



2%
fewer reportable
events

excluding impact of
public order events



99.9%
passenger
journeys
on-time



5.61 million
average weekday
patronage

HONG KONG TRANSPORT OPERATIONS

AIM

We strive to be the best public transport service provider in Hong Kong by offering safe, reliable and caring service to our customers. At the same time, we seek to generate sustainable returns so that we can invest in our network, further improve our high levels of service and address the changing expectations of our customers. These investments involve replacing and upgrading our existing railway assets as well as constructing new railway lines. Together, they are part of our plan for the next generation of railways that will support Hong Kong's development as an economy and as a society.

CHALLENGES

- Safety of our railway operations services
- Managing major asset upgrades and replacements without compromising our service performance or the customer experience
- Workforce transition and how to deliver extensive training to our railway operations employees relevant to the innovative technologies we are introducing

STRATEGIES

- Review our approach to risk management and station design for enhanced security
- Deliver on our excellent track record and safety culture. Equip staff with clear guidelines and sound training with regard to operations and customers and raise our customers' awareness of safety through targeted campaigns and information
- Maintain high performance standards that exceed the targets set out in the Operating Agreement and our own more demanding Customer Service Pledges. Continue our stringent maintenance regime, investing significantly in renewing and upgrading our railway assets

- Understand and deliver what matters most to our customers, enhance the travel experience of commuters and also meet the needs of an aging population
- Develop our staff by inspiring, engaging and training them while continuing to offer long-term, rewarding careers in various disciplines

OUTLOOK

Despite the major challenges faced by MTR during the year, we believe that railway will continue to be the backbone of public transportation in Hong Kong well into the foreseeable future.

Although our business will continue to be resilient during economic change, we will need to contend with a variety of risks, including uncertainties surrounding higher unemployment, reduced tourist arrivals, and particularly the recent COVID-19 outbreak. As a result of the COVID-19 outbreak, several boundary crossings between Hong Kong and the Mainland had been closed (including the closure of our Lo Wu, Lok Ma Chau and Hong Kong West Kowloon stations as well as the Intercity through train control point at Hung Hom Station) resulting in no cross boundary passengers during the period of closure and the closure of station shops at these stations, while the work from home and school closure measures coupled with much reduced tourist and local leisure travellers are having a significant negative impact on the patronage of our Domestic Service.

During the year, we adjusted fares by +3.3% underpinned by the Fare Adjustment Mechanism, while simultaneously offering a 3.3% fare discount for Octopus users. Hence, there was no actual fare increase for Octopus users in 2019/2020. In view of the outbreak of COVID-19, we have also decided that there will be no actual adjustment to MTR fares for the remainder of 2020 by means of fare rebates or other arrangements.

Ahead of the opening of the full Shatin to Central Link, we opened the Tuen Ma Line Phase 1 on 14 February 2020, allowing passengers on the Ma On Shan Line to travel directly to Kai Tak Station in East Kowloon.

FINANCIAL PERFORMANCE

HK\$ million	Year ended 31 December		Inc./Dec.) %
	2019	2018	
Hong Kong Transport Operations			
Total Revenue	19,938	19,490	2.3
EBITDA	5,909	8,171	(27.7)
EBIT	(591)	1,985	n/m
EBITDA Margin (in %)	29.6%	41.9%	(12.3)% pts.
EBIT Margin (in %)	(3.0)%	10.2%	(13.2)% pts.

The revenue of our Hong Kong transport operations increased by 2.3% to HK\$19,938 million in 2019, mainly due to the full year impact of the opening of HSR in September 2018, which more than offset the adverse impact brought about by the public order events. Loss before interest, finance

charges and taxation and after variable annual payment was HK\$591 million, mainly due to a reduction in total patronage and additional operating and repair and maintenance costs incurred as a result of the impact of the public order events in Hong Kong.

SAFETY

We continued to place the highest priority on passenger safety. Nevertheless, we experienced an increase of 16% on the number of reportable events on our Hong Kong heavy rail and light rail network, mainly due to public order events. Excluding the impact caused by the public order events, the total number of reportable events would have decreased by 2%. Further details on our safety performance can be found in the Ten-Year Statistics of this Annual Report.

To raise awareness of safety on our railways, we continued to support People On Board Social Enterprise Limited by joining them in hosting exhibition booths at the Hong Kong Book Fair, where we promoted railway safety and courteous behaviour.

In July 2019, we kicked off Escalator Safety Campaign 2019 with MTR Ambassador T Chai, featuring WhatsApp stickers, posters and a video to promote escalator safety.

We also held a campaign on the importance of safety on our escalators by organising four Escalator Safety Walks with the Escalator Safety Special Task Force. Other escalator campaigns included hosting Escalator Safety Promotion Booths at stations and organising a post-escalator accident prevention programme.

To improve platform gap safety, we set up a Platform Gap Incident Special Task Force and published platform gap safety messages.

We continued to host the Budding Station Master programme, in which children acted as station ambassadors to distribute safety messages and gifts at selected stations.

At Light Rail, our innovative Integrated Speed and Position Supervision System was implemented so that the speed of light rail vehicles can be monitored in real time, further improving operational safety and efficiency.

PATRONAGE AND REVENUE

	Patronage in million		Revenue HK\$ million	
	2019	Inc./(Dec.) %	2019	Inc./(Dec.) %
Hong Kong Transport Operations				
Domestic Service	1,568.2	(6.1)	12,714	(3.9)
Cross-boundary Service	104.2	(11.3)	3,164	(8.9)
HSR	16.9	219.2	2,098	249.7
Airport Express	15.8	(11.0)	1,011	(12.5)
Light Rail and Bus	207.3	(10.0)	677	(6.4)
Intercity	1.9	(48.2)	175	(18.2)
	1,914.3	(6.4)	19,839	2.3
Others			99	6.5
Total			19,938	2.3

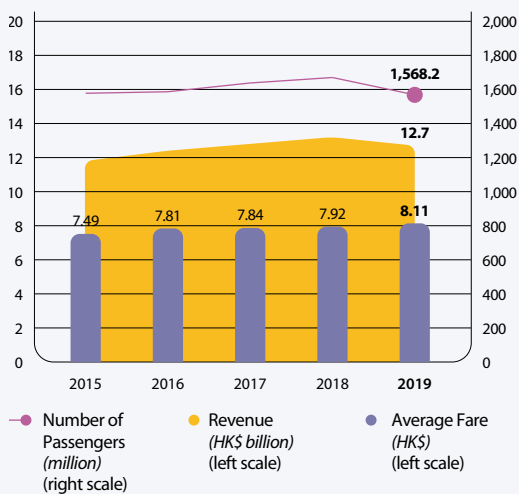
Total patronage of all our rail and bus passenger services in 2019 decreased by 6.4% to 1,914.3 million passenger trips as a result of public order events during the latter half of 2019, as well as a decrease in visitor arrivals and a weakening economy.

Breaking these figures down, our Domestic Service (comprising the Kwun Tong, Tsuen Wan, Island, Tung Chung, Tseung Kwan O, Disneyland Resort, East Rail (excluding the Cross-boundary Service), West Rail, Ma On Shan and South Island lines) recorded total patronage of 1,568.2 million for the 12 months of 2019, or 6.1% lower than the previous year.

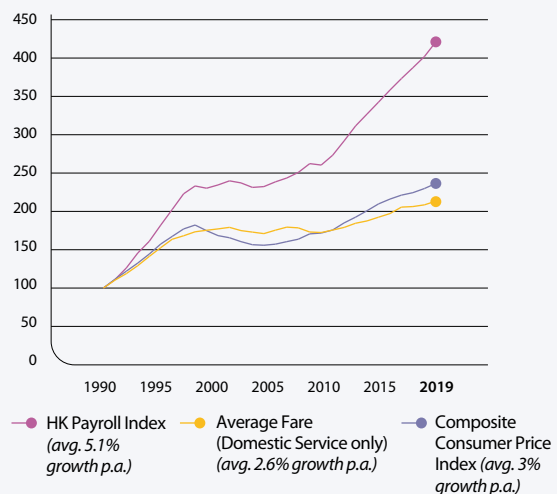
For the Cross-boundary Service to Lo Wu and Lok Ma Chau, patronage fell by 11.3% to 104.2 million, mainly due to the substantial decrease in Mainland visitors. Patronage of the HSR was 16.9 million. Patronage of the Airport Express dropped by 11.0% to 15.8 million as a result of the decline in tourist arrivals.

In 2019, average weekday patronage of all our rail and bus passenger services declined by 4.5% to 5.61 million passenger trips, while our Domestic Service, reported a 4.2% drop to 4.66 million.

Domestic Service – Passengers and Fares



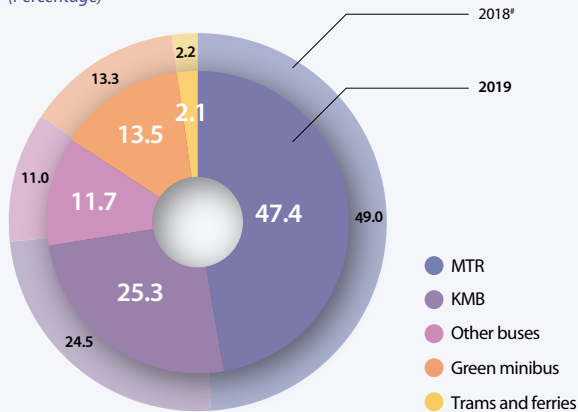
Fare Trend



MARKET SHARE

Market Shares of Major Transport Operators in Hong Kong

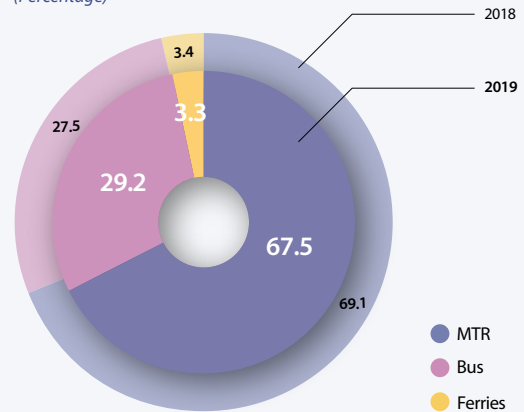
(Percentage)



* Market share for 2018 was rebased to reflect the impact on the opening of Hong Kong – Zhuhai – Macao Bridge.

Market Shares of Major Transport Operators Crossing the Harbour

(Percentage)



Our overall share of the franchised public transport market in Hong Kong during the year was 47.4% as compared with 49.0% in 2018, a decrease of 1.6% points from the year before. The decline was mainly due to the decrease in patronage for all rail services as a result of the public order events. Of this total, the share of cross-harbour traffic was 67.5%, compared with 69.1% in 2018.

In 2019, MTR's Cross-boundary Service and HSR registered a decrease in market share of cross-boundary business from 52.1% to 51.3%. Our market share to and from the airport fell from 22.0% to 20.5%.



FARE ADJUSTMENTS, PROMOTIONS AND CONCESSIONS

For 2019/2020, the overall adjustment rate of MTR fares was +3.3%, which was in accordance with the Fare Adjustment Mechanism (“FAM”). To thank our passengers, commemorate our 40th anniversary and in view of recent outbreak of COVID-19, we offered the following major fare promotions, with overall fare savings amounted to more than HK\$900 million as compared with over HK\$500 million in the previous period:

- From 30 June 2019 to end of June 2020, we are offering a 3.3% rebate for every Octopus trip, totalling over HK\$500 million
- No price adjustment will be made on “MTR City Saver” and “Tuen Mun – Nam Cheong Day Pass” until end of June 2020
- No price adjustment will be made for Monthly Pass Extras until end of June 2020
- The Early Bird Discount Promotion was extended for one year to 31 May 2020, with the discount rate increased to 35% starting October 2019 and the number of stations covered increased to 45

The scheme enables all Octopus users to enjoy a 3.3% fare discount on every paid journey on the MTR, Light Rail and MTR Bus.

Other on-going fare concessions and interchange discounts are offered to different sectors of the community, including the elderly, children, eligible students and persons with disabilities. Along with over HK\$2.6 billion on-going fare concessions and interchange discounts, we will be providing customers with over HK\$3.5 billion in fare concessions in 2019/2020.

In view of the outbreak of COVID-19, the Company has also decided to ensure, through fare rebates or other arrangements, that there will be no actual adjustment to MTR fares for the remainder of 2020, despite the fare adjustment rate for 2020/2021 under the FAM that will only be derived after the Census and Statistics Department announces the year-on-year percentage change in the Nominal Wage Index (Transportation Section) for December 2019 and other relevant figures later in the first quarter of 2020. Detailed arrangements will be announced by the end of March 2020 when the statistics are published. After this plan is implemented, Octopus fares charged would have stayed the same from January 2019 to the end of 2020.

SERVICE PERFORMANCE

Train service delivery and passenger journeys on-time in our heavy rail network remained at 99.9%, excluding the effects of public and external events. This exceeded both the targets in our Operating Agreement and our own more demanding Customer Service Pledges. Train service delivery is a measure of the actual train trips run against the train trips scheduled to be run by the Company, and passenger journeys on-time is a measure of all passenger journeys that are completed within five minutes of their scheduled journey times.

In 2019, more than 2.07 million train trips were made on our heavy rail network and more than 0.96 million trips on our light rail network. There were 10 delays on the heavy rail network and no delays on the light rail network lasting 31 minutes or more caused by factors within our control, a decrease of 16.7% from the year before.

Our service performance was marred by two incidents during the year. The first, on 18 March, involved a collision between two non-passenger trains on the Tsuen Wan Line near Central Station during a test of a new signalling system after service hours. A panel comprising senior MTR personnel and local and overseas experts was subsequently set up to investigate the root causes of the incident, and its findings were made public in July 2019. The detailed investigation concluded that the incident was caused by software implementation errors made by the contractor of the new signalling system, and a number of improvement measures have been recommended for the contractor. We have been overseeing the contractor in implementing the improvement measures, and will exercise extra vigilance and strengthen monitoring on the contractor’s deliveries.

BUSINESS REVIEW

HONG KONG TRANSPORT OPERATIONS

Operations Performance in 2019

Service Performance Item	Performance Requirement	Customer Service Pledge Target	Actual Performance
Train service delivery			
– Kwun Tong Line, Tsuen Wan Line, Island Line, Tseung Kwan O Line, South Island Line, Tung Chung Line, Disneyland Resort Line and Airport Express	98.5%	99.5%	99.9%
– East Rail Line (including Ma On Shan Line)	98.5%	99.5%	99.8%
– West Rail Line	98.5%	99.5%	99.9%
– Light Rail	98.5%	99.5%	99.9%
Passenger journeys on-time			
– Kwun Tong Line, Tsuen Wan Line, Island Line, Tseung Kwan O Line, South Island Line, Tung Chung Line and Disneyland Resort Line	98.5%	99.5%	99.9%
– Airport Express	98.5%	99.0%	99.9%
– East Rail Line (including Ma On Shan Line)	98.5%	99.0%	99.8%
– West Rail Line	98.5%	99.0%	99.9%
Train punctuality			
– Kwun Tong Line, Tsuen Wan Line, Island Line, Tseung Kwan O Line, South Island Line, Tung Chung Line and Disneyland Resort Line	98.0%	99.0%	99.8%
– Airport Express	98.0%	99.0%	99.9%
– East Rail Line (including Ma On Shan Line)	98.0%	99.0%	99.9%
– West Rail Line	98.0%	99.0%	99.9%
– Light Rail	98.0%	99.0%	99.9%
Train reliability: train car-km per train failure causing delays ≥5 minutes			
– Kwun Tong Line, Tsuen Wan Line, Island Line, Tseung Kwan O Line, South Island Line, Tung Chung Line, Disneyland Resort Line and Airport Express	N/A	700,000	3,400,912
– East Rail Line (including Ma On Shan Line) and West Rail Line	N/A	700,000	8,798,055
Ticket reliability: smart ticket transactions per ticket failure			
– Kwun Tong Line, Tsuen Wan Line, Island Line, Tseung Kwan O Line, South Island Line, Tung Chung Line, Disneyland Resort Line, Airport Express, East Rail Line (including Ma On Shan Line) and West Rail Line	N/A	10,500	49,140
Add value machine reliability			
– Kwun Tong Line, Tsuen Wan Line, Island Line, Tseung Kwan O Line, South Island Line, Tung Chung Line, Disneyland Resort Line and Airport Express	98.0%	99.0%	99.8%
– East Rail Line (including Ma On Shan Line)	98.0%	99.0%	99.8%
– West Rail Line	98.0%	99.0%	99.9%
Ticket machine reliability			
– Kwun Tong Line, Tsuen Wan Line, Island Line, Tseung Kwan O Line, South Island Line, Tung Chung Line, Disneyland Resort Line and Airport Express	97.0%	99.0%	99.7%
– East Rail Line (including Ma On Shan Line)	97.0%	99.0%	99.9%
– West Rail Line	97.0%	99.0%	99.8%
– Light Rail	N/A	99.0%	99.7%
Ticket gate reliability			
– Kwun Tong Line, Tsuen Wan Line, Island Line, Tseung Kwan O Line, South Island Line, Tung Chung Line, Disneyland Resort Line and Airport Express	97.0%	99.0%	99.9%
– East Rail Line (including Ma On Shan Line)	97.0%	99.0%	99.9%
– West Rail Line	97.0%	99.0%	99.9%
Light Rail platform Octopus processor reliability*			
	N/A	N/A	N/A
Escalator reliability			
– Kwun Tong Line, Tsuen Wan Line, Island Line, Tseung Kwan O Line, South Island Line, Tung Chung Line, Disneyland Resort Line and Airport Express	98.0%	99.0%	99.9%
– East Rail Line (including Ma On Shan Line)	98.0%	99.0%	99.9%
– West Rail Line	98.0%	99.0%	99.9%
Passenger lift reliability			
– Kwun Tong Line, Tsuen Wan Line, Island Line, Tseung Kwan O Line, South Island Line, Tung Chung Line, Disneyland Resort Line and Airport Express	98.5%	99.5%	99.7%
– East Rail Line (including Ma On Shan Line)	98.5%	99.5%	99.8%
– West Rail Line	98.5%	99.5%	99.9%
Temperature and ventilation			
– Trains, except Light Rail: to maintain a cool, pleasant and comfortable train environment generally at or below 26°C	N/A	97.5%	99.9%
– Light Rail: on-train air-conditioning failures per month	N/A	<3	0
– Stations: to maintain a cool, pleasant and comfortable environment generally at or below 27°C for platforms and 29°C for station concourses, except on very hot days	N/A	93.0%	99.8%
Cleanliness			
– Train compartment: cleaned daily	N/A	99.0%	99.9%
– Train exterior: washed every two days (on average)	N/A	99.0%	100.0%
Northwest transit service area bus service			
– Service Delivery	N/A	99.0%	99.8%
– Cleanliness: washed daily	N/A	99.0%	100.0%
Passenger enquiry response time within six working days			
	N/A	99.0%	100.0%

* Performance data for Light Rail will be available after completion of installation, testing and trial operations of the new Light Rail platform Octopus processors.

The second incident, on 17 September, involved a train derailment on East Rail Line near Hung Hom Station. Three cars of a Hung Hom-bound East Rail Line train shifted out of their positions on the track and the fourth and fifth cars were separated.

Following this incident, we set up an investigation panel comprising MTR personnel as well as experts from Hong Kong and overseas, and the results of its investigation were made public on 3 March 2020. It was concluded that the incident was caused by dynamic track gauge widening at a turnout near Hung Hom Station. The Company has accepted the recommendations made by the panel and is taking actions to prevent the occurrence of those of a similar nature.

To gauge customer satisfaction levels concerning our services and fares, we carry out regular surveys and research, the results of which are published in our Service Quality Index and Fare Index respectively. Our performance in 2019 was mainly affected by the adjusted train services during public order events in Hong Kong.

Service Quality Index	2019	2018
Domestic and Cross-boundary services	66	70
Airport Express	79	82
Light Rail	58	67
Bus	68	71
HSR	83	–

Fare Index	2019	2018
Domestic and Cross-boundary services	56	59
Airport Express	70	75
Light Rail	58	68
Bus	66	68
HSR	78	–

The high level of service provided by MTR was again recognised in the number of awards received during the year, some of which are listed below:

- Best Long Service Award, Top Service Awards 2019
Next Magazine
- Public Transportation Category Award, Hong Kong Service Awards 2019
East Week Magazine
- Public Transportation Category Award, Sing Tao Service Awards 2018
Sing Tao Daily
- UITP Excellence in Marketing Campaign Award 2019
UITP
- WEBSITE STREAM and MOBILE STREAM – TRIPLE GOLD AWARD, Web Accessibility Recognition Scheme 18/19
Hong Kong Internet Registration Corporation

MTR is one of the participants of The Community of Metros (“CoMET”), which comprises 19 metro systems around the world to benchmark performance and improve practices across the industry. In 2018, performance in terms of service reliability, punctuality and our cost efficiency level was one of the best among the participants. The 2018 CoMET benchmarking results can be found in the “Performance Metrics” section on our sustainability website.



ENHANCING THE CUSTOMER EXPERIENCE

To achieve our vision for the future of rail travel in Hong Kong, we continued major upgrades and replacements on the existing rail network and implemented a variety of technology initiatives to enhance the customer experience. Over HK\$9.8 billion was invested to maintain, upgrade and renew our Hong Kong railway assets in 2019.

More Frequent Services

Extra train trips

To make our customers' journeys more comfortable, new rounds of MTR train service enhancements were implemented in April and July 2019, when an extra 101 train trips per week were added to the Island Line, Tsuen Wan Line, Kwun Tong Line and East Rail Line.

Since 2012, more than 3,200 train trips per week have been added to the MTR heavy rail network and over 600 trips per week to the light rail network.

Upgrade of Signalling System

During the year, work continued on the upgrade of our signalling system, which is necessary for increasing the frequency of our services. The contract for the replacement of the signalling systems for the Tsuen Wan, Island, Kwun Tong, Tseung Kwan O, Tung Chung and Disneyland Resort lines, as well as the Airport Express, was awarded at about HK\$3.3 billion in 2015.

After the non-passenger train collision incident during a non-traffic hours drill test for the new signalling system in March 2019, all train tests relating to the new signalling systems were immediately suspended. As safety is always our top priority, we will only resume train testing after obtaining the consent of Government.

We also completed reliability tests on the new signalling system for East Rail Line, which is different from the new system for Tsuen Wan Line.

Greater Comfort for Passengers

New Trains

For a total investment of HK\$6 billion, we are purchasing 93 new, more comfortable 8-car trains to replace the existing trains on the Kwun Tong, Tsuen Wan, Island and Tseung Kwan O lines. In 2019, seven more trains, in addition to the five delivered, were sent to Hong Kong. All new trains underwent rigorous testing and commissioning.

New Light Rail Vehicles

As demand for our light rail services increases, we are replacing 30 light rail vehicles and purchasing 10 additional light rail vehicles at a total cost of HK\$745 million. Testing and commissioning of the first two replacement light rail vehicles entered the final stages in 2019 and will be ready to enter passenger service starting in 2020. The 10 additional new light rail vehicles will be used to expand the size of the Light Rail fleet to 150 in 2023.

The new light rail vehicles are designed to enhance the passenger experience by providing an advanced LED lighting system as well as better handrail and straphanger arrangements in the compartment.

Replacement of Air Conditioning Systems

For the comfort of our passengers, we have been replacing the air conditioning systems in stations across our network. The work involves the replacement of 160 chillers (about half of all our chillers) with new, more energy-efficient versions.

The replacement programme will be carried out in five phases with target completion in 2022. In the first and second phases, the replacement of 61 chillers in 11 stations and four depots were completed. The third phase of the project, which will take place from 2019 to 2020, covers 31 existing chillers for 10 stations and one depot.

Enhancing Station Facilities

We are providing public toilets for passengers at interchange stations when these stations are undergoing major renovation works.

During the year, new toilets were opened at Central, Tiu Keng Leng, Yau Tong and Lai King stations. New toilets at Yau Ma Tei and North Point stations are also targeted for opening in the second half of 2020, and in Tsim Sha Tsui Station by the third quarter of 2021. Babycare rooms will also be provided in the new public toilets.

Other feature upgrades include the installation of additional wide gates and seats, mobile charging spots, water dispensers for refillable bottles, as well as new footbridges, exits and entrances.

As Hong Kong's population is aging, we are also trying to meet the needs of the elderly with new initiatives at designated stations that focus on four key areas: accessibility, mobility, and the provision of toilets and information. Included in these enhancements are the addition of middle handrails and seats in longer adits, large signage, magnifiers and alphabet cards at Customer Service Centres in our network.

Enhancing Passenger Journeys through Technology

Another aspect of enhancing the customer experience is investing in new technology that will deliver more personalised services and smoother journeys.

Across our various mobile applications, we have been making use of Artificial Intelligence (AI) and Internet of Things (IoT) technologies to offer a wide range of personalised services, such as a new Alighting Reminder, Estimated Waiting Time Indicator at Admiralty Station and MTR Bus Real-Time Schedules. We have also upgraded our Trip Planner to

provide point-to-point transport advice, such as connecting public transport information, and revamped the user interface of the Airport Express function on the MTR Mobile app. The MTR Mobile app had about 1.4 million active users per month in 2019.

Internally, we have been applying technology to improve internal processes and maintenance. These include chatbots and Robotic Process Automation (RPA) tools that help to reduce repetitive office tasks. Additionally, we have been using big data and AI to optimise planning and engineering works scheduling, as well as video and image analytics to monitor the health of our railway assets. We have also introduced Augmented Reality and Virtual Reality in our training curriculum to simulate actual working conditions with a totally immersive 3D environment.

To keep up with trends in mobile phone payments, we began accepting Alipay, Alipay HK, WeChat Pay and WeChat Pay HK at selected Ticket Issuing Machines in our stations.