

2017 INTERNATIONAL STUDY MISSION TO ASIA - HONG KONG, SINGAPORE & TOKYO

Safety Culture, State of Good Repair,
Innovative Operations

A series of white lines of varying thicknesses and lengths, arranged in a parallel, diagonal pattern from the bottom-left towards the top-right, set against a blue gradient background.





Managed residential flats in Hong Kong (2016)



Square metres of managed commercial and office space in Hong Kong (2016)

V

values

Excellent Service

Mutual Respect

Value Creation

Enterprising Spirit

87 Heavy Rail Stations



220.9 Kilometres of Track



2,110 Rail Cars



Train and Light Rail Trips Operated

2.9 Million



99.9% On-time Passenger Service



Passenger Journeys Billion

1.938





SMRT – Singapore



Rail Network

129.8km
7.8km LRT
rail length

More than 3 million
Passenger trips per day

84 MRT
14 LRT
stations

Operate
205 trains
32 train cars



- North-South Line
- East-West Line
- Circle Line
- Bukit Panjang LRT



SMRT SERVICES

Rail



Roads



Commercial



Engineering
Services



Rail Operations

Non-Rail Operations



Metropolitan



High Speed



Regional

Network: **7,458 km**

No. of Passengers: **17 Million /day**

No. of Trains: **12,400 /day**

Annual Operating Revenue: **\$25.4 Billion**
(no subsidies from the government)

Net Annual Income: **\$2.2 Billion**

No. of Employees: **58,550**

*Numbers are as of FY ended March 31 , 2016


**Calculated by 1 \$ = 113 JPY





常に乗降遅延を心がけ、列車経路による
（駅間停止列車を防止！）
最大限の運転区間を確保し
最小限の支障時間を目指す！

FUNDAMENTALS OF A PROFIT MAKING TRANSIT COMPANY

- **Consistent risk-based approach**
 - **Consider the cost of doing nothing**
 - **Continuous improvement model**
 - **Long term planning paired with predictable funding**
- 
- A decorative graphic consisting of several parallel white lines of varying lengths, slanted upwards from left to right, located in the bottom right corner of the slide.



SMRT & SAFETY

Key Success Factors

7 pillars in 1 page

PEOPLE

1 Leadership & Engagement



Leadership at all levels to walk the ground and encourage the right behaviour.

Educate, Ensure, Enforce

2 Communication



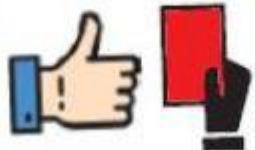
- Open sharing of good safety practices
- Toolbox brief to ensure instructions and risks are conveyed
- Regular safety updates and feedback to close the loop

3 Competency & Performance Management

- Staff are qualified and competent
- Routine refresher training
- Aligned with WI
- Clear standards and KPIs
- Regular monitoring and assessment



4 Discipline & Rewards

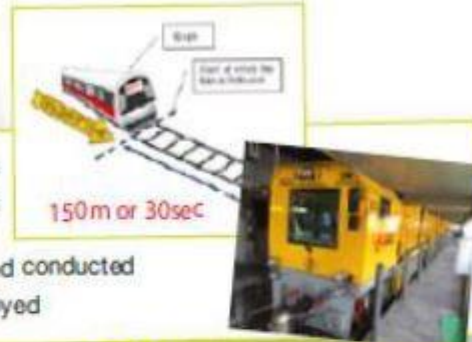


- Exemplary behaviour should be praised and rewarded
- Unsafe behaviour should be disciplined and corrected

PROCESS

5 Workplace Processes & Resources

- Clear, simple and relevant instructions
- Safety briefings, drills and inspections routinely conducted
- Risk assessments are documented and conducted
- Adequate and relevant tools are deployed



6 Organisational Safety System

- Open Reporting culture
- Safety Time Out and Stop Work Order Directive
- Risk-based audit and inspections
- Evidence-based investigations
- Regular monitoring and measurement of safety culture



TECHNOLOGY

7 Technological Enablers

- Leveraging on technology to make work activities safer
- Condition Monitoring in Operations and Maintenance
- Telematics and Big Data Technologies



JR EAST Key to Safety

Establish Safety Cultures

A culture of proper reporting



A culture of noticing



A culture of direct meeting and discussion



A culture of learning



A culture of action





SBM

GREAT TEAM
FOR EXCELLENCE

Station
Maintenance
Engineer



Yau Tak Ming

Station
Maintenance
Supervisor



Ho Tat Chung



Lau Yuen Tung



Lui Kwok Wai

Senior
Technician



Cheung Ngai Hang



Chiu Sai Cheong



Fu Chuen Fai



Tsui Kai Ho, Paul



Ho Tze Lung



Ng Wai Ming



Wong Siu Kei

Technician



Fung Wai Chung



Ho Kei Lam



Lam Chung Wai



Wai Chi Man



Yuen Yee Hong



Lau Wing Kit



Siu Ping Ho



Tam Ching Ming



Tang Kwok Ming

Tradesman



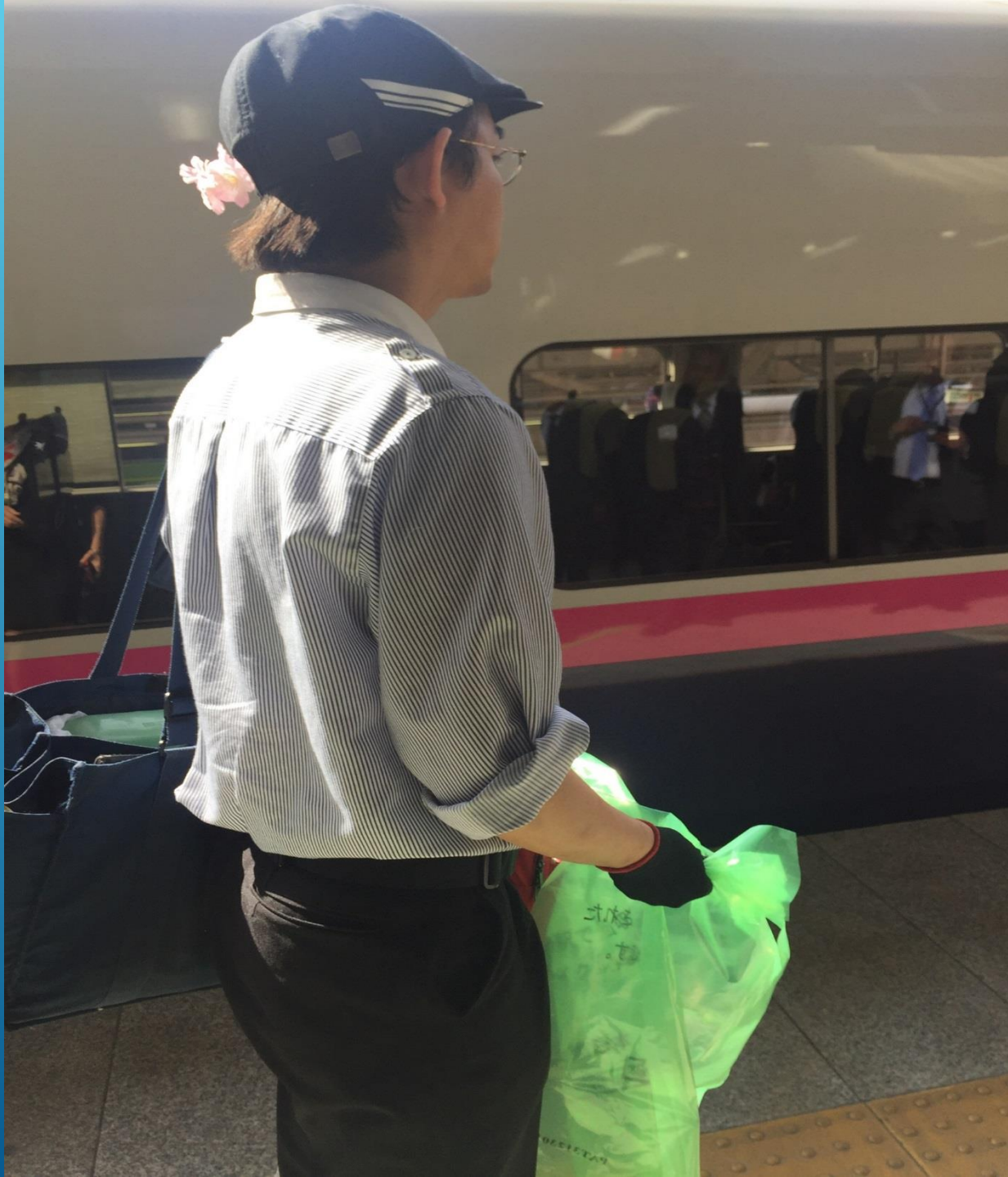
Chu Chun Ming



Ng Siu Hung

THE FUNDAMENTALS OF ASSET MANAGEMENT

- ▶ **Data driven risk based framework backed by strong engineering**
- ▶ **Defined performance level and service load for assets at birth**
- ▶ **An organizational structure with defined roles and responsibilities relative to asset performance;**
- ▶ **A robust financial management system**
- ▶ **A commitment to investment in employee competence.**



MTR provides a full suite of in-house training programmes for over 17,000 MTR people in Hong Kong and develop our young talents into railway professionals

Apprentices



> 6000 classes delivered per year
> 120,000 trainee-mandays per year
600+ new Operations staff trained
184 apprentice intake in 2016

Operations Training



Management Training



> 900 classes delivered per year
> 20,000 trainee-mandays per year

Learning Culture



SMRT Safety, Security & Quality Day 16

Management Walkabout/Engagement



SAFETY ALERT

BEWARE OF ELECTRICAL HAZARD

SAFETY ADVISORY

Keeping Our Workplace Safe – Re-

Lessons learnt:

- Always assume that traction been told it is 'OFF', you must use approved voltage tester. (Ops)
- If the track access & work zones (or overlapping third zones) must be switched off (SCDs).

How To Prevent Electric Shock

- Ensure electrical equipment/tool
- Wear appropriate Personal Protective Equipment (PPE)
- Conduct Risk Assessment (RA) control measures to all involved
- Effectively implement all control measures

Safety Alerts and Advisories

SAFETY ALERT

DON'T FALL FOR IT!

Common hazards that increase risk of Slips, Trips & Falls:

- Floor housekeeping
- Wet & slippery floor surfaces
- Uneven walking surfaces
- Lack of handrails on platforms & staircases
- Improper foot wear
- Inefficient lighting

PREVENTION FOR SLIPS, TRIPS & FALLS:

- Keep floors and stairs dry & clean
- Place signs to warn of slippery surfaces
- Use anti-slip mats at areas prone to slip & fall
- Hang power cords over aisles & work areas
- Hold onto handrails when walking on stairs & slopes
- Keep work area neat – do not leave tools & materials lying around haphazardly

Safety Advisory

FIRST AID BOX – DO FREQUENT CHECKS AND MONITOR THE EXPIRY DATE OF FIRST AID ITEMS

Applying first aid to an injured person is an initial intervention to prevent the condition from getting worse and promote recovery while the person awaits professional medical help if required.

It is therefore crucial to have a first aid kit with up-to-date first aid items. Using expired first aid items not only reduces the effectiveness of the first aid but is unsafe to the injured person.

EXPIRY DATE

First aid items come with a shelf life and an expiry date. Refer to the following:

- Replacement of used/ expired
- Expiry Date

STERILE FIRST AID ITEMS

Sterile first aid items are opened for use, the container is not to be resealed and kept for use again. Once these are opened by the user, it would have been micro-organisms (which will multiply over time) and to this, using them can also increase an injured person's risk of infection if such contaminated items are applied on the wound.

CHECK AND REPLENISH USED ITEMS

Ensure first aid kit is well stocked up and replenished regularly. Regular checks must be done to ensure that the first aid kit is up to date. It is important to check the first aid kit expiration date on the applicable items regularly.

SAFETY ADVISORY

Apply the correct and the rules and responsibilities.

Awards & Recognition

SMRT SAFETY, SECURITY & QUALITY DAY 2016

OUTSTANDING INDIVIDUAL SAFETY AWARD

Staff exemplary in safety & health and active in contributing and promoting safety & health in their workplaces.



- | | | | |
|---|---|---|--|
| <p>Male</p> <p>Chew Joon Ung
Harry Lim
Huang Haoan
Lim Chong Han
Lim Yee Koh
James Han Huat Chye
Koo G O Hui</p> | <p>Female</p> <p>Lim Jooi Ann
Kuo Jooi Ann
Lim Chooi Bee
Lim Chooi Kan
Lim Chooi Min
Lim Chooi See</p> | <p>International Services</p> <p>Ang Choon Hock
Brahm Ashok Vora
Choi Wan Shun
Inderek Chua Han Wang
Kovindoo Aji Suresh
Ng Jooi Ann
Ng Jooi Ann</p> | <p>Others</p> <p>Wai Subavut Weidat
Mehin Jim Alos Shan
Johns Bin Ahmad
Iskender U O Ishwari
Tan Ching Kwang
Wong Chung Hua</p> |
|---|---|---|--|

SMRT SAFETY, SECURITY & QUALITY DAY 2016

ZERO ACCIDENT SAFETY AWARD

Operations and Engineering Departments that achieved zero reportable workplace accident.



- | | |
|--|--|
| <p>CCL Station Operations
CCL Systems
Communications System (Engineering & Projects)
Fare System (Engineering & Projects)
P&S Project
Projects & Support
Signalling System (Engineering & Projects)
Supervisory Control System (Maintenance & Projects)
Systems Operations Maintenance</p> | <p>Bus Plus Operations
Customer Service & Drivers' Affairs
Engineering Services
Fleet Management & Driver Sales
Maintenance Planning / Technical Training
SMRT Media and Digital</p> |
|--|--|



- | | |
|---|---|
| <p>RFURT
CCL Control Operations
CCL Rolling Stock, PWay & EIB
Power
Project Planning & System Integration
PWay Maintenance Engineering
Rolling Stock Engineering
Rolling Stock Projects
Tales One</p> | <p>Operations Control & System Development
Operations Support & Resource Management
SMRT Commercial Development
SRE Project Management Office
SMRT Properties</p> |
|---|---|



Real Estate Business



新宿駅
Shinjuku Sta.
丸ノ内線
M 08

新宿西口駅
Shinjuku-nishiguchi Sta.
都営大江戸線
E 01



A14



X-10 金堂街

B1F RESTAURANT	
和食 500円	和食 500円
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和食 500円	和食 500円

B2F METRO PLAZA

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↑ B1F
↓ B2F



← 都営大江戸線
E01 新宿西口駅

丸ノ内線
M08 新宿駅

JR東横線
小田原線
→ 小田原駅

Shinjuku Metro Food Mall

小山・大宮・上野・東京







Train Door Operation:
6 million doors / day



Checking Signal:
1.2 million times / day





Thank you from the 2017 study mission delegates!

