

Communities of Practice in MTR Projects Division

A Forum on Communities of Practice in Hong Kong Organized by Hong Kong Polytechnic University

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MTR Corporation Limited 香港鐵路有限公司

Discussion Outline

- Business Imperative Why we want CoPs
- History of Knowledge Communities in MTR Projects The CoPs are coming!
- The Purpose They Serve What CoPs do
- Continual Improvement It's a journey!
- Lessons Learnt and Factors for Success



Current MTR Network Expansion Programme 2014-2020



Why do we have CoPs?

- Cultivate a collaborative way of working
- Exploit organisational and historical knowledge
- Facilitate technology transfer for all staff
- Acquire new skills/learning
- Learn from past lessons and improve future projects
- Help to achieve our mission towards project delivery effectiveness

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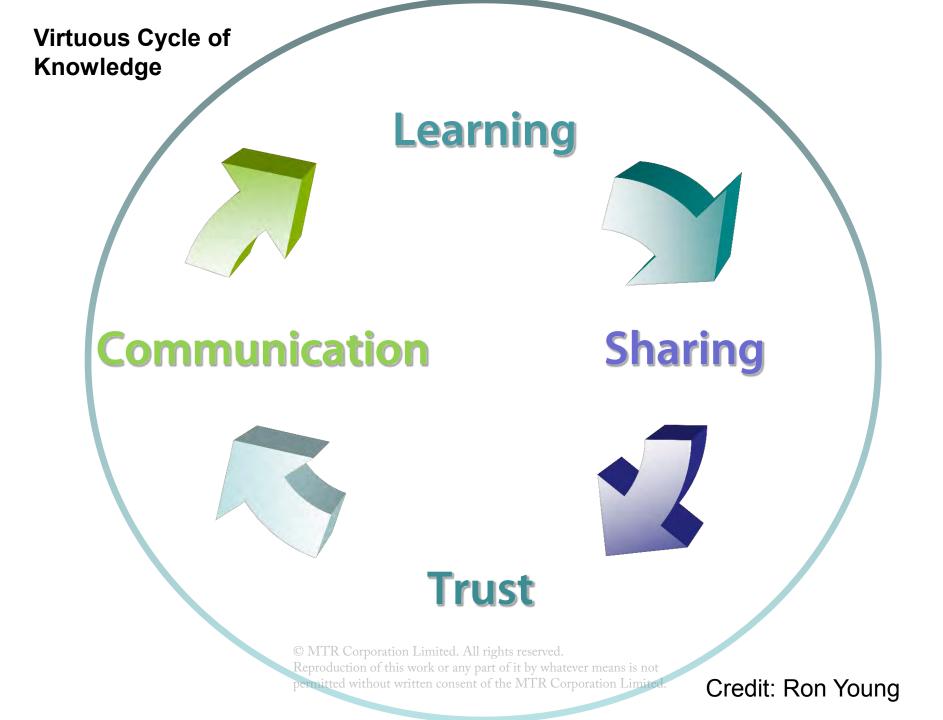
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南港島線(東非 SOUTH ISLA) LINE (EAST)

百溃島賤 WEST ISLAND LINE

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度深港高總 GUANGZHOU-SHENZHEN-GUANG EXPRESS RAIL LINK



Timeline

• **2007**

Challenges on railway expansion programme New joiners, retirement, turnover, 5 concurrent projects...

• **2008**

Kicking off the new strategy development KM process Culture of knowledge sharing and collaborating

• **2009**

New KM Portal launched in June 2009 Interactive between People → Technology → People via Web 2.0 technology

• 2010-2011 COP W@VE

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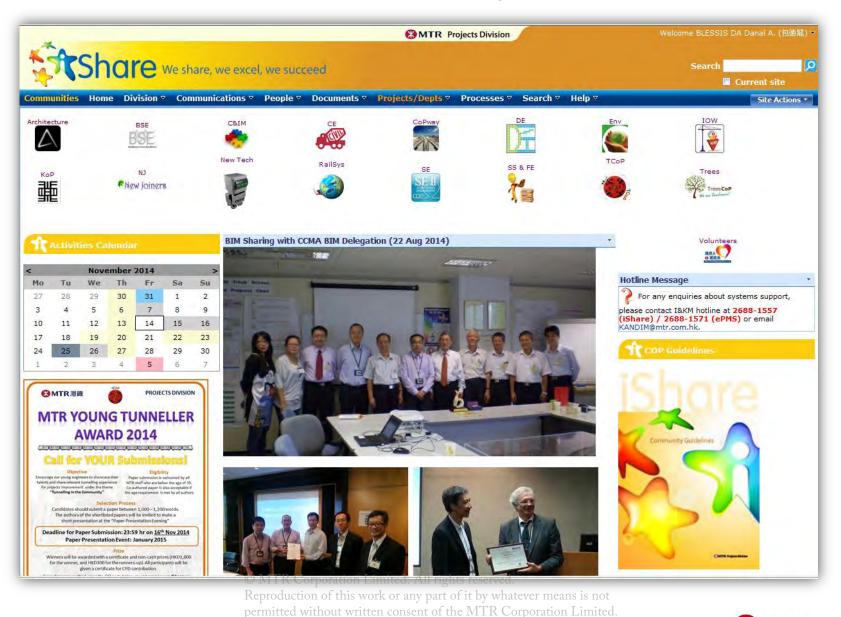
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6 Stars of Knowledge Sharing – Launch June 2009



iShare – Home of the CoPs in PjDiv



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COP W@VE 2010



iShare – 16 CoPs Today



- Architecture
- **DE** (Digital Engineering)
- **BSE** (Building Services Excellence)
- C&IM (Coordination and Interface Management)
- Civil (Civil Engineering)
- CoPway (Permanent Way)
- Environment
- IOW (Inspector of Works)

- KoP (Knowledge)
- NJ (New Joiners)
- NewTech (New Technologies)
- **SE-II** (Stakeholder Engagement)
- RailSys (Railway Systems)
- SS&FE (Statutory Submissions and Fire Engineering)

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- Trees
- TCoP (Tunnelling)

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Projects Division Objective for 2014

"Deepen the practice and culture of *knowledge sharing* as a means to *improve our project management / delivery capabilities* and *raise the profile of the organisation."*



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Projects Division Objective for 2014

2. "Sustain CoPs for building positive relationships and collaboration and embedding useful knowledge into the practices of the Division."



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CoP Emphasis for 2014

- Injecting value into CoPs personal touch to help grow
- Injecting value into the **Division** Lessons Learnt
- Injecting value into the Business Body of Knowledge

6	351	<- social event attendees
7	819	<- online participants
14	687	<- seminar/talk attendees
25	697	<- site visit attendees
3	30	<- workshop attendees



Benefits to Corporation

- Boundary-less ways of generating ideas and solving problems
- Informal dialogue, inviting questions, spontaneity, critical thinking, creativity and synergy leading to innovation
- Partnering with our colleagues, building relationships and increasing organisational effectiveness
- New networks of people, helping new joiners assimilate, and spreading tacit knowledge throughout the organisation
- Best practice and lessons learnt throughout the organisation



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Benefits to Members

- Life-long learning, personal and professional development
- Access to information, knowledge and expertise, to help make the "day job" easier
- Increasing our own value within the organisation, through participation and contribution
- PLORKing the combination of "play" and "work" that is both meaningful and fun!



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Lessons learnt and success factors for CoPs

- Mentor
- Champion
- Facilitator(s)
- Core Team
 - Webmaster / archivist Social host Subject matter advisor New joiner Young engineer
- Member



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Mentors

- Be a role model
- Support the champion, coaching and giving counsel
- Stimulate growth and interest
- Ensure the CoP is realising its vision and adding business benefit
- Share experience through high level presentations



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Champions

- Ensure the CoP brings value and has a genuine business case
- Ensure the CoP has a vision
- Assess the future direction for the CoP
- Recommend key appointments and provide leadership
- Provide support mechanism
- Review performance and reward success
- SUPPORT



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Facilitator

- Ensure the right people are involved
- Help bring people together
- Prepare and co-ordinate a programme of activities
- Act as the first point of contact
- Work with the core team
- Ensure digital artefacts are captured
- Ensure the online library is growing



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Core Team

- Provide practical, pragmatic advice
- Ensure the acquisition of new knowledge
- Freely share and disseminate knowledge
- Participate online
- Participate in face-to-face activities
- GET INVOLVED



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Webmasters

- Update the CoP site
- Manage and organise photo library
- Manage and organise the document library
- Ensure records and information from events/visits are captured online
- Advise the facilitators on site traffic & discussion activity
- Ensure a digital footprint calendar, news items, blog, photos, etc.



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GEs Roles and Responsibilities

- Core Member of the CoP
- Work with CoP leaders to strive to achieve best practice in each CoP
- Assist in planning and organising CoP functions, e.g. publicity, organisation, coordination, etc.
- Take a lead role in maintaining the CoP website on iShare
- Demonstrate proficiency in the effective operation of CoPs.
- 6-12 months' period as a CoP Core Team Member
- Encouraged to continue with active involvement in CoPs on a voluntary basis



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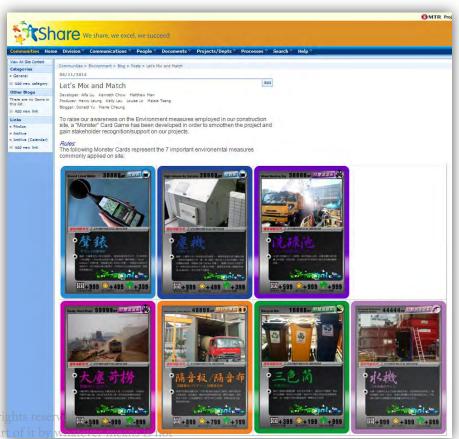
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Participation: Online

- Participate in discussion forums
- Post / comment on blogs
- Post Photos
- Add to wikis
- "Capture" documents
- Report on training / visits
- Capture digital footprint



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Participation: Face-to-face

- Participate in CoP meetings
- Join seminars / visits
- Suggest / help organise events
- Give a CoP talk / share experience (can link to CPD)



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CoPs are at Different Stages

Potential (incubating)

Coalescing (formation)

Maturing (gaining commitment)

Stewardship (innovation & knowledge generation)

Transformation (move on)

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Lessons Learnt on CoPs

- Nurturing
- Training
- Top-down support
- Bottom-up leadership
- Youth engagement
- Monitoring
- Intervention
- Budget/resources



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Success Factors

- Strong Management Support and Role Modelling
- Dedicated KM workforce
- Encourage collaboration
- Reward knowledge sharing
- Promote face-to-face interactions
- Digital footprints to record success (wiki, forum, blog)



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iShare tailor-made training

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Exploring KOOL knowledge

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Aspiration for the CoPs

"Groups of people with *common interests and goals* who *share* their *knowledge*, *experiences* and *wisdom* about particular topics. CoPs enable *collaborative working* and handle *unstructured problems* outside of the traditional organisational boundaries."



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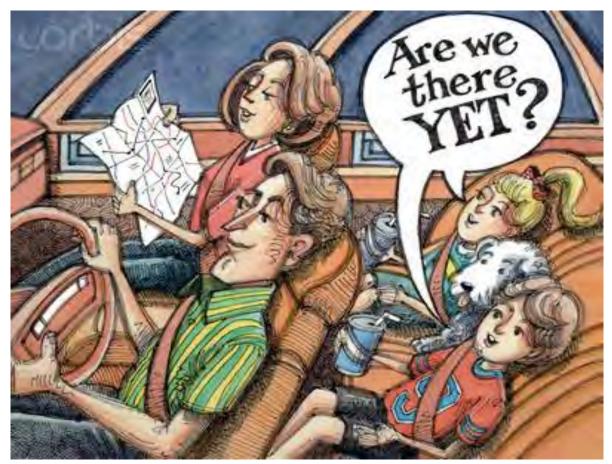
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Journey's end?



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Thank You!



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Architecture

- This CoP is those whose works involve ABWF or its coordination, and also everyone in the company who is interested in architecture and design in general.
- By strengthening fellowship and collaboration in project works, proper appreciation of architecture and quality building works can be nurtured among colleagues of different disciplines.

Building Services Excellence (BSE)

- For staff who are devoted to creating excellence in quality and innovation in Building Services.
- This CoP is aimed at raising awareness of the importance in quality in Building Services. Particular emphasis will be made on the need to get a Building Services system well for operation and maintenance right at the design stage.

Coordination and Interface Management (C&IM)

• There are so many interfacing parties in our rail projects (e.g. over 60 in KSL project alone), including civil, P-way, E&M, utilities and government – this can lead to a number of adversarial and programme issues. This CoP brings together a cross section of interested parties from a number of different backgrounds to discuss C&IM and how we can best work together with all stakeholders to achieve success for the Corporation.

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Civil Engineering (CE)

- This CoP will keep you updated on things associated with civil engineering within PjDiv, and if you cannot find the answer then ask! We like to see lots of photos showing what is happening on your project, so please see photo upload for advice on how to upload.
- This is the place to share your knowledge, ask questions, and interact with your colleagues on different projects. You are not alone! So whether it is reinforcement or road signs, bentonite or bending moments, compaction or cracks, join the CoP and tell us all about it.

Digital Engineering

 Digital Engineering serves the entire Corporation based on digital engineering information system. DE includes the drawing archive of all existing infrastructure, e.g. CADD/ GIS/ System/ Graphic/ Photomontages as well as the progression of BIM within the Corporation. It also works in collaboration to ensure the digital information meets the standards set by the Corporation in a logical and centrally available format.

Environment

- This CoP is committed to the sustainable development of Hong Kong and will explore and ensure the responsible management of the social, economic and environmental aspects of sustainable business opportunities.
- Through various technical and casual meeting, seminar, workshop to deliver our members with the latest news, legislations and code of practices on the environment.

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Inspector of Works (IOW)

- This CoP is for colleagues who have an interest in or have interface with the site inspection works.
- This CoP wishes to provide a platform for experience and knowledge sharing on matters related to works inspection.
- This CoP creates a platform for digital sharing and for organising non-digital activities related to works inspection and provides a platform for experience and knowledge sharing through the use of documents, photos, videos and digital collaboration.
- The company will be benefited by having a knowledge repository for storing codified knowledge related to works inspection. The individual will be benefited by learning more about works inspection
- This CoP aims to create values for the company by having a semi-structured organisation to share knowledge within and between departments/sections.
- Projects Division's NLNM focus with regarding to People Development, Collaboration and Trusted Partnership and Project Delivery Effectiveness are also this CoP's vision and focus.

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Knowledge CoP (KoP)

- The KoP aims to be a role model for knowledge sharing and brings together staff from a breadth of areas and backgrounds. The KoP domain broadly comprises "Knowledge Management" but there is a diversity of interest in other topics which may be of benefit to members.
- The KoP mission is to:
 - 1. Distinguish and differentiate ourselves from other CoPs Be Unique
 - 2. Focus more on the soft side of project issues Dim Sum (點心) / Touch Your Heart
 - 3. Be a catalyst for knowledge sharing and collaboration in Projects Division Role Model / weShare
 - 4. Balance on-line activities with engaging in-person activities Catalyst
 - 5. Provide new values for Projects Division and MTR Corporation VMV and NLNM
 - 6. Encourage the fun side of work Integrating playing and working (Plorking)

New Joiners (NJ)

- This CoP is for the new joiners and for those colleagues who would like to meet new joiners.
- This CoP tries to provide opportunities for NJ to get to know each other, and to provide an informal way for NJ to accelerate their integration with Projects Division.

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New Technologies (New Tech)

- The railway industry is evolving all the times. There are many new technologies emerging in different parts of the world which may not be available to everyone in Projects Division. Through the sharing and discussion in the CoP the timeframe and efforts in researching and evaluating the feasibility of adopting a new technology in a new project could be greatly reduced. Members can also benefit from up-keeping their knowledge on latest industry development.
- This CoP will like to become a *defacto* Forum in MTR Projects Division for discussion and evaluation on feasibility of applying a new technology and ideas to a project.

Permanent Way (CoPway)

- CoPway is the CoP on the Design and Construction of Trackwork in Hong Kong and Overseas. We are trackwork design and construction professionals who do not only undertake the design and construction of trackwork for new projects but are also the custodians of the 'structure gauge', ensuring the spatial requirements to operate the railway.
- We also write and maintain railway engineering design standards, promote railway / Pway engineering including maintenance, design and construction. We are dedicated to inform, share, educate and train anyone interested in the Permanent Way aspects of Railway Engineering.

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Railway Systems (RailSys)

- This CoP is interested in all the discrete electrical and mechanical systems that comprise the integrated railway system, from the perspective of design through to construction and operation. This CoP welcomes involvement from all interested MTR colleagues.
- This CoP tries to be the forum of choice within MTR for the deliberation of key issues on railway systems, and tries to be a community for the avid railway professional.

Stakeholder Engagement (SE)

- Each and every one of us can contribute to the process as Ambassadors of New Railway Projects in Hong Kong.
- SE CoP is a new platform for interested MTR colleagues to share ideas on the consultation process, discuss hot topics/social issues, and exchange valuable PR skills.
- This is a place you can interact, share, express, learn and exchange views on stakeholder engagement.
- Everyone in Projects Division has a role to play in Stakeholder Engagement.
- So come and keep yourself posted on the latest information on Stakeholder Engagement and join our events & have some fun!!!

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