying to virtualize, augment and reproduce the "reality" through VR, AR and MR technology. These technological breakthroughs enable us to extend our sense of touch, hearing, sight and taste so that we could have a better life experience. However, until now, we are missing an important aspect: sense of smell. And that's why ScentRealm is committed to unveiling the mystery.

Key Learning: The next step of immersive; sense of touch, hearing, sight, and taste.

气味王国
SCENTREALM

Hefei

Institute of Plasma Physics, Chinese Academy of Sciences (ASIPP)

ASIPP was founded in September 1978 for the purpose of the peaceful utilization of fusion energy based on the tokamak approach. The main area of research covers high temperature plasma physics, magnetically confined fusion engineering and relevant important research projects.

ASIPP is one of the most important laboratories on magnetically confined fusion in China, has built HT-6B, HT-6M, HT-7, the first superconducting tokamak in China, and EAST, the world's first non-circle cross-section full superconducting tokamak.

Key Learning: Advanced Energy Technology idea and concept

HANGZHOU

Dream Town Start-Up Community

Dream Town, located at the ancient town Cangqian town, Hangzhou city, is the first batch characteristic town of Zhejiang province.
Occupying an area of three square kilometers, the town contains four parts – Internet Village, Entrepreneurship Fair, Angel Village and Entrepreneur Street. It strives to be a model of maker space and characteristic town and a new economic growth point.

The town enjoys a long history and is renowned for granary culture and traditional Chinese culture. As a demonstration of innovation and entrepreneurship, it is filled with an atmosphere of entrepreneurship enthusiasm.

Key Learning: Idea of creating a culture and technology community.

HANGZHOU

Government Giant Investment Park "E-Fashion Town"

Located in the central area of Linping New Town, Hangzhou E-fashion Town covers a total planned area of about three square kilometers. It was selected as one of the first characteristic towns of Zhejiang in June 2015 and became a textile and fashion creative design experimental park of the Ministry of Industry and Information Technology in January 2017. E-fashion Town centers the Donghu Lake and is made up of three blocks on culture, history and art. E-fashion town focuses on the development of fashion design industry and also has some E-commerce and industrial internet businesses. It is a gathering place of various fashion companies and talented designers.

Key Learning: Understand the concept of government support and the integration of technologies with local expertise.

HANGZHOU

Alibaba Campus

Alibaba Group Holding Limited founded in 1999. Their owns and operates a diverse array of businesses around the world in numerous sectors

Highlight:
- One of the world's most admired companies by Fortune.
- Chinese multinational conglomerate specializing in e-commerce, retail, Internet, AI, digital media and entertainment, and technology.
- Alibaba Business: Alibaba.com, Taobao, Tmall, Aliexpress,1688, Alimama, Alibaba cloud, Cainiao, Ant Financial

Key Learning:
- Alibaba culture
- A success story of Alibaba
- The future of Alibaba and the e-commerce world
- Emerging of electronic wallet and cashless society

HANGZHOU

Herma Market

HEMA Supermarket, the prototype supermarket chain of Alibaba Group Holding Ltd New Retail concept.

Highlight:
- 24hours delivery service in two Chinese cities.
- Delivered to their homes within 30 minutes.
- Combine the online and offline shopping experience.

Key Learning:
- The new experience of retailing business
- Futuristic supermarket that's aim to support community around it by offering an exceptional new standard of service.

KM Award Winners 2021

Best Expert

Mr. Mongkol Sommaichaiya
(OLG)

Mr. Jirapong Lohtrakulchai
(HEM)

Best Contributor

Miss Phattarakorn Rangsriwong
(OWE)

Mr. Anucha Leelaratsameephanit
(PMO)

Miss Krittiyawan Wisutthisaen
(OMI)

Miss Piyarat Wattana
(OTM)

Mr. Pacharapol Charoensuk
(EFE)

Miss Tasaporn Visawameteekul
(PMO)

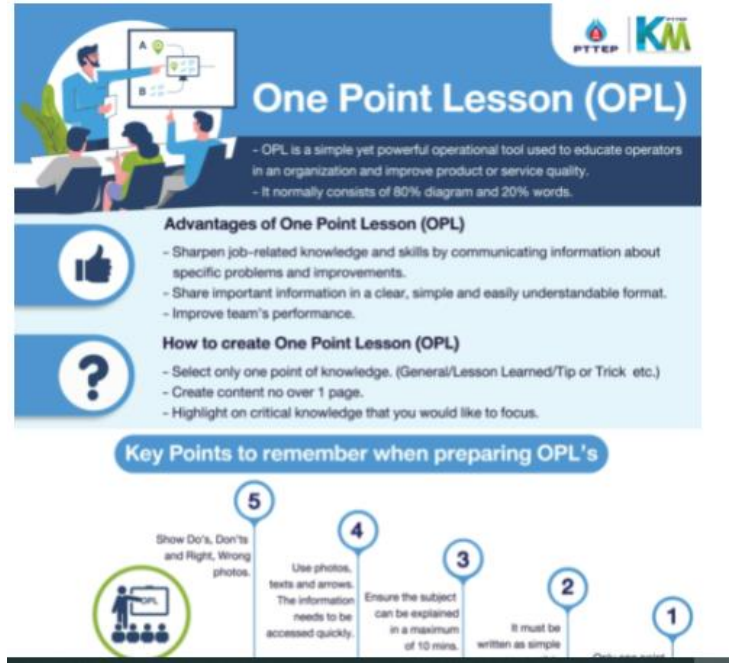
Mr. Ronnapoom Kulwatthanasal
(EFE)

Best Learner

Miss Tunchanok Nitipan
(EFE)

Miss Kwansuporn Apichartpraculp
(EFE)

Mr. Boonyakorn Assavanives
(EFE)



Communication

KM Induction & KM E-Learning

One System One Goal

Give More Get More Campaign 2021

Corporate Culture: EP SPIRIT

Innovation is Embedded in PTTEP Corporate Culture

Innovative Behavior

- Encourage others to bring out new idea
- Think out of box
- Suggest new practical idea to team
- Adopt new technology to enhance work performance
- Improve work process to reduce time and/or resources

Knowledge Management Skills

are embedded in PTTEP Soft Skills as follows:

Individual

1. Innovative Thinking
2. Accountability
3. Strategic and Analytical Thinking
4. Achievement Drive and Executional Agility
5. Digital Literacy

Team

6. Collaborative Work
7. People Development
8. Integrator Leadership

Stakeholder

9. Communication
10. Stakeholder Management
11. Operational Performance for Sustainability

PTTEP Soft Skills

"The New Way to be the New You"

Innovative Thinking

Contribute creative solutions and foster innovativeness in others

- Apply existing knowledge and develop new knowledge for creating, developing, and implementing new idea, product, process or service; with the aim of improving efficiency, effectiveness or competitive advantage.

Collaborative Work

Collaborate within and across units to create value (as one company)

- Create, Share and Apply knowledge, lessons learned and best practice within and/or across own discipline to foster collaboration across the organizational boundaries.
- Create one agenda for Knowledge Management in the meeting.
- Recognize team who practices creating, sharing and applying knowledge.

Integrator Leadership

Be able to amplify leadership through showing real impact, influencing others, and effective communication

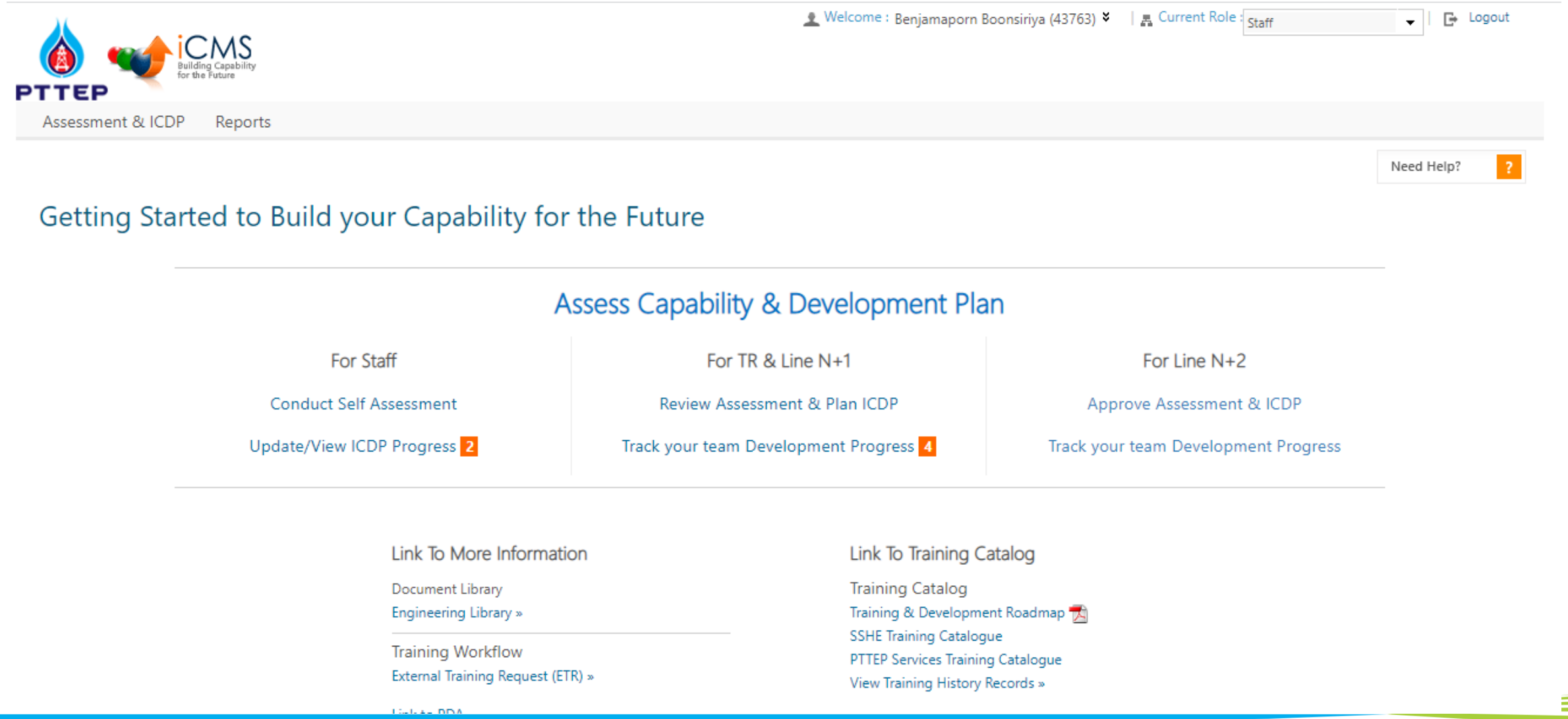
- Inspire team to cultivate Knowledge Management (KM) culture.
- Communicate benefits of Knowledge Management to team.
- Create supportive environment, promote and support employees to share knowledge and work experiences.

Operational Performance for Sustainability

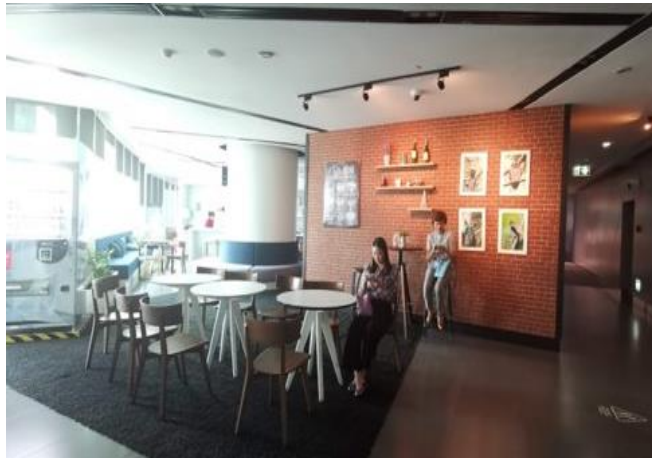
Organize and prioritize tasks and resources to ensure sustainable outcomes

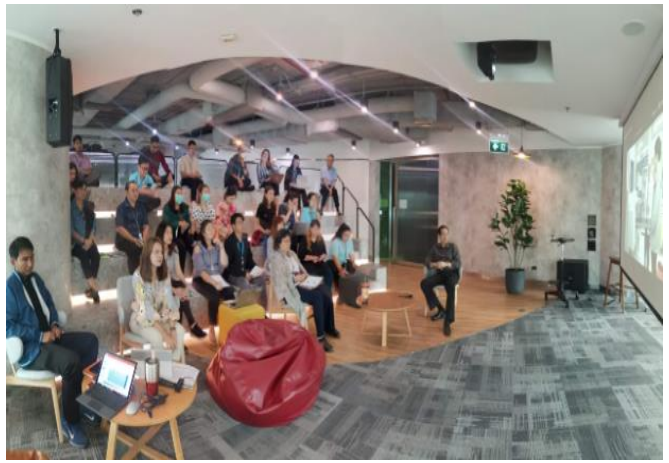
- Develop organizational knowledge base to become a high performance organization

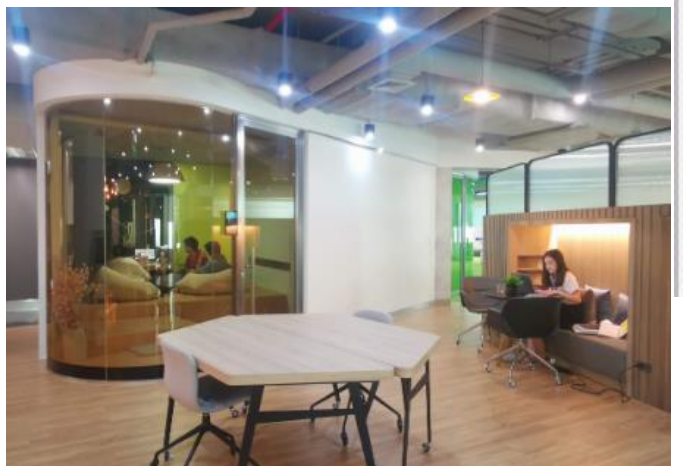
Individual Competency Development System (ICMS)



Innovation Playground







Fostering Innovation :

ARV hosts AI & Robotics Hackathon 2021: Open House

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Transformation

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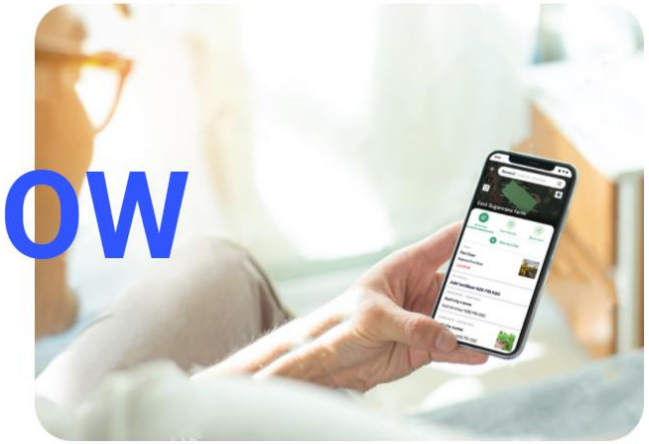
PTTEP New Business : AI and Robotics Ventures (ARV)

THE FUTURE
ARV NOW



TECHNOLOGY DEVELOPMENT

As we are the technology spin-off company dedicated to leverage cutting-edge AI & Robotics technology, the technology development is one of our core company strategies.

PROFESSIONAL SERVICES

ARV provides professional services and solutions for Oil & Gas and non-Oil & Gas business including facility inspection using our AI and Robotics technology across air/sea/land applications and through our business units.

BUSINESS BUILDING

ARV innovates and develops new business S-Curves in our Venture Studio team.

INNOVATION PLATFORM

Through ARV network of clients and partners, we have resources to accelerate and invest in high potential start-ups to meet market demands. ARV's headquarter is home to a shared workspace, facilities infrastructure, and access to network & playground for our partners.

PTTEP New Business : AI and Robotics Ventures (ARV)

ESTABLISHMENT OF PTTEP ROBOT CLUB & ROBOTICS COP

PTTEP robotic club and CoP was established to develop robot to provide an alternative method enhancing PTTEP operation.

PTTEP had involved in search and rescue operation for “Wild Boar” team.

H.M. King Maha Vajiralongkorn Bodindradebayavarangkun’s Birthday celebration

Thai-made AI robot and innovations support Thailand’s fight against COVID-19

AI AND ROBOTICS VENTURES

ROVULA

Subsea Inspection, Repair & Maintenance

SKYLLER

Drone Inspection

varuna

Smart Farming

HEALTHTECH

Health platform & ecosystem

Knowledge Management is important to PTTEP because …

..It boosts the efficiency of our decision-making ability

..Improves operation efficiency which leads to cost effectiveness

..Supports continuous improvement and innovation

..Opportunity for new business

KM & Innovation Achievements

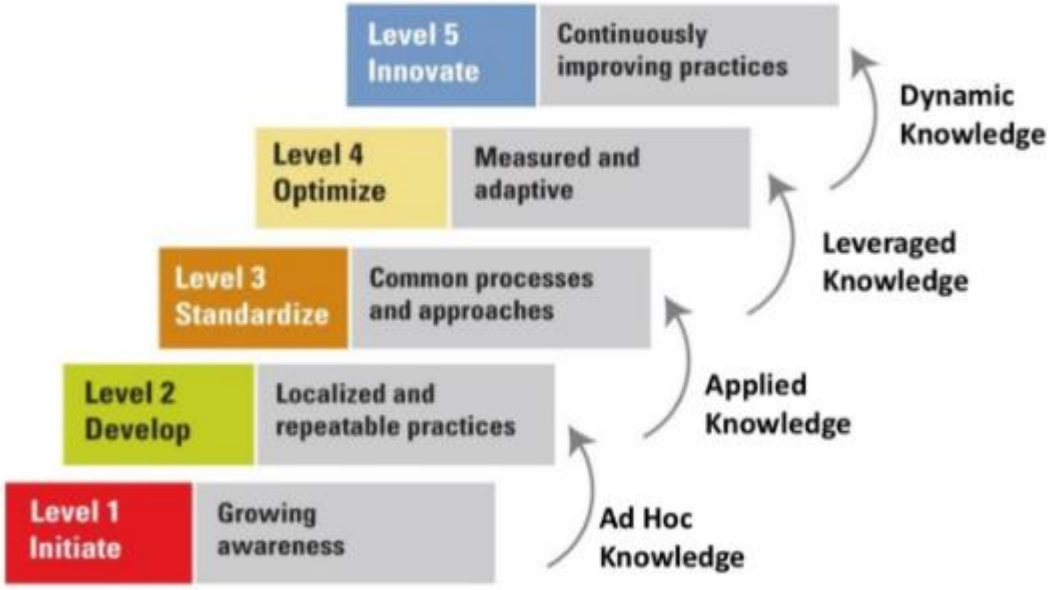
APQC
AMERICAN PRODUCTIVITY & QUALITY CENTER

Excellence in KM Award

PTTEP

PTTEP KM KNOWLEDGE MANAGEMENT

KM Maturity Model - APQC



STRATEGY

- Objectives
- Business Case
- Budget

PEOPLE

- Resources
- Governance & Leadership
- Change Management
- Communication

PROCESS

- Knowledge Flow Processes
- KM Approaches & Tools
- Measurement

CONTENT & IT

- Content Management Process
- Information Technology

KM & Innovation Achievements

Innovation Awards

SET Award

Best Innovative Company

ADIPEC Innovation Award
A world-first subsea pipeline repair robot.

NIA Award

KM & Innovation Achievements

Most Innovative Knowledge Enterprise Award

Most Innovative MIKE 2021 Global Knowledge Enterprise

GOLD AWARD MIKE THAILAND 2021

Continuous Improvement for Sustainable Future

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