

Sharing corporate safety knowledge with managers during a period of significant change

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SUMMARY

MTR Corporation (MTR), based in Hong Kong, is going through a period of significant growth and change. Within Hong Kong, five major new line/line extension projects are underway, while our China & International Business continues to expand the number of railway operations internationally. With this level of growth, maintaining our world-class safety standards and performance is challenging. To overcome this, we recognise the importance of strengthening corporate knowledge sharing, in particular, sharing among the broad organisational leadership team. Following on this recognition, we developed an outline training course agenda. It focused on three main areas, these were: i) the safety leadership skills that managers require to maintain, ii) the reinforcement of corporate safety governance, and iii) the knowledge transfer of international expertise from rail and other high hazard sectors. Arthur D. Little was brought in to help and support MTR with the development and delivery of this training. This was because Arthur D. Little has suitable international experience and understands how the “safety first culture” has evolved within MTR for many decades. The course material was then developed by Arthur D. Little following needs identification and finalised after two pilot course deliveries. So far, the training has been attended by 850 managers, out of an identified leadership population of 1800 at MTR with excellent feedback of an average score of 4.4 out of 5. Through this training, our corporate safety DNA is ingrained in our managers to reinforce our safety-first culture during the critical growth and change period. Apart from learning the critical safety leadership skills, most course participants also took away “challenge the green”, “broken window theory”, “don’t walk by” as their daily safety motto.

INTRODUCTION

MTR is a world leading mass transportation operator predominantly based in Hong Kong, comprising Domestic and Cross-boundary services, a dedicated high-speed Airport Express railway and a light rail system. The entire system stretches 218 km and carries an average of 5.2 million passengers every weekday – one of the world's most heavily utilised metros. By leveraging on our railway assets and expertise in Hong Kong, MTR has been involved in other businesses such as rentals of station retail space and telecommunication. Outside of Hong Kong, MTR has invested in urban rail networks in Mainland China and in “asset-light” operation concessions in the UK, Sweden and Australia.

MTR is growing at a fast pace as we continue to enhance our core businesses in Hong Kong and expand our portfolio of rail-related operations in Mainland China and overseas. This growth creates new demand for professional staff and the secondment of experienced Hong Kong railway managers to new operations in order to learn from MTR's experience. The rapid expansion in the integrated rail network, the high turnover in staff numbers and the coincidental retirement of experienced railway managers all present huge challenges to MTR in maintaining world-class safety standards.

The intent of this paper is to demonstrate how MTR has tackled these challenges with the support of Arthur D. Little, through instilling safety leadership and safety-first culture among the broad organisational leadership team.

NOTATION

IRSC: International Railway Safety Council

MTR: MTR Corporation

ADL: Arthur D. Little

KNOWLEDGE SHARING VIA TRAINING

MTR recognises that training is fundamentally important for overcoming the challenges of maintaining world-class safety standards during a time when we are experiencing rapid growth and change. Training would not only provide the leadership team with the knowledge to make positive changes to the way in which they work and make decisions, but also allow a wider range of MTR staff to implement the kind of outlook that matches the corporate safety policy statement. Furthermore, we realise that safety leadership plays a critical role in fostering a sustainable corporate safety culture as stipulated in our Corporation General Instruction (CGI) 264 “Corporate Safety Governance” document. This instruction specifies the corporate safety governance arrangements across the different Divisions within the Corporation. It also contains the safety responsibilities for a number of different groups, including managers who should discharge to ensure effective implementation and arrangement of safety management within their areas of control. Therefore, there is a need to develop a customised Corporate Safety Management Training Programme to support and strengthen our managerial staff’s understanding and skills for both leading and managing safety in MTR.

Under the directive of the Corporate Safety Management Committee and our Corporate Strategic Safety Plan for 2013 to 2016, an outline training course agenda was carefully crafted by the Safety & Quality Department and discussed and agreed among all divisions’ safety management committees. The Committee recognised that for the training to be effective, it would require suitably qualified trainers with international expertise from rail and other high hazard sectors to further develop the course material and deliver the course. As a result, MTR went out to tender for a consultancy and Arthur D. Little were successful in winning the three year contract.

ARTHUR D. LITTLE SUPPORT KNOWLEDGE SHARING

Arthur D. Little experience

Arthur D. Little has a proven track record of developing safety management training for organisations around the world. Their senior staff regularly delivers training courses on safety management, safety leadership, risk assessment skills, and accident investigations for a number of high hazard sectors, such as transport, construction and oil and gas. In particular, Arthur D. Little has delivered the Strategic Safety Management Programme (SSMP) to the UK rail industry for more than 15 years and has significant experience in linking safety management to strategic and business needs. The wide range of industries served by Arthur D. Little, such as oil and gas processing, pipelines, construction, shipping of hazardous materials, highways and nuclear power, helps keep them at the leading edge of safety and risk management. In addition, they have over 20 years' experience of working with many parts of MTR Corporation in Hong Kong and internationally and understand both how and why the safety culture has developed within MTR.

Course Programme Overview

The course materials were developed in four stages by Arthur D. Little. Firstly, they reviewed the corporate safety governance framework and the corporation's existing safety management training programmes to identify the gap among the available training courses. Secondly, in order to ensure practicality and effectiveness of the programme, they interviewed key management to understand their training needs and expectations (an example is illustrated in

Arthur D Little

Corporate Safety Management Training Programme – Needs for Corporate Course

Overall, in terms of CONTENT, the interviews confirmed strong and consistent support for the suggested course agenda, together with further clarifications

The course should	The course should not
<ul style="list-style-type: none"> ■ Recap, summarise and confirm why safety is a key business issue for MTR ■ Refresh understanding of the specific commitments to safety of MTR – Safety Values ALERT etc ■ Explain the Corporate Safety Policy, Safety Strategy and Safety Governance arrangements, cascades to Divisions and supply chain ■ Explain the role of a Manager in safety at MTR, including SRS – and directly tackles attitudes such as "I am too busy doing my work" and "I have S&Q support to do this for me" ■ Note how this course interfaces with other safety management courses provided by Divisions ■ Strengthen <i>mind-set, knowledge and skills</i> relating to two primary contributions to effective safety mgt: <ul style="list-style-type: none"> – Leadership for support of effective culture – Risk Mgt - recognising risks and what to do ■ Include key focus areas, developments, take-aways 	<ul style="list-style-type: none"> ■ Address all safety management training needs of MTR Managers. e.g. <ul style="list-style-type: none"> – Property – construction, maintenance and property management related risk management together with Property Division SMS – Operations – operating and engineering related risk management together with Operations Division SMS – Projects – construction related risk management together with Projects Division SMS ■ Include an End-of-Course exam. Traditionally, one of the key drivers for such was the need to ensure discipline in attendance and engagement of participants. This is not recognised as an issue with MTR Managers. An alternative basis for assessing the course benefit to Managers will be explored

▶ **Leadership is seen to be the core focus for the day with maximum time allocation expected**

MTR

Figure 1). Thirdly, they designed the course based on the information collected in the first two stages and on their extensive experiences. Fourthly, they finalised the training programme through two pilot deliveries to selected leaders drawn from across the different MTR Divisions (Operations, Projects, Property, China & International Business and Corporate Support Functions).

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Figure 1: Training Needs Identification

The entire training programme has three phases. Phase one is a pre-course preparation, whereby delegates review the corporate strategic safety plan/corporate safety governance documents and complete a pre-course self-assessment. In addition, discussions are initiated among the participants and their line managers to identify personal/business needs. Phase two is for delegates to attend an one-day safety leadership course and develop individual key take-away lessons. Phase three is a post-course follow-up to enhance the learning by having further discussions with their line managers to reflect on any pre-course needs and to seek for ways in which learning can be transformed into practice.

Course Objectives

The one-day training course comprises four modules aimed at developing the managers in their roles as leaders of safety in MTR. Each of the modules offers safety leadership skills and/or knowledge that are essential for the managerial team to acquire.

Module 1 – Safety Governance – is aimed at improving the delegates’ understanding and their implementation ability of the corporate safety policy and strategy. This is designed for the managerial team to appreciate the relevance between Corporate and Divisional safety governance requirements, safety values at MTR and their important roles/responsibilities in safety leadership.

Following on from Module 1, Module 2 and 3 offer the delegates with various techniques and tools, which incorporated the latest trends and key focuses of safety management to support their roles in safety leadership. More specifically, Module 2 deals with safety leadership and culture, which provides a clear understanding of the principles of safety leadership across an organisation and methodologies that could be used to inspire employees to achieve a higher level of safety and productivity as well as applying good leadership attributes on a daily basis. Module 3 relates to risk management that enables the delegates to grasp the fundamental concept of risk management and the application of the concept to day-to-day business activities. The final Module is personal

reflection exercise to identify the key learning points and specific actions for each individual. The outcome of the module will subsequently facilitate the post-course follow-up discussions with delegates' manager.

Course Features

The objectives of the training programme are achieved through the following course features.

Taught course versus interactive discussion

Instead of a purely lecturing-style taught course, all the sessions are designed to be interactive. Delegates are asked many open style questions, for example, 'where can my part of MTR improve? And how?'). These questions generate discussions between the delegates from different divisions, enabling knowledge sharing, and sparking new ideas and practical advice in how to provide safety leadership. Examples include activities that can be used to improve the understanding of what the 'safety first' culture means, questions to be asked of staff and contractors and what to look for when reviewing method statements.

All the examples are real accidents

Unlike many safety training courses, MTR and Arthur D. Little decided very early on in the course development process that all the examples used would be real accidents and incidents. The lessons learnt and good practices in preventing accidents from reoccurring are drawn from a mixture of different sectors, including several described at previous ISRCs. By studying and sharing these lessons, delegates are able to develop the necessary safety mind, and to identify how and where to implement good practice in their line of businesses.

Two substantial examples are used. The 2005 Texas City Refinery Disaster, which demonstrates how deficiencies in safety governance led to the catastrophic process accident that killed 15 and injured 170 workers. The other one is the 1987 London Underground Kings Cross Station Fire, which illustrates the importance of implementing lessons from accident investigations (in particular the 1984 London Underground Oxford Circus Fire) and having proper emergency notification and management arrangements.

Overall, the wealth of practical and real-life examples (including many from the trainers) are able to contextualise the theoretical concepts, thus bridging the gap between theory and practice, encouraging active learning and developing customised learning outcomes.

Use of videos

Multiple short videos are used throughout the training course, starting with one specially recorded by the MTR CEO, who stresses the criticality of safety, shows the commitment of the top management team and demonstrates to the delegates how safety should be embedded into their daily job. The two main case studies also have videos, allowing visual impact and an enhanced impression of the accidents.

Course Outcome

At the end of each course, delegates were familiar with the Corporate General Instruction Corporate Safety Governance (CGI 264) document and understood the key messages including "cascade to divisions" and "the safety responsibilities of Managers" (as defined in CGI 264). In addition, the delegates developed their own understanding of the importance of Safety Leadership and Culture in achieving MTR's safety aspirations and their role in providing leadership. These understandings were translated to a set of key 'take-aways', which were developed from delegates answering the questions, such as 'what do I think are the most important points from


this training course'. This was combined with a group photograph and was issued post-course (see an example in

Dear MTR Managers

Thank you for completing the Corporate Safety Management Training Programme. Please continue to practise safety leadership to uphold a safety-first culture at all levels. This is fundamental for upholding our world-class safety standard and performance.

Dr Jacob Kam
Chairman
Corporate Safety Management Committee

**Corporate Safety Management Training:
Key Takeaways**
Friday 10th June 2014



- Don't walk by
- Broken windows – show we care by fixing them (exercise landlord's responsibility)
- Safety is everybody's responsibility
- Importance of finding hazards and managing risk
- Challenge the greens!
- Understand safety leadership and culture – and leadership styles
- Act as a role model – safety starts with me
- Failing to manage risk costs us time, money



Figure 2) as a reminder and reinforcement.

It is always difficult to directly quantify the benefits of a training programme, as it is a journey rather than a one-off project. However, we believe that by putting managers through the customised training programme is helping us to generate a positive safety first culture and ensure that the managers are able to use the learnt skills in their day jobs.

The training has been attended by 850 managers to date, out of an identified leadership population of 1800, including managers of diverse background from different divisions and departments, including frontline railway O&M, new railway line project management, property development and management, corporate support functions such as human resources, marketing, corporate relations, etc. The completed 'reaction level' feedback sheets, which identified (if any) improvement areas of the programme, indicate an average high score of 4.4 out of 5 resulting from the 850 delegates attended. This clearly demonstrates that the course was well received by delegates. We consider the feedback from the managers essential to the continued enrichment and success of the programme.

At the end of each session, the course participants were asked about the learning points and key takeaways. Apart from learning the critical safety leadership skills, most course participants also took away "challenge the green", "broken window theory", "don't walk by" as their daily safety motto.

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**Safety
First**

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Figure 2: Key take away learning message board

CONCLUSION

The customised training programme has been a powerful tool and forum in sharing organisational knowledge regarding safe operations, developing managers' skills to support their safety leadership role, improving their understanding of the MTR approach to risk management and enabling better engagement with their Divisional safety arrangements. In particular, the delivery of the training course by Arthur D. Little brought fresh perspectives and invaluable experiences into the organisation and enhanced knowledge sharing and learning. These support MTR to overcome the challenges of maintaining the world-class safety standard and service performances.

REFERENCE

[1] Corporate General Instruction Corporate Safety Governance (CGI 264), Issue 6, 2/1/13, MTR